



EMCOR Utility (2035570 Alberta Ltd.)

2023-2027 General Rate Application

March 28, 2024

Alberta Utilities Commission

Decision 28055-D02-2024
EMCOR Utility (2035570 Alberta Ltd.)
2023-2027 General Rate Application
Proceeding 28055

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1 Decision summary

1. This decision provides the Alberta Utilities Commission's determinations on EMCOR Utility's general rate application regarding its potable water system for the 2023-2027 test years. For the reasons that follow, the Commission approves the following for EMCOR:

- Final revenue requirements for the periods June 7, 2023, to February 29, 2024; March 1, 2024, to February 28, 2025; March 1, 2025, to February 28, 2026; and March 1, 2026, to February 28, 2027.
- Final rates effective June 7, 2023, March 1, 2024, March 1, 2025, and March 1, 2026.
- Recovery of depreciation and return on rate base as part of its revenue requirements, as a proxy for CME Holdings Ltd.
- Terms and conditions of service, contingent upon certain matters it is required to undertake.

2. EMCOR is directed to file an application to true up its interim rates to final rates for the period June 7, 2023, to March 31, 2024, as directed in this decision.

2 Introduction

Background

3. EMCOR indicated that it is a private, investor-owned water, sanitary and storm system utility that treats and distributes potable water; treats and distributes recycled water; stores and provides fire suppression water; collects and treats sanitary water; and collects and manages storm water, in the Carmek Business Park located in Rocky View County, Alberta. EMCOR stated that this is the first water rates application it has filed with the Commission. It has not previously received Commission approval of the water rates charged to its customers.

4. Rule 011: *Rate Application Process for Water Utilities* applies to the rate application process for investor-owned water utilities.

5. On March 1, 2023, EMCOR filed an application pursuant to Rule 011, requesting approval of the following items related to potable water service: terms and conditions of service, including rate schedules; depreciation rates; interim refundable rates for supply and distribution of water, effective March 1, 2023; and final rates for the supply and distribution of water, effective March 1, 2023, to February 29, 2028, being the 2023-2027 test period.

6. Rule 011 provides that AUC staff assistance is available for small water utilities through the application development phase, up until the start of the formal review process.¹ Subsequent to the Commission staff's preliminary review of the application, Commission staff identified to EMCOR additional information that was missing from the application, but was required, before a formal review process could commence.² In response, EMCOR updated its application on September 22, 2023. The application then moved to the formal review process stage, to test the merits of the application. The Commission issued notice of the application on October 26, 2023.³ The Commission stated in the notice:

The issuance of this notice does not mean that EMCOR has discharged its burden of proof in relation to its 2023-2027 general rate application, nor that the Commission has decided to approve the requests as filed. EMCOR bears the onus of demonstrating and supporting the reasonableness of all the elements comprising its revenue requirement and all other aspects of its 2023-2027 general rate application.

7. The Commission divided consideration of EMCOR's application into two distinct parts.

8. In part one (Decision 28055-D01-2023⁴), the Commission found that EMCOR's potable water system met the definition of a public utility, and that EMCOR was the owner. The Commission also approved interim rates for the supply and distribution of potable water effective June 7, 2023, until such time when the final rates are determined.

9. In part two (the current decision), the Commission determines the final rates and approves terms and conditions for EMCOR's potable water services during the 2023-2027 test period.

10. EMCOR did not seek Commission approval of its rates for recycled water, fire protection, irrigation water, or stormwater collection systems, and submitted that these systems are not public utilities. In Section 9 of this decision, the Commission provides general guidance regarding legal arguments made by EMCOR, but does not make any specific findings of mixed fact and law regarding these systems.

Process

11. On October 26, 2023, the Commission issued a notice of application, requiring interested parties to submit a statement of intent to participate by November 9, 2023. To ensure that potential stakeholders were sufficiently informed of this proceeding, Commission staff contacted customers receiving service from EMCOR via phone calls. During these interactions, staff members detailed the registration and participation process for this proceeding. The Commission did not receive any statements of intent to participate.

12. The procedural steps for the second part of this proceeding involved two rounds of information requests (IRs) directed to EMCOR. The Commission closed the record for this

¹ Rule 011, sections 4.2, 6.1 and 7.1.

² Exhibit 28055-X0013.

³ Exhibit 28055-X0024.

⁴ Decision 28055-D01-2023: EMCOR Utility (2035570 Alberta Ltd.), Interim Rates for Supply and Distribution of Potable Water, Proceeding 28055, June 7, 2023.

proceeding on February 13, 2024, the date when EMCOR submitted a revised response to the Commission's IRs.

3 Issues and findings

13. Under the *Public Utilities Act*, the Commission fixes just and reasonable rates of the owner of a public utility. The Commission has historically applied cost-of-service regulation in fixing rates for investor-owned water utilities. Under this methodology, a regulated utility is allowed to charge rates sufficient to cover its operations and maintenance (O&M) costs and provide a fair rate of return on, and return of, capital. The first step in this methodology is establishing the forecast revenue requirement to serve utility customers, which includes consideration of O&M costs, depreciation, taxes and an allowed rate of return on rate base. The second step allocates the revenue requirement to customer classes and establishes rates that are necessary to recover the forecast revenue requirement. This decision addresses both steps concurrently.

14. In the following sections, the Commission makes findings on matters pertaining to EMCOR's application, which the Commission determined are required to be specifically addressed. All other application matters not raised by the Commission are approved as filed.

15. The Commission is required to approve forecast costs for the safe and reliable operation of EMCOR's potable water system while ensuring just and reasonable rates for the service received by its customers. The Commission's thorough review of EMCOR's application results in a just and reasonable tariff.

16. In reaching the determinations set out within this decision, the Commission has considered all relevant materials comprising the record of this proceeding. Accordingly, references in this decision to specific parts of the record are intended to assist the reader in understanding the Commission's reasoning relating to a particular matter and should not be taken as an indication that the Commission did not consider all relevant portions of the record with respect to that matter.

4 Rates

4.1 Test period and associated rates

17. EMCOR requested approval for "Final Rates for the supply and distribution of water effective March 1, 2023, to February 29, 2028, being the 2023-2027 test period."⁵ It stated that "The rates for each of the years 2023-2027 would be adjusted on March 1st of each year."⁶ The information provided by EMCOR only covers the fiscal years March 1, 2023 to February 28, 2027, and not March 1, 2023, to February 29, 2028. In the revised application EMCOR confirmed the description of the requested approval period as the 2023 to 2027 test period, which reflects the date ranges filed in the rates schedules to February 28, 2027.⁷ The associated

⁵ Exhibit 28055-X0001, PDF page 40.

⁶ Exhibit 28055-X0001, PDF page 39.

⁷ Exhibit 28055-X0017, PDF page 38.

requested rates would therefore be effective March 1, 2023, March 1, 2024, March 1, 2025, and March 1, 2026.

18. The final rate model, which is included as [Appendix 3](#) to this decision, incorporates revisions that were made by the Commission to show the dates of each fiscal year.

19. In this decision, the Commission approves final revenue requirements for the periods June 7, 2023, to February 29, 2024; March 1, 2024, to February 28, 2025; March 1, 2025, to February 28, 2026; and March 1, 2026, to February 28, 2027. The Commission approves final rates effective June 7, 2023, March 1, 2024, March 1, 2025, and March 1, 2026.

4.2 Calculation of approved revenue requirement for June 7, 2023, to February 29, 2024

20. EMCOR did not provide a revenue requirement for June 7, 2023, to February 29, 2024. It forecast a revenue requirement for March 1, 2023, to February 29, 2024. The Commission calculated the approved revenue requirement for June 7, 2023, to February 29, 2024.

21. There are 366 days in the fiscal year March 1, 2023, to February 29, 2024. There are 268 days in the period June 7, 2023, to February 29, 2024. The Commission multiplied the revenue requirement items for March 1, 2023, to February 29, 2024, by 268/366 to arrive at the approved revenue requirement for June 7, 2023, to February 29, 2024. Details of the Commission's calculations and the resulting numbers are included in the final rate model, attached as Appendix 3 to this decision.

4.3 Eligibility for return on rate base and depreciation

22. A regulated utility is permitted to earn a return on and a return of the money it has invested in rate base. The return on the money invested is what makes up the return on debt, and return on equity components of the revenue requirement. The return of the money invested is what makes up the depreciation component of the revenue requirement.

23. EMCOR indicated that CME Holdings Ltd., the parent company of EMCOR, built and paid for all the utility system infrastructure and subsequently transferred it all to EMCOR, for the consideration of one dollar and Class A common shares. EMCOR further submitted that its shares are 100 per cent owned by CME Holdings Ltd.

24. The Commission finds that even though EMCOR, as a stand-alone corporation, has invested no money in rate base, the sole owner of EMCOR, CME Holdings Ltd., has. Therefore, the Commission considers it is fair that EMCOR be permitted to recover depreciation and return on rate base as part of its revenue requirements, as a proxy for CME Holdings Ltd. If EMCOR issues any shares to a party other than CME Holdings Ltd., or if CME Holdings Ltd. sells, transfers or disposes of any or all of its shares in EMCOR, the proxy recovery of depreciation and return on rate base will no longer be permitted.

4.4 Rate base and return on rate base

25. This is the first potable water rates application filed by EMCOR. As part of its decision on the application, the Commission must approve the rate base figures at February 29, 2024, February 28, 2025, February 28, 2026, and February 28, 2027. The Commission has calculated opening and closing rate base on a fiscal year basis, because the information submitted by

EMCOR is on a fiscal year basis. EMCOR indicated that the first bill issued for potable water service was for the consumption period of February 15, 2018, to May 31, 2020.⁸ Depreciation of the potable water system begins with the first date of commercial operation. Therefore, in its calculations of the opening rate base for March 1, 2023, the Commission included accumulated depreciation for the period February 15, 2018, to February 28, 2023.

26. On schedules 3, 3.1 and 3.2 of the third version of its rate model,⁹ EMCOR reported the gross assets,¹⁰ depreciation¹¹ and accumulated depreciation;¹² with the first information reported for the fiscal year March 1, 2019, to February 29, 2020. The final rate model, which is attached as Appendix 3 to this decision, incorporates the Commission's revisions to schedules 3, 3.1 and 3.2 to include:

- The information for February 15, 2018, to February 28, 2018, and for the fiscal year March 1, 2018, to February 28, 2019.
- The cost of the distribution piping system, which EMCOR provided in response to a Commission IR.¹³
- Depreciation and associated accumulated depreciation on the distribution piping system. The Commission calculated depreciation on the distribution piping system using a period of 75 years, as proposed by EMCOR.¹⁴

27. Using the asset costs from the worksheet "Sch. 3.1 Cont Sch Gross Assets," as revised by the Commission to include the cost of the underground piping system, and the accumulated depreciation figures from the worksheet "Sch. 3.2 Acc Depreciation," as revised by the Commission to include depreciation from February 15, 2018, onward, the Commission calculated the rate base figures in worksheet "Sch. 4 Util Rate Base." The Commission-calculated rate base figures are included in the final rate model.

28. In the third version of the rate model,¹⁵ EMCOR excluded any amounts for contributed capital, whereas in the first¹⁶ and second¹⁷ versions of the rate model, it had included amounts for contributions. The Commission concludes that no amounts should be included for contributions, based on EMCOR's submission that no contributions were collected from customers to help finance the capital cost of the potable water system,¹⁸ and EMCOR's submissions that there are no requirements in the franchise agreement it has with Rocky View County with respect to a contribution factor, no-cost capital and rate base.¹⁹

⁸ Exhibit 28055-X0044, Response to EMCOR-AUC-2024JAN19-003, PDF page 5.

⁹ EMCOR submitted three versions of the rate model for the potable water system. The first version is in Exhibit 28055-X0002, which was filed on March 1, 2023. The second version is in Exhibit 28055-X0018, which was filed on September 22, 2023. The third version is in Exhibit 28055-X0030, which was filed on December 19, 2023.

¹⁰ Exhibit 28055-X0030, Worksheet "Sch. 3.1 Cont Sch Gross Assets."

¹¹ Exhibit 28055-X0030, Worksheet "Sch. 3 Dep & Amortization."

¹² Exhibit 28055-X0030, Worksheet "Sch. 3.2 Acc Depreciation."

¹³ Exhibit 28055-X0044, Response to EMCOR-AUC-2024JAN19-005(c), PDF page 7.

¹⁴ Exhibit 28055-X0044, Response to EMCOR-AUC-2024JAN19-005(c), PDF page 8.

¹⁵ Exhibit 28055-X0030.

¹⁶ Exhibit 28055-X0002.

¹⁷ Exhibit 28055-X0018.

¹⁸ Exhibit 28055-X0016, PDF pages 6-7.

¹⁹ Exhibit 28055-X0029, Response to EMCOR-AUC-2023NOV27-005, PDF pages 6-7.

29. Any subsequent contributions toward the capital costs that are collected from customers must be accounted for by EMCOR in determining future revenue requirements.

30. The Commission excludes any costs for working capital as part of the approved rate base. In the second²⁰ and third²¹ versions of the rate model, EMCOR included amounts for average working capital in rate base, calculated as 12.5 per cent of the combined total O&M and general and administrative (G&A) expenses. The Commission questioned the reasonableness of the working capital amounts. In response, EMCOR indicated that the resulting lead lag of 45 days was reasonable and added “Billing is made monthly and payments are due net 30 days. This timing may be extended based on the business billing cycles up to 45 days or more.”²² It also submitted that “A line has been added to Schedule 4 for Working Capital but a zero amount is forecast.”²³

31. The Commission finds there is a discrepancy between EMCOR’s submission that a zero amount was forecast for working capital and the fact that the second and third versions of the rate model included amounts for working capital. The Commission considers that EMCOR’s assessment of the reasonableness of the 45 days for the resulting lead lag days only focuses on the lead time between when water service is provided and when customers pay their bill and does not account for the lag time between when EMCOR incurs its O&M and G&A expenses, and when it pays these expenses.

32. In the Commission’s view, working capital to be added to rate base must consider both the revenue side and the expense side of the utility’s operations. EMCOR’s assessment of the reasonableness of the 45 days only discussed the revenue side and not the expense side, even though the Commission asked EMCOR to explain the reasonableness “based on the billing cycle, payment deadlines, payment received from customers and when payments are made to suppliers.”²⁴ In the absence of any information about the impact on working capital related to the expense side of the operations, the Commission finds that EMCOR has not demonstrated that a 45-day lead lag time is reasonable, and by extension has not demonstrated that the working capital amounts are reasonable. The Commission therefore excludes any costs for working capital as part of rate base.

33. The final rate model, which is included as Appendix 3 to this decision, incorporates revisions that were made by the Commission to exclude any costs for working capital as part of rate base.

34. The Commission approves the deemed capital ratio of 60 per cent debt and 40 per cent equity requested by EMCOR. This is consistent with the Commission-approved deemed capital structure for two other water utilities identified by EMCOR: Horse Creek Water Services Inc., in Decision 21340-D01-2017,²⁵ and Blazer Water Systems Ltd., in Decision 22319-D01-2018.²⁶

²⁰ Exhibit 28055-X0018.

²¹ Exhibit 28055-X0030.

²² Exhibit 28055-X0016, PDF page 8.

²³ Exhibit 28055-X0016, PDF page 8.

²⁴ Exhibit 28055-X0016, PDF page 8.

²⁵ Decision 21340-D01-2017: Horse Creek Water Services Inc., 2016 General Rate Application, Proceeding 21340, October 20, 2017, PDF page 32, paragraph 140.

²⁶ Decision 22319-D01-2018: Blazer Water Systems Ltd., 2019-2020 General Rate Application, Proceeding 22319, November 22, 2018, PDF page 44, paragraph 188.

In the Commission's 2023 generic cost of capital decision, Decision 27084-D02-2023,²⁷ the Commission approved a deemed equity ratio of 37 per cent for the majority of the larger gas and electricity utilities it regulates, and it approved a 39 per cent deemed equity ratio for a smaller gas utility. The 40 per cent deemed equity approved for EMCOR reflects the fact that it has more business risk and investor risk than the utilities that are encompassed by the generic cost of capital proceedings.

35. The Commission approves the forecast return on equity percentage of 9.28 per cent for the fiscal years ending February 29, 2024, February 28, 2025, February 28, 2026, and February 28, 2027, as requested by EMCOR. This percentage is the same as the Commission-approved return on equity for 2024 set out in Decision 28585-D01-2023²⁸ and is the latest Commission-approved return on equity percentage.

36. In addition, the Commission approves the forecast return on debt percentage of 6.45 per cent as requested by EMCOR. The Commission accepts EMCOR's explanation that CME Holdings Ltd. finances capital expansion and operations on a line of credit, which has a current interest rate of 6.45 per cent.

4.5 Reduction to return on rate base and depreciation for unused capacity

37. Part of the monthly bill for EMCOR's potable water customers is a fixed charge. This fixed charge is calculated by multiplying the fixed rate by the number of developed acres the customer occupies. EMCOR indicated that the potable water system currently services 172.2 acres as well as an expansion of an additional future development area of 295 acres.²⁹ In the third version of the rate model, the developed acres forecast at the end of the fiscal years February 28, 2025, February 28, 2026, and February 28, 2027, is 173 acres.³⁰

38. The other part of the monthly bill for EMCOR's potable water customers is a charge for water usage. This charge is calculated by multiplying the water used by the usage rate. EMCOR indicated that the current well capacity of the potable water system is 40,000 cubic metres but the treatment capacity is 17,000 cubic metres per year.³¹ The annual forecast water usage for the fiscal years ending February 29, 2024, February 28, 2025, February 28, 2026, and February 28, 2027, is much less than the 17,000 cubic metres treatment capacity.³²

39. The developed acres forecast and the water usage forecast for the test period compared to the design capacity of the potable water system indicate that the system is not fully utilized to provide utility service to the public. The design capacity of the potable water system was sized to accommodate the entire development, which is incomplete. While the Commission considers it is fair that EMCOR be permitted to recover depreciation and return on rate base as part of its revenue requirements (as explained in Section 5.3), the Commission also considers it fair that current customers are not required to pay for the full share of the depreciation and return,

²⁷ Decision 27084-D02-2023: Determination of the Cost-of-Capital Parameters in 2024 and Beyond, Proceeding 27084, October 9, 2023, PDF page 69, paragraph 283.

²⁸ Decision 28585-D01-2023: 2024 Return on Equity, Proceeding 28585, November 20, 2023, PDF page 4, paragraph 6.

²⁹ Exhibit 28055-X0029, Response to EMCOR-AUC-2023NOV27-002(a), PDF pages 2-3.

³⁰ Exhibit 28055-X0030, Worksheet "Sch. 5 Rate," Excel cells H11, I11 and J11.

³¹ Exhibit 28055-X0029, Response to EMCOR-AUC-2023NOV27-002(a), PDF pages 2-3.

³² The forecast annual water usage is in Exhibit 28055-X0030, Worksheet "Sch 2.1 Est Use_Waste," Excel cells F12, G12, H12 and I12.

because the system is not fully utilized. A principle of utility rate setting is that customers should only pay for that portion of the utility that is used to provide utility service to the public. Therefore, it is necessary to include the amount of depreciation expense and return on rate base amount in the revenue requirement that reflects only the portion of the total system used to provide utility service to the public. The amount of depreciation expense and return on rate base amounts attributable to the unused portion of the total system will be borne by the shareholder of EMCOR.

40. The Commission calculated the allowable portion of depreciation expense and return on rate base amounts by reducing the amounts for the entire system by the percentage of the system that is not used. For each of the fiscal years, the Commission calculated the unused percentage attributable to the number of acres and the unused percentage attributable to the treated water capacity. The Commission then took the simple average of the two percentages and applied it on a mid-year basis. The details of the Commission's calculations and the resulting reductions are included in the final rate model,³³ which is attached as Appendix 3 to this decision. The Commission notes that in calculating the unused percentage attributable to the treated water capacity, it used 173 acres as the developed acres number, as reported by EMCOR in the third version of the rate model,³⁴ instead of the 172.2 acres reported by EMCOR in the information response.³⁵ In the case of discrepancies between reported figures, the Commission prefers to rely on the numbers reported in a rate model, because it considers a rate model to be a more credible source of figures.

4.6 Wastewater haulage forecast

41. EMCOR's applied-for wastewater haulage expense forecast was tested by the Commission to determine whether it was reasonable. The wastewater haulage expense was the largest of EMCOR's forecast O&M expenses. It is incurred when EMCOR contracts a third party to haul away high-in-dissolved-solids wastewater produced during the water treatment process. The Commission requested haulage invoices of EMCOR to better understand this expense.³⁶ A sampling of those invoices between March 2019 and November 2023 indicated that EMCOR's historical annual expenses for haulage services were above the test year forecasts (2024 to 2027). Further, EMCOR predicted future water consumption growth that would increase wastewater output. The comparatively high historical expenses and the assumption in growth inferred that forecast wastewater expenses were low.

42. EMCOR developed its wastewater haulage forecast using a model that estimated total water production volume and the wastewater volume generated during that process. The wastewater haulage expense is derived by making assumptions about the number of truckloads and the cost of each to dispose of the wastewater.³⁷

43. The Commission had some preliminary concerns with EMCOR's wastewater haulage forecasting model. First, the model included forecasts for prior years where actual data was available (2020, 2021 and 2022). When comparing the actual expense results of wastewater haulage with EMCOR's forecast for those same periods, the forecast appeared low. The forecast

³³ Please refer to the worksheet "Sch. 1 Rev Req'd" of the final rate model.

³⁴ Exhibit 28055-X0030, Worksheet "Sch. 5 Rate."

³⁵ Exhibit 28055-X0029, Response to EMCOR-AUC-2023NOV27-002(a), PDF pages 2-3.

³⁶ The invoices were provided in Exhibit 28055-X0023.

³⁷ EMCOR's applied-for wastewater haulage volume and expense forecast can be found in Exhibit 28055-X0018, Worksheet "Sch. 2.1 Est Use_Waste."

model also did not include an assumption for inflation in haulage costs, suggesting under-forecasting. Finally, the volume per truckload assumption did not correspond to the actual data provided in the invoices. Most truckloads were 13 cubic metres in size and not the 28.5 cubic metres stated in the model. The invoices demonstrated that a smaller truck size was being used for most of the haulage, which was affecting costs and the frequency of truckloads. Generally, a smaller load size required a higher frequency of pick-ups and resulted in higher costs than forecast.

44. EMCOR provided an explanation for its low applied-for wastewater haulage forecast.³⁸ EMCOR stated that its system is designed to use recycled water, and the reclaimed water system would become operational in Quarter 3 (Q3) 2024. The system had been using treated raw water only, which affected the cost for haulage and increased historical expenses. Once the reclaimed water system became operational, EMCOR expected wastewater volumes and its expenses to stabilize as reclaimed water reduced demand for its potable water.

45. EMCOR also updated its estimate of wastewater produced during the water treatment process to include an assumption for reclaimed water being used in the system.³⁹ The new estimate reduced EMCOR's potable water haulage volume forecast between 2024 and 2027.

Table 1. Applied-for and updated wastewater volume for haulage in cubic metres

	March 1, 2023, to February 29, 2024	March 1, 2024, to February 28, 2025	March 1, 2025, to February 28, 2026	March 1, 2026, to February 28, 2027
Applied-for wastewater vol.	1,223	1,554	1,631	1,631
Updated wastewater vol.	1,127	1,158	1,190	1,190

Source: EMCOR's applied-for wastewater haulage volume forecast can be found in Exhibit 28055-X0018, Worksheet "Sch. 2.1 Est Use_Waste" and EMCOR's updated wastewater haulage volume forecast can be found in Exhibit 28055-X0041.

46. The Commission accepts EMCOR's updated wastewater volumes for haulage forecast in Table 1. The forecast incorporated estimates for reclaimed water production between 2024 and 2027, which offsets treatable water production and its wastewater byproduct. The Commission finds that the estimates are reasonable given the design of EMCOR's system and the reclaimed water operational start date of Q3 2024.

47. The Commission, however, finds that EMCOR's forecasted wastewater haulage expense model uses assumptions that skew the forecast lower than what would be considered likely or reasonable. These reasons are set out below. The Commission, therefore, prescribes the following changes to the model to produce the annual forecast expenses for each year of the test period.

Table 2. Calculation of the wastewater haulage expense forecast

Forecast input	Calculation	March 1, 2023, to February 29, 2024	March 1, 2024, to February 28, 2025	March 1, 2025, to February 28, 2026	March 1, 2026, to February 28, 2027
Updated wastewater vol. (cubic metres)	A	1,127	1,158	1,190	1,190
Volume per truckload (cubic metres)	B	13	13	13	13
Trucking efficiency	C	100%	100%	100%	100%

³⁸ Exhibit 28055-X0037, PDF pages 11-12.

³⁹ Exhibit 28055-X0041.

Forecast input		Calculation	March 1, 2023, to February 29, 2024	March 1, 2024, to February 28, 2025	March 1, 2025, to February 28, 2026	March 1, 2026, to February 28, 2027
Estimated number of truckloads (annual)	D	$A/(B \times C)$	86.69	89.08	91.54	91.54
Cost per truckload ⁴⁰	E	$E^{t-1} \times (1+F)$	\$508.50	\$523.76	\$539.47	\$555.65
Inflation	F		N/A	3.0%	3.0%	3.0%
Estimated annual wastewater haulage	G	$D \times E$	\$44,083	\$46,654	\$49,382	\$50,863

Source: Please refer to the worksheet "Sch. 2.1 Est Use_Waste" of the final rate model.

48. The Commission updates the forecast to use (i) EMCOR's updated wastewater volume projections; (ii) a smaller truck size of 13 cubic metres per load; and (iii) an estimated cost per truck that factors in inflation.

49. Based on the invoices provided by EMCOR, the smaller truck size was used at a higher frequency than the 29 cubic metres load. The Commission considers it is likely that EMCOR will continue to use the smaller truck size to dispose of the wastewater because it was common practice in prior years, and there is no evidence to indicate alternative practices going forward.

50. As a result of the smaller truck size, the Commission adjusted the cost-per-truck assumption in year 2024. The year 2024 cost per truck is based on the most recent wastewater haulage invoice provided by EMCOR, dated August 11, 2023. The Commission assumes that the wastewater haulage rates have not altered significantly since that time. The annual truck cost is escalated in subsequent years by the inflation assumption, acknowledging price inflation in that sector for the utility.

51. The Commission notes that the forecast process in Table 2 is the same as submitted by EMCOR in Exhibit 28055-X0018, worksheet "Sch 2.1 Est Use_Waste," except for the changes to the inputs and how the wastewater volumes were derived. Also of note is that the forecast expenses remain relatively the same as applied for by EMCOR for the years 2025 to 2027, except the volume of wastewater assumption has decreased considerably.

Table 3. Calculation of the wastewater haulage expense forecast

Period	Wastewater haulage expense	
	EMCOR forecast	Commission-approved
	(\$)	
March 1, 2023, to February 29, 2024	35,400	44,083
June 7, 2023, to February 29, 2024		32,279
March 1, 2024, to February 28, 2025	44,979	46,654
March 1, 2025, to February 28, 2026	47,200	49,382
March 1, 2026, to February 28, 2027	47,200	50,863

Source: EMCOR's applied-for wastewater haulage expense forecast can be found in Exhibit 28055-X0018, Worksheet "Sch. 2 "OM&A" and the Commission-approved wastewater haulage expense forecast can be found in worksheet "Sch. 2 "OM&A" of the final rate model.

⁴⁰ The 2024 estimate for cost per truckload is based on invoice number 2122160, 8/11/2023, which was the most recent sample invoice provided by EMCOR. The total cost per truckload includes the haulage rates, fuel surcharge, and goods and services tax.

52. The Commission sets the revenue requirements in Table 3 for the wastewater haulage expense, which represents a cumulative addition of \$13,878 for June 7, 2023, to February 28, 2027.⁴¹

4.7 Final revenue requirements and rates and projected revenues compared to Commission-approved revenue requirements

53. The Commission-approved revenue requirements are included in the final rate model,⁴² which is attached as Appendix 3 to this decision. The Commission-approved revenue requirements are as follows:

- \$127,613 for the period June 7, 2023, to February 29, 2024.
- \$192,131 for the fiscal year March 1, 2024, to February 28, 2025.
- \$202,163 for the fiscal year March 1, 2025, to February 28, 2026.
- \$205,668 for the fiscal year March 1, 2026, to February 28, 2027.

54. The Commission-approved revenue requirements are all lower than the corresponding revenue requirements requested by EMCOR,⁴³ because of the reductions the Commission made to the depreciation expense and return on rate base amounts to reflect the unused capacity.

55. EMCOR appears to have accounted for the unused capacity by requesting approval of potable water rates that do not recover the revenue requirements it calculated. EMCOR used the requested potable water rates,⁴⁴ along with the forecasts for developed acres occupied and annual water usage, in order to calculate the following revenue forecasts.⁴⁵

- \$92,010 for the fiscal year March 1, 2023, to February 29, 2024.
- \$127,238 for the fiscal year March 1, 2024, to February 28, 2025.
- \$143,164 for the fiscal year March 1, 2025, to February 28, 2026.
- \$150,324 for the fiscal year March 1, 2026, to February 28, 2027.

56. The resulting deficiencies between EMCOR's calculated revenue requirements and projected revenues are larger than the resulting deficiencies between the Commission-approved revenue requirements and EMCOR's projected revenues. The Commission considers that if

⁴¹ EMCOR calculated a forecast expense of \$35,400 for March 1, 2023, to February 29, 2024. $268/366 * \$35,400 = \$25,921$ for June 7, 2023, to February 29, 2024. $\$25,921 + \$44,979 + \$47,200 + \$47,200 = \$165,300$ for June 7, 2023, to February 28, 2027, as calculated by EMCOR. The Commission-approved forecast for the same period is the sum of the four amounts in the table, specifically, $\$32,279 + \$46,654 + \$49,382 + \$50,863 = \$179,178$. Cumulative addition is $\$179,178 - \$165,300 = \$13,878$.

⁴² Please refer to the worksheet "Sch. 1 Rev Req'd" of the final rate model.

⁴³ The revenue requirements requested by EMCOR are included in Exhibit 28055-X0030, Worksheet "Sch. 1 Rev Req'd."

⁴⁴ Exhibit 28055-X0030, Worksheet "Sch. 5 Rate," includes the updated rates EMCOR requested approval of. These rates are also reported in Exhibit 28055-X0029, Response to EMCOR-AUC-2023NOV27-001(a). The only exception is a discrepancy between the fixed rate for March 1, 2023. In Exhibit 28055-X0030, this is reported as \$47.597 whereas in Exhibit 28055-X0029 it is reported as \$47.95. The Commission considers the \$47.597 reported in Exhibit 28055-X0030 is correct, because it is arrived at by using a formula.

⁴⁵ Exhibit 28055-X0030, Worksheet "Sch. 5 Rate," Excel cells G27, H27, I27 and J27.

EMCOR requested rates that it knew would result in revenue deficiencies, and if those deficiencies will now be decreased, then the requested rates will still be acceptable to EMCOR.

5 Compliance with previous Commission direction

57. Paragraph 25 of Decision 23256-D01-2018⁴⁶ included the following direction for EMCOR, or EMCORU as it was referred to in that decision.

25. The Commission finds that the preliminary water certificate is issued to 590140 Alberta Ltd. and not EMCORU. The franchise agreement recognizes that the preliminary water certificate is held by a different entity and contemplates the licence being transferred to EMCORU. The Commission directs EMCORU to ensure that the water licence is issued, or transferred, in its name as soon as feasible and to file a copy of it with the Commission once it is obtained.⁴⁷ [footnote 8 of decision deleted]

58. EMCOR stated that Alberta Environment and Parks issued a licence amendment on July 4, 2022, which confirmed that water licence 00435641-00-00 is now issued in the name of 2035570 Alberta Limited.⁴⁸ EMCOR submitted a copy of the licence amendment.⁴⁹

59. The Commission has reviewed the information and finds that EMCOR has complied with the direction from paragraph 25 of Decision 23256-D01-2018.

6 Terms and conditions of service

60. In its application, EMCOR also sought approval for the terms and conditions regulating its potable water services. That document outlines the rules, obligations and terms that govern the provision of utility services between EMCOR and its customers.

61. During this proceeding, the Commission raised certain matters regarding EMCOR's terms and conditions. Specifically, in a letter⁵⁰ dated August 3, 2023, the Commission highlighted an inconsistency in Appendix C - EMCOR Water Distribution Terms and Conditions of Service,⁵¹ which erroneously referenced Section 16.2(d) in Section 17.2(e). Given the discrepancy, the Commission requested EMCOR to rectify the oversight; however, EMCOR failed to address this issue in its resubmitted terms and conditions document.⁵² EMCOR is again directed to correct this inconsistency.

62. Furthermore, the Commission also raised questions regarding such administrative charges as Returned Payment, Call Back Charge and Late Payment, which form part of the terms and conditions, given that EMCOR's revised application⁵³ did not contain an assigned dollar amount

⁴⁶ Decision 23256-D01-2018: Rocky View County, Franchise Agreement with EMCOR Utility, Proceeding 23256, June 18, 2018.

⁴⁷ Decision 23256-D01-2018, paragraph 25.

⁴⁸ Exhibit 28055-X0044, Response to EMCOR-AUC-2024JAN19-004, updated February 13, 2024, PDF page 6.

⁴⁹ Exhibit 28055-X0045.

⁵⁰ Exhibit 28055-X0013, AUC letter - Preliminary comments on general rate application.

⁵¹ Exhibit 28055-X0004.

⁵² Exhibit 28055-X0020, Appendix C: AUC application EMCOR Utilities terms and conditions of potable water service.

⁵³ Exhibit 28055-X0017, Revised General Rate Application EMCOR Utility, September 18, 2023, PDF page 87.

to these charges. In response to the Commission's IR,⁵⁴ EMCOR assigned the following dollar amounts: Returned Payment – \$150; Call Back Charge – \$75; Late Payment – one per cent per month; however, EMCOR did not provide an explanation for the basis of these amounts. In response to the Commission's inquiry⁵⁵ about the disproportionately high Returned Payment charge compared to other utilities, EMCOR cited its small size and lack of dedicated staff to handle such matters, necessitating the diversion of regular personnel to address these issues.

63. While the Commission acknowledges EMCOR's small scale and limited number of staff, it is not persuaded that such reasons alone are sufficient to impose the proposed administrative charges. Despite the Commission's request, EMCOR did not explain how the amounts were determined. Nevertheless, the Commission observes that while the revised application omitted specific dollar amounts for administrative charges, the accompanying terms and conditions appendix⁵⁶ did include the following proposed amounts: Returned Payment – \$50; Call Back Charge – \$50; Late Payment – \$50. The Commission finds these amounts to be more reasonable, and in line with what other utilities in Alberta are charging, and accordingly approves these charges.

64. The Commission is satisfied that its thorough review of EMCOR's terms and conditions contributes to ensuring that the rates approved in this decision are just and reasonable and reflect the Commission's consideration of all relevant factors in this proceeding by balancing the interests of both the utility and customers.

7 True-up of interim and final rates

65. Interim rates were set in Decision 28055-D01-2023, effective June 7, 2023. The final rates for the period June 7, 2023, to February 29, 2024, and for March 1, 2024, to February 28, 2025, were among the final rates approved in this decision. Given the date of this decision is March 28, 2024, EMCOR will be able to reflect the final rates in place for March 1, 2024, to February 28, 2025, on customers bills, effective April 1, 2024. This means that EMCOR will have to calculate, for each customer, the differences between: (i) the revenue for the period June 7, 2023, to March 31, 2024, that was based on the interim rates in place for that period; and (ii) the revenue for the same period if the final approved rates had been used. This is referred to as the true-up of interim to final rates.

66. The Commission directs EMCOR to file an application to propose how it wishes to collect the calculated revenue differences from customers. The application must include details of the calculated revenue differences and the proposal for collection, including the time period over which the collections will take place. The application should be filed with the Commission some time after billing on interim rates to March 31, 2024, is complete and EMCOR has all the necessary billing information. Once the true-up application is received by the Commission, the Commission will issue a notice of application and set out the process to allow customers to provide their comments on the true-up application.

⁵⁴ Exhibit 28055-X0029, IR EMCOR-AUC-2023NOV27-020(b).

⁵⁵ Exhibit 28055-X0037, IR EMCOR-AUC-2024JAN19-007.

⁵⁶ Exhibit 28055-X0020, Standard fees and charges schedule, page 19.

8 Recycled water, fire protection, irrigation water, and stormwater collection systems

67. Under the *Public Utilities Act*, an application to the Commission includes a complaint.⁵⁷ The Commission also has the authority to initiate a proceeding to prospectively rate regulate a public utility in the absence of an application or complaint.⁵⁸

68. EMCOR was clear that it was only seeking Commission approval of its potable water rates, and that it was not seeking Commission approval of its rates for recycled water, fire protection, irrigation water, or stormwater collection systems.⁵⁹ In Decision 28055-D01-2023, the Commission advised that it was considering EMCOR's submissions regarding this matter.⁶⁰ The Commission has determined that it will not make a finding in this decision as to whether each of these systems is a "public utility" under the *Public Utilities Act*.

69. However, the Commission emphasizes that if the Commission receives an application or complaint (which it has not at this time), or otherwise becomes aware of any potential mischief or other compelling concern (which it does not at this time based on a preliminary review of the financial and other information filed in this proceeding) in relation to these systems, then the Commission will apply the facts to make a decision as to whether these systems are public utilities as that term is defined in the *Public Utilities Act*.

70. If EMCOR's customers believe that there are concerns with the rates charged by EMCOR, those customers can file a complaint with the Commission. Additional information about filing a complaint is available via the AUC homepage (www.auc.ab.ca/aucomplaintform/), email (info@auc.ab.ca) or via phone (310-4AUC).

71. The Commission recognizes that the full regulatory process is often costly for investor-owned water utilities, which generally have a small customer base and lack the personnel and expertise required for complex rate hearings. The Commission does not agree with EMCOR's arguments made in this proceeding as to why these systems, for reasons of statutory interpretation, are not public utilities. The Commission provides the following commentary regarding these arguments on the basis that it may assist EMCOR or its customers in determining whether it or they may file an application or complaint in relation to these systems.

72. The definition of "public utility" in the *Public Utilities Act* has three elements: (1) a system, works, plant, equipment or service; (2) for the production, transmission, delivery or furnishing of water; and (3) either directly or indirectly to or for the public.⁶¹

Does the meaning of "water" in the definition of "public utility" include non-potable water?

73. The ordinary meaning of potable water is drinkable water that is safe for human consumption. EMCOR placed importance on the fact that the water in some of the systems was

⁵⁷ Section 2.

⁵⁸ See, for example, *Public Utilities Act*, sections 79, 87-88 and 103(1).

⁵⁹ A schematic of the Carmek Business Park showing the different systems is available in Exhibit 28005-X0011.

⁶⁰ Exhibit 28055-X0012; Decision 28055-D01-2023, paragraph 5.

⁶¹ *Public Utilities Act*, Section 1(i) and (iv): "(i) "public utility" means ... (iv) a system, works, plant, equipment or service for the production, transmission, delivery or furnishing of water, heat, light or power supplied by means other than electricity, either directly or indirectly to or for the public, ..."

non-potable. In EMCOR's view, non-potable water is excluded from the meaning of "water" in the definition of "public utility."

74. The Commission does not find this argument compelling. The legislature chose to use the term "water" in the definition of "public utility." There is no legislative definition of "water" in the *Public Utilities Act*. The ordinary meaning of water is general and broad, and includes potable and non-potable water.⁶² The Commission gives significance to the ordinary meaning of "water" in the interpretive exercise.

75. The Commission notes that this interpretation is consistent with Commission precedent. As one example, the Commission previously found an irrigation system, which transmitted non-potable water, to be a public utility.⁶³

76. The Commission recognizes that "wastewater" is excluded from the ordinary meaning of water because of Section 112(2)(c) of the *Public Utilities Act*. In Section 112(2)(c), the legislature signaled that sewage and waste management systems (i.e., wastewater) are excluded from the definition of "public utility."⁶⁴ While the legislature expressly drew a line between water and wastewater, it did not do so as between water and other non-potable types of water.

77. EMCOR argued that the legislature intended to exclude byproduct or derivative products of wastewater by means of the language in Section 112(2)(c). The Commission finds this interpretation to be overly broad. Section 112(2)(c) refers to a sewage or waste management system. Wastewater, if treated, may no longer carry attributes that would ordinarily classify it as wastewater and may be used to provide non-wastewater services even if it remains non-potable.⁶⁵

Under the definition of "public utility," must customers be able to access water at any time and to possess it to the exclusion of others?

78. Another argument EMCOR made regarding some of the systems was that customers were restricted in their ability to access the water on demand, or to possess the water to the exclusion

⁶² According to Black's Law Dictionary, 11th ed. 2019, water is "a body of [transparent liquid that is a chemical compound of hydrogen and oxygen], as in a stream, river, lake, or ocean."

⁶³ In Decision 22319-D01-2018, the Commission included the irrigation system in its determination that Blazer Water was a public utility as defined in the *Public Utilities Act* and subsequently set rates for the irrigation system. In that decision, the Commission noted that "[t]he irrigation pump station supplies untreated water through the irrigation water distribution systems to the residential irrigation customers in Lynx Ridge," paragraph 18.

⁶⁴ *Macdonald Communities Limited v Alberta Utilities Commission*, 2019 ABCA 353. The Court of Appeal referenced, in part, Section 112(2)(c) of the *Public Utilities Act* ("(2) In this section, ... (c) 'public utility' includes, in addition to its defined meaning under section 1, a sewerage or waste management system.") and stated, "23. We conclude that the two definitions of 'public utility' found in the Act must be read in their grammatical and ordinary sense and in a fashion that ensures coherence and consistency. If, as MCL [Macdonald Communities Limited] argues, the legislature's sole intent was to ensure that 'public utility' is not read down in s 112(2)(c) to exclude sewerage or waste management systems, the words 'in addition to its defined meaning under section 1' would not be present in that section. It is presumed that the legislature avoids speaking in vain: ... The words 'in addition to' signal the legislative intent that 'public utility' not include sewerage or waste management systems."

⁶⁵ The Commission has previously reached the same conclusion. For example, In Decision 2006-026: Petro-Canada, Application for Declaration Pursuant to Subsection 79(1) of the *Public Utilities Board Act*, Application 1424931, March 16, 2006, the Commission's predecessor, the Alberta Energy and Utilities Board, determined that a pipeline carrying membrane-treated wastewater used for irrigation, snow-making and industrial purposes met the definition of "water" in a "public utility."

of others, and therefore that these systems were not public utilities. One example EMCOR pointed to was access to water in fire hydrants being limited to local fire authorities.

79. The Commission is not persuaded by this argument. As noted in *Macdonald Communities*, the definition of “public utility” has three parts (“for the production, transmission, delivery or furnishing” of “water” “either directly or indirectly to or for the public”). Taking fire hydrants as one example, the Commission acknowledges that customers may not be able to access this water at any time they wish, and that the water does not come into possession of customers in the sense that a customer can control this water to the exclusion of others.⁶⁶ However, if water leaves the fire protection system, due to a fire or for other reasons, then it leaves the possession of EMCOR and comes into the possession of Carmek Business Park, which may include its tenants and lot owners, depending on the circumstances. In addition, regardless of whether the provision of water is supplied directly or indirectly, if it is done for a public benefit (such as fire suppression), then all of EMCOR’s customers benefit.⁶⁷

9 Order

80. It is hereby ordered that:

- (1) The following potable water rates for 2035570 Alberta Ltd. (operating as EMCOR Utility) are approved on a final basis, effective June 7, 2023:
 - Fixed charge of \$49.98 per month per acre.
 - Consumption charge of \$4.91 per cubic metre.
- (2) The following potable water rates for 2035570 Alberta Ltd. (operating as EMCOR Utility) are approved on a final basis, effective March 1, 2024:
 - Fixed charge of \$52.48 per month per acre.
 - Consumption charge of \$5.15 per cubic metre.
- (3) The following potable water rates for 2035570 Alberta Ltd. (operating as EMCOR Utility) are approved on a final basis, effective March 1, 2025:
 - Fixed charge of \$55.10 per month per acre.
 - Consumption charge of \$5.41 per cubic metre.
- (4) The following potable water rates for 2035570 Alberta Ltd. (operating as EMCOR Utility) are approved on a final basis, effective March 1, 2026:
 - Fixed charge of \$57.86 per month per acre.
 - Consumption charge of \$5.68 per cubic metre.
- (5) 2035570 Alberta Ltd. (operating as EMCOR Utility) will file an application to true up its interim rates to final rates for the period June 7, 2023, to March 31, 2024, as directed in this decision.

⁶⁶ According to Black’s Law Dictionary, 11 ed 2019), possession means “the right under which one may exercise control over something to the exclusion of all others.”

⁶⁷ See, for example, Decision 24695-D01-2021, para 44.

Dated on March 28, 2024.

Alberta Utilities Commission

(original signed by)

Matthew Oliver, CD
Commission Member

Appendix 1 – Proceeding participants

Name of organization (abbreviation) Company name of counsel or representative
EMCOR Utility (2035570 Alberta Ltd.) (EMCOR) McLennan Ross Barristers & Solicitors

Alberta Utilities Commission
Commission panel M. Oliver, CD, Commission Member
Commission staff N. Fitz-Simon (Commission counsel) J. Graham (Commission counsel) A. Jukov E. Deryabina D. Mitchell K. O'Neill

Appendix 2 – Summary of Commission directions

This section is provided for the convenience of readers. In the event of any difference between the directions in this section and those in the main body of the decision, the wording in the main body of the decision shall prevail.

1. EMCOR is directed to file an application to true up its interim rates to final rates for the period June 7, 2023, to March 31, 2024, as directed in this decision. paragraph 2
2. The Commission directs EMCOR to file an application to propose how it wishes to collect the calculated revenue differences from customers. The application must include details of the calculated revenue differences and the proposal for collection, including the time period over which the collections will take place. The application should be filed with the Commission some time after billing on interim rates to March 31, 2024, is complete and EMCOR has all the necessary billing information. Once the true-up application is received by the Commission, the Commission will issue a notice of application and set out the process to allow customers to provide their comments on the true-up application. paragraph 66

Appendix 3 – Final rate model

[\(return to text\)](#)



Appendix 3 - Final
rate model

(consists of 17 pages)

CARMEK UTILITY SERVICES

Potable Water

Schedule 5: Cost Allocation and Rate Determination

Line No.	March 1, 2019 to February 28, 2020	March 1, 2020 to February 28, 2021	March 1, 2021 to February 28, 2022	March 1, 2022 to February 28, 2023	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23	Sep-23	Oct-23	Nov-23	Dec-23	March 1, 2023 to February 28, 2024	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	March 1, 2024 to February 28, 2025	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	March 1, 2025 to February 28, 2026	March 1, 2026 to February 28, 2027													
1																	\$174,278																	\$192,131																	\$202,163	\$205,668					
2																	\$0																	\$0																	\$0	\$0					
3																	\$174,278																	\$192,131																	\$202,163	\$205,668					
Developed Acres/Water Usage																																																									
4	58	0	5	30	8.33	16.54	0	0	0	0	0	0	0	0	0	4.49	55	5																	25																	0	0				
5	58	58	63	94																	149																	173																	173	173	
6	58	58	61	79																	121																	161																	173	173	
7	285	60	80	80																	265	80																	80																	0	0
8	285	345	425	505																	770	80																	850																	850	850
9	285	315	385	465																	638	20																	830																	850	850
10	20	20	20	17																	17	17																	17																	17	17
11	6	6	7	7																	7	7																	7																	7	7
12	1778	1966	2803	2877																	3945	5012																	5260	5260																	
Proposed Rates																																																									
13																	5.0%																	3.0%																	3.0%	3.0%					
14	\$ 43,270	\$ 43,270	\$ 43,270	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,434	\$ 45,797	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200	\$ 48,200														
15	\$ 4,250	\$ 4,250	\$ 4,250	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,463	\$ 4,596	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734	\$ 4,734												
Revenues at Proposed Rates																																																									
16	\$30,230	\$30,230	\$31,591	\$42,831																	\$68,021	\$93,143																	\$103,345	\$106,446																	
17	\$7,558	\$8,354	\$11,912	\$12,840																	\$18,132	\$23,729																	\$25,648	\$26,418																	
18	\$ 37,788	\$ 38,584	\$ 43,503	\$ 55,672																	\$ 86,153	\$ 116,872																	\$ 128,993	\$ 132,864																	
19																	\$ (86,153)																	\$ (75,249)																	\$ (72,170)	\$ (70,801)					

CARMEK UTILITY SERVICES

Potable Water

Schedule 1: Revenue Requirement Summary

	March 1, 2022 to February 28, 2023	March 1, 2023 to February 29, 2024	June 7, 2023 to February 29, 2024	March 1, 2024 to February 28, 2025	March 1, 2025 to February 28, 2026	March 1, 2026 to February 28, 2027	Supporting Schedule				
Operating and Maintenance Expenses	\$	120,582	\$	88,295	\$	125,449	\$	130,540	\$	134,456	2
General and Administration Expenses	\$	10,486	\$	7,678	\$	10,801	\$	11,125	\$	11,459	2
TOTAL OM&A	\$	131,069	\$	95,974	\$	136,250	\$	141,665	\$	145,915	
Depreciation	\$	54,335	\$	39,787	\$	54,335	\$	54,335	\$	54,335	3
Amortization	\$	-	\$	-	\$	-	\$	-	\$	-	3
Return	\$	133,849	\$	98,010	\$	129,729	\$	125,610	\$	121,490	4
Total - as calculated by Commission - before reduction for unused capacity	\$	319,253	\$	233,770	\$	320,314	\$	321,610	\$	321,740	
Reduction to depreciation and return on equity for unused capacity - beginning of year		81.5%		72.5%		66.7%		66.0%		66.0%	
Reduction to depreciation and return for unused capacity - end of year		72.5%		66.7%		66.0%		66.0%		66.0%	
Reduction to depreciation and return for unused capacity - average for the year		77.0%		77.0%		69.6%		66.4%		66.0%	
Depreciation reduction	\$	(41,859)	\$	(30,651)	\$	(37,839)	\$	(36,068)	\$	(35,870)	
Return reduction	\$	(103,116)	\$	(75,506)	\$	(90,344)	\$	(83,379)	\$	(80,202)	
Total - as calculated by Commission - after reduction for unused capacity	\$	174,278	\$	127,613	\$	192,131	\$	202,163	\$	205,668	
Commission calculations of unused portion of potable water system											
System usage - based on unoccupied acres/total acres the system can accommodate											
Total serviced acres - December 19, 2023	173	173		173	173	173	5				
Additional development acres - December 19, 2023	295	295		295	295	295	Exhibit 28055-X0029, response to EMCOR-AUC-2023NOV27-002(a)				
Total acres that the potable water system as it now exists, can accommodate	468	468		468	468	468					
Acres occupied at end of fiscal year	94	149		173	173	173	5				
Unoccupied acres at end of fiscal year	375	320		295	295	295					
Unoccupied acres as a percentage of total acres - end of fiscal year	80.0%	68.3%		63.0%	63.0%	63.0%					
System usage - based on unused portion of treated water capacity											
Treated water capacity of the current system (cubic metres)	17,000	17,000		17,000	17,000	17,000	Exhibit 28055-X0029, response to EMCOR-AUC-2023NOV27-002(a)				
Annual water usage (cubic metres)	2,877	3,945		5,012	5,260	5,260	5				
Unused portion of treated water capacity (cubic metres)	14,123	13,055		11,988	11,740	11,740					
Unused portion of treated water as a percentage of treated water capacity - end of fiscal year	83.1%	76.8%		70.5%	69.1%	69.1%					
Simple average of both reasonableness assessment percentages - end of fiscal year	81.5%	72.5%		66.7%	66.0%	66.0%					

CARMEK UTILITY SERVICES

Potable Water

mar 1-19 to feb 28-20

Schedule 2: OM&A Expenses

	Historical					Projected			
	March 1, 2019 to February 29, 2020	March 1, 2020 to February 28, 2021	March 1, 2021 to February 28, 2022	March 1, 2022 to February 28, 2023	March 1, 2023 to February 29, 2024	June 7, 2023 to February 29, 2024	March 1, 2024 to February 28, 2025	March 1, 2025 to February 28, 2026	March 1, 2026 to February 28, 2027
WATER TREATMENT SYSTEMS									
Operating and Maintenance Expenses:									
Utilities									
Electricity (20%)	\$ 7,725	\$ 5,556	\$ 4,041	\$ 4,243	\$ 4,370	\$ 3,200	\$ 4,502	\$ 4,637	\$ 4,776
Natural Gas (1/3)	\$ 684	\$ 717	\$ 1,098	\$ 1,152	\$ 1,187	\$ 869	\$ 1,223	\$ 1,259	\$ 1,297
Communications (1/3)	\$ 949	\$ 858	\$ 799	\$ 839	\$ 864	\$ 632	\$ 890	\$ 916	\$ 944
Sub-Total	\$ 9,358	\$ 7,131	\$ 5,937	\$ 6,234	\$ 6,421	\$ 4,702	\$ 6,614	\$ 6,812	\$ 7,017
Operating and Maintenance Expenses:									
Operator Contract	\$ 36,523	\$ 35,335	\$ 35,960	\$ 37,758	\$ 38,891	\$ 28,477	\$ 40,057	\$ 41,259	\$ 42,497
Water Testing	\$ 1,383	\$ 220	\$ 6,514	\$ 6,840	\$ 7,045	\$ 5,159	\$ 7,256	\$ 7,474	\$ 7,698
Maintenance and Repairs	\$ 3,558	\$ 8,779	\$ 10,214	\$ 10,725	\$ 11,046	\$ 8,089	\$ 11,378	\$ 11,719	\$ 12,071
Meter Reading and Billing Costs	\$ 801	\$ 151	\$ 4,474	\$ 4,697	\$ 4,838	\$ 3,543	\$ 4,983	\$ 5,133	\$ 5,287
Out of Scope Work	\$ 2,450	\$ 5,012	\$ 4,601	\$ 4,831	\$ 4,976	\$ 3,643	\$ 5,125	\$ 5,279	\$ 5,437
Operations (Hauling from Waste Tank)	\$ 30,124	\$ 44,877	\$ 35,722	\$ 25,821	\$ 44,083	\$ 32,279	\$ 46,654	\$ 49,382	\$ 50,863
Chemicals	\$ 6,232	\$ 2,918	\$ 3,035	\$ 3,187	\$ 3,282	\$ 2,403	\$ 3,381	\$ 3,482	\$ 3,587
Supplies and Meters	\$ 2,244	\$ 682	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-Total	\$ 83,315	\$ 97,975	\$ 100,519	\$ 93,858	\$ 114,161	\$ 83,593	\$ 118,835	\$ 123,728	\$ 127,440
General and Administrative Expenses:									
Insurance (1/2)	\$ 3,274	\$ 4,966	\$ 6,343	\$ 6,660	\$ 6,860	\$ 5,023	\$ 7,066	\$ 7,278	\$ 7,496
Interest and Bank Charges (1/3)	\$ 97	\$ 43	\$ 51	\$ 53	\$ 55	\$ 40	\$ 56	\$ 58	\$ 60
Management and Administration (1/3)	\$ -	\$ 1,808	\$ 788	\$ 827	\$ 852	\$ 624	\$ 877	\$ 904	\$ 931
Professional Fees (Accounting) (1/3)	\$ 3,117	\$ 269	\$ 497	\$ 522	\$ 538	\$ 394	\$ 554	\$ 570	\$ 588
Consulting	\$ 570	\$ 2,095	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Office (1/3)	\$ 574	\$ 72	\$ 129	\$ 135	\$ 139	\$ 102	\$ 143	\$ 148	\$ 152
Computer Supplies and Services	\$ 394	\$ 176	\$ -	\$ 200	\$ 206	\$ 151	\$ 212	\$ 219	\$ 225
Security (1/3)	\$ 110	\$ 2,059	\$ 1,698	\$ 1,783	\$ 1,837	\$ 1,345	\$ 1,892	\$ 1,949	\$ 2,007
Bad Debts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Sub-Total	\$ 8,136	\$ 11,488	\$ 9,506	\$ 10,181	\$ 10,486	\$ 7,678	\$ 10,801	\$ 11,125	\$ 11,459
Total Water Treatment System	\$ 100,808	\$ 116,595	\$ 115,962	\$ 110,273	\$ 131,069	\$ 95,974	\$ 136,250	\$ 141,665	\$ 145,915

Escalation Rate				5.00%	3.00%		3.00%	3.00%	3.00%
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CARMEK UTILITY SERVICES																														
2035570 Alberta Ltd.																														
Schedule 2: OM&A Expenses																														
	Feb-20	2020 adj to	COA	YEAR ENDING FEB 28-2021												Total	YEAR ENDING FEB 28-2022													
	YE 2020	2021		Mar 2020	Apr 2020	May 2020	Jun 2020	Jul 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020	Jan 2021	Feb 2021		Mar 2021	Apr 2021	May 2021	June 2021	July 2021	Aug 2021	Sept 2021	Oct 2021	Nov2021	Dec2021	Jan2022	Feb2022		
COMBINED UTILITIES																														
WATER TREATMENT SYSTEMS																														
Operating and Maintenance Expenses:																														
Utilities																														
Electricity (15%)	7,725		01000	393.51	401.62	506.04	399.41	358.59	444.30	491.10	535.05	674.30	376.74	399.47	575.66	5,555.79	523	604	587	536	301	250	344	230	195	195	123	154	4,041	
Natural Gas (1/3)	684		01001	111.42	79.23	68.48	39.27	31.32	19.42	29.53	38.57	85.47	112.44	102.20	717.33	121	105	84	120	42	39	50	70	122	178	167	1,098			
Communications (1/3)	949		01002	76.38	76.38	76.38	76.38	76.38	76.38	66.55	67.13	66.56	66.56	66.56	66.56	858.20	67	67	67	67	67	67	67	67	67	67	67	67	799	
Subtotal		9,357.69														7,131.32	711	775	738	722	368	358	450	347	332	383	367	387	4,800	
Operator Contract	36,523		01003	2,892.53	2,892.53	2,892.53	2,892.53	2,892.53	2,892.53	2,892.53	2,892.53	2,892.53	2,892.53	2,892.53	3,517.28	35,335.15	2,893	2,893	2,893	2,893	2,893	2,893	2,893	2,893	2,893	2,893	2,893	2,893	3,517	35,960
Water Testing	1,383		01004					220.42								220.42	139			559	2423	693	139		2423	138.6			6,514	
Maintenance and Repairs	3,558		01005	262.50	131.25	351.75	54.12		89.38	1,071.70		6,818.41				8,779.11	65			7299	1719					1063.6	67.73		10,214	
Meter Reading and Billing Costs	801		01006												150.68	150.68			151		334	334	334	614	593	592.73	592.73	592.73	4,474	
Out of Scope Work	2,450		01007	0.00			1,640.63	1,319.07				602.72	335.48	1,114.58		5,012.48	151	3,131	859		197	262.5							4,601	
Operations (Hauling from Waste Tank)	30,124		01008	3,142.13	3,638.25	4,417.88	3,491.25	4,803.75	4,856.25	5,696.25	4,436.25	2,598.75	1,732.50	3,465.00	2,598.75	44,877.01	1,759	4,352	5,219	3666	3322	2804.82	3301	2811	469	935	3790.5	3293.5	35,722	
Chemicals	6,232		01009	545.56	430.44		654.29	721.00		502.98		512.69		-938.89	490.59	2,917.66	80	101	164	531	359			304	50	534	562.47	295.91	52.6	3,035
Supplies and Meters	2,244		01010	205.59			476.70								682.29								0	0	0	0	0	0	0	
Subtotal		83,316														97,974.80	5,086	10,628	9,135	15,282	11,246	6,987	6,971	6,368	6,911	6,185	8,264	7,456	78,614	
Total		92,672.37														105,106.12	5,797	11,403	9,873	16,004	11,614	7,345	7,420	6,715	7,243	6,568	8,631	7,844	83,414	
General and Administrative Expenses																														
Insurance (1/2)	3,274		01011	419.00	419.00	419.00	419.40	419.40	419.40	419.40	419.40	403.00	403.00	403.00	403.00	4,965.98	419	419	419	419	453	453	453	696	653	653	653	653	6,343	
Interest and Bank Charges (1/3)	97		01012	3.00	3.53	3.87	3.53	4.20	3.53	3.20	3.53	3.53	3.53	4.26	3.53	43.26	3.53	3.53	3.87	4.63	4.59	7.75	3.92	5.38	3.33	3.33	3.33	3.33	51	
Management and Administration (1/3)	-	1,808	01013												1,808.00	1,808.00				788									788	
Professional fees (1/3)	3,117		01014				148.75	62.18		58.31						269.24				225		99.82					172.288333		497	
Consulting	570	992	01015	446.00	657.00										992.00	2,095.00													0	
Office (1/3)	574		01016	6.30								65.63				71.93		22			80				27				129	
Computer Supplies and Services (1/3)	394		01017		176.00											176.00													0	
Security (1/3)	110	2,013	01018		46.00										2,013.00	2,059.00							1083					615.7725	1,698	
Bad Debts	-		01019													0.00							0	0	0	0	0	0	0	
Subtotal		8,135.67														11,488.41	423	445	1,211	649	537	561	1,540	702	683	656	828	1,272	9,506	
Total Water Treatment Systems		100,808														116,594.52	6,220	11,848	11,084	16,653	12,151	7,906	8,960	7,416	7,926	7,224	9,459	9,115	115,962	

CARMEK UTILITY SERVICES

Potable Water

Schedule 2.1: Estimated Water Usage and Process Waste Volumes

Year	March 1, 2019 to February 29, 2020	March 1, 2020 to February 28, 2021	March 1, 2021 to February 28, 2022	March 1, 2022 to February 28, 2023	March 1, 2023 to February 29, 2024	March 1, 2024 to February 28, 2025	March 1, 2025 to February 28, 2026	March 1, 2026 to February 28, 2027
1 Number of Persons	285	315	385	465				
2 Number of Days of Week Water is delivered	6	6	7	7				
3 Average per person water used (L/c/d)	20	20	20	17				
4 Daily Water usage (L/d)	5700	6300	7700	7905				
5 Yearly Water Usage (C.M./Yr)	1778	1966	2803	2877				
6 Treatment Efficiency (%)	80%	80%	80%	80%				
7 Total Raw water required to meet annual demand (C.M./yr)	2223	2457	3504	3597				
8 Total Waste Water Generated (C.M./yr)	445	491	701	719				
9 Total Volume per Backwash (C.M.)	9.12	9.12	9.12	9.12				
10 Volume of water treated per backwash (C.M.)	152	152	152	152				
11 Estimated number of backwashes per year	11.7	12.9	18.4	18.9				
12 Estimated volume of backwash generated per year (C.M./yr)	106.704	117.936	168.168	172.6452				
13 Total Waste generated (Process and backwash) (C.M./yr) ¹	551	609	869	892	1127	1158	1190	1190
14 Volume per truck load (C.M.)	28.5	28.5	28.5	28.5	13	13	13	13
15 Trucking efficiency (How full is the truck)	100	100	100	100	100	100	100	100
16 Estimated number of truck loads per year	19.34	21.38	30.49	31.30	86.69	89.08	91.54	91.54
17 Cost per Truck Load ²	\$ 675	\$ 675	\$ 825	\$ 825	\$ 509	\$ 524	\$ 539	\$ 556
18 Estimated Yearly Trucking Cost	\$ 13,057	\$ 14,432	\$ 25,151	\$ 25,821	\$ 44,083	\$ 46,654	\$ 49,382	\$ 50,863

1. Projected values are based on the calculations provided by EMCOR in Exhibit 28055-X0041
2. The 2024 estimate for cost per truck load is based on invoice number 2122160, 8/11/2023, which was the most recent sample invoice provided by EMCOR. The total cost per truck load includes the haulage rates, fuel surcharge, and goods and service tax.

CARMEK UTILITY SERVICES

Potable Water

Schedule 3: Depreciation and Amortization

	February 15, 2018 to February 28, 2018	March 1, 2018 to February 28, 2019	March 1, 2019 to February 29, 2020	March 1, 2020 to February 28, 2021	March 1, 2021 to February 28, 2022	March 1, 2022 to February 28, 2023	March 1, 2023 to February 29, 2024	March 1, 2024 to February 28, 2025	March 1, 2025 to February 28, 2026	March 1, 2026 to February 28, 2027	Supporting Schedule
Depreciation:											
Underground Piping	\$ 1	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	\$ 29	3.2
Underground Storage Tanks	\$ 1	\$ 23	\$ 23	\$ 23	\$ 23	\$ 23	\$ 23	\$ 23	\$ 23	\$ 23	3.2
Distribution Piping System	\$ 708	\$ 18,466	\$ 18,466	\$ 18,466	\$ 18,466	\$ 18,466	\$ 18,466	\$ 18,466	\$ 18,466	\$ 18,466	3.2
WTP Building and Structures	\$ 358	\$ 9,336	\$ 9,336	\$ 9,336	\$ 9,336	\$ 9,336	\$ 9,336	\$ 9,336	\$ 9,336	\$ 9,336	3.2
Water Treatment Plant Equipment	\$ 923	\$ 24,075	\$ 24,075	\$ 24,075	\$ 24,075	\$ 24,075	\$ 24,075	\$ 24,075	\$ 24,075	\$ 24,075	3.2
WTP Pumps and Motors	\$ 558	\$ 14,535	\$ 14,535	\$ 14,535	\$ 14,535	\$ 13,978	\$ -	\$ -	\$ -	\$ -	3.2
WTP Generator	\$ 92	\$ 2,407	\$ 2,407	\$ 2,407	\$ 2,407	\$ 2,407	\$ 2,407	\$ 2,407	\$ 2,407	\$ 2,407	3.2
WTP Control /Monitor/Computers	\$ 312	\$ 8,128	\$ 8,128	\$ 8,128	\$ 8,128	\$ 7,817	\$ -	\$ -	\$ -	\$ -	3.2
Total	\$ 2,953	\$ 76,999	\$ 76,999	\$ 76,999	\$ 76,999	\$ 76,130	\$ 54,335	\$ 54,335	\$ 54,335	\$ 54,335	
Amortization:											
Grants				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Customer Contribution				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	3.3
Cash Developer Connection Charges				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Total				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	

CARMEK UTILITY SERVICES

Potable Water

Schedule 3.1: Continuity Schedule of Gross Assets

	Underground Piping (On WTP)	Underground Storage Tanks	Distribution Piping System	WTP Building and Structures	Water Treatment Plant	WTP Pumps and Motors	WTP Generator	WTP Control /Monitor/Compu	Total	Schedule Reference
Asset Life	50	50	75	25	17.5	5	10	5		3.6
Cost: February 15, 2018	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	3.5
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2018	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2019	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 29, 2020	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2021	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2022	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2023	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 29, 2024	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2025	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2026	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	
Additions									\$0	
Retirements									\$0	
Cost: February 28, 2027	\$ 1,444	\$ 1,127	\$ 1,384,916	\$ 233,407	\$ 421,320	\$ 72,676	\$ 24,067	\$ 40,642	\$2,179,598	

Schedule 3.2: Continuity Schedule of Annual Depreciation

	Underground Piping (On WTP Site)	Underground Storage Tanks	Distribution Piping System	WTP Building and Structures	Water Treatment Plant Equipment	WTP Pumps and Motors	WTP Generator	WTP Control /Monitor/Comput ers	Total: accumulated depreciation
Life	50	50	75	25	17.5	5	10	5	
Accumulated depreciation: February 15, 2018	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation: February 15, 2018 to February 28, 2018	\$ 1	\$ 1	\$ 708	\$ 358	\$ 923	\$ 558	\$ 92	\$ 312	\$ 2,953
Accumulated depreciation: February 28, 2018	\$ 1	\$ 1	\$ 708	\$ 358	\$ 923	\$ 558	\$ 92	\$ 312	\$ 2,953
Depreciation: March 1, 2018 to February 28, 2019	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ 14,535	\$ 2,407	\$ 8,128	\$ 76,999
Accumulated depreciation: February 28, 2019	\$ 30	\$ 23	\$ 19,174	\$ 9,694	\$ 24,999	\$ 15,093	\$ 2,499	\$ 8,440	\$ 79,952
Depreciation: March 1, 2019 to February 29, 2020	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ 14,535	\$ 2,407	\$ 8,128	\$ 76,999
Accumulated depreciation: February 29, 2020	\$ 59	\$ 46	\$ 37,639	\$ 19,031	\$ 49,074	\$ 29,628	\$ 4,906	\$ 16,569	\$ 156,951
Depreciation: March 1, 2020 to February 28, 2021	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ 14,535	\$ 2,407	\$ 8,128	\$ 76,999
Accumulated depreciation: February 28, 2021	\$ 88	\$ 68	\$ 56,105	\$ 28,367	\$ 73,150	\$ 44,163	\$ 7,312	\$ 24,697	\$ 233,950
Depreciation: March 1, 2021 to February 28, 2022	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ 14,535	\$ 2,407	\$ 8,128	\$ 76,999
Accumulated depreciation: February 28, 2022	\$ 117	\$ 91	\$ 74,570	\$ 37,703	\$ 97,225	\$ 58,698	\$ 9,719	\$ 32,825	\$ 310,949
Depreciation: March 1, 2022 to February 28, 2023	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ 13,978	\$ 2,407	\$ 7,817	\$ 76,130
Accumulated depreciation: February 28, 2023	\$ 145	\$ 114	\$ 93,036	\$ 47,039	\$ 121,301	\$ 72,676	\$ 12,126	\$ 40,642	\$ 387,079
Depreciation: March 1, 2023 to February 29, 2024	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ -	\$ 2,407	\$ -	\$ 54,335
Accumulated depreciation: February 29, 2024	\$ 174	\$ 136	\$ 111,502	\$ 56,376	\$ 145,376	\$ 72,676	\$ 14,532	\$ 40,642	\$ 441,414
Depreciation: March 1, 2024 to February 28, 2025	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ -	\$ 2,407	\$ -	\$ 54,335
Accumulated depreciation: February 28, 2025	\$ 203	\$ 159	\$ 129,967	\$ 65,712	\$ 169,451	\$ 72,676	\$ 16,939	\$ 40,642	\$ 495,750
Depreciation: March 1, 2025 to February 28, 2026	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ -	\$ 2,407	\$ -	\$ 54,335
Accumulated depreciation: February 28, 2026	\$ 232	\$ 181	\$ 148,433	\$ 75,048	\$ 193,527	\$ 72,676	\$ 19,346	\$ 40,642	\$ 550,085
Depreciation: March 1, 2026 to February 28, 2027	\$ 29	\$ 23	\$ 18,466	\$ 9,336	\$ 24,075	\$ -	\$ 2,407	\$ -	\$ 54,335
Accumulated depreciation: February 28, 2027	\$ 261	\$ 204	\$ 166,898	\$ 84,384	\$ 217,602	\$ 72,676	\$ 21,752	\$ 40,642	\$ 604,420
Depreciation Rate	2.00%	2.00%	1.33%	4.00%	5.71%	20.00%	10.00%	20.00%	

CARMEK UTILITY SERVICES

Potable Water

Schedule 3.3: Continuity Schedule of No Cost Capital

Customer Contribution Percentage					0%
	Grants and Tax Credits	Customer Contribution	Cash Developer Connection Charges	TOTALS	
Cost: February 15, 2018	\$ -	\$ -	\$ -	\$0	
Additions				\$0	
Retirements				\$0	
Cost: February 28, 2018	\$ -	\$ -	\$ -	\$0	
Additions				\$0	
Retirements				\$0	
Cost: February 28, 2019	\$ -	\$ -	\$ -	\$0	
Additions				\$0	
Retirements				\$0	
Cost: February 29, 2020	\$ -	\$ -	\$ -	\$0	
Additions				\$0	
Retirements				\$0	
Cost: February 28, 2021	\$ -	\$ -	\$ -	\$0	
Additions		\$ -	\$ -	\$0	
Retirements				\$0	
Cost: February 28, 2022	\$ -	\$ -	\$ -	\$0	
Additions				\$0	
Retirements				\$0	
Cost: February 28, 2023	\$ -	\$ -	\$ -	\$0	
Additions				\$0	
Retirements				\$0	
Cost: February 29, 2024	\$ -	\$ -	\$ -	\$0	
Additions			\$ -	\$0	
Retirements				\$0	
Cost: February 28, 2025	\$ -	\$ -	\$ -	\$0	
Additions			\$ -	\$0	
Retirements				\$0	
Cost: February 28, 2026	\$ -	\$ -	\$ -	\$0	
Additions			\$ -	\$0	
Retirements				\$0	
Cost: February 28, 2027	\$ -	\$ -	\$ -	\$0	

CARMEK UTILITY SERVICES

Potable Water

Schedule 3.4: Asset Costs

Description	Inv#	Contractor	UG Piping	UG Tanks	Bldg/Structures	WTP	Treatment Filtration	RO	Pumps/Motors	Generator	Control/Monitor	Computer	
TOTAL			\$ 1,443.71	\$ 1,127.00	\$ 233,406.58	\$ 337,251.79	\$ -	\$ 84,068.10	\$ 72,676.20	\$ 24,066.67	\$ 39,042.14	\$ 1,600.00	\$ 794,682.19
WATER TREATMENT PLANT													
All Thread Rods		49112 Alberta Bolt Makers				\$ 81.68							
Fabricate Spools WTP		448 Arawak Welding Inc.				\$ 9,500.00							
Watermeter Install in Well		489 Backwood Landscapes & Design Inc.				\$ 8,691.41							
Install Equipment		1027 Black Bear Mechanical				\$ 7,660.11							
Consulting		28846 B&A				\$ 725.00							
Blinds		30005 Calgary Venetian Blinds				\$ 175.00							
Pipeline Testing		628045 Cal-Portisan	\$ 935.79										
Pipeline Testing	T15118	Cal-Portisan	\$ 507.92										
Propane for Heating (1/3 of Cost for Potable Water)	Various	CanWest				\$ 9,575.92							
Chemical Feed Systems		14897 Capital H2O Systems						\$ 31,715.25					
Electrical Contractor (1/3 of Cost for Potable Water)	Various	Cerato Electric Ltd.				\$ 132,837.60							
Courier Fees	Various	Chariot Express				\$ 2,454.90							
Pumps	Various	Chinook Pumps Ltd.						\$ 40,960.95					
Control Panel		3047 Command Technology								\$ 39,042.14			
RO System	Various	Culligan					\$ 84,068.10						
Generator (1/3 of Cost for Potable Water)	Various	Cummins							\$ 24,066.67				
Mechanical Install (1/3 of Cost for Potable Water)	Various	Deerfoot Mechanical Ltd.				\$ 76,768.65							
Courier Fees		846921 Driver Direct				\$ 78.98							
Courier Fees		846921 Driver Direct				\$ 78.98							
Concrete Pumping (1/3 of Cost for Potable Water)	Various	Dynamic Concrete Pumping				\$ 790.45							
Screw Piles (1/3 of Cost for Potable Water)		167003 Earth Drilling Co. Ltd.				\$ 1,336.65							
Concrete (1/3 of Cost for Potable Water)						\$ 1,761.33							
Waste Handling (1/3 of Cost for Potable Water)	Various					\$ 1,393.75							
Rebar (1/3 of Cost for Potable Water)	Various	Harris				\$ 3,250.33							
Lab Cabinets	Various	Hayley Industrial				\$ 9,670.00							
Sheeps foot Roller (1/3 of Cost for Potable Water)		HRR Rentals				\$ 863.04							
Building Construction (1/3 of Cost for Potable Water)	Various	Jolly Construction Ltd.				\$ 11,195.58							
Misc (1/3 of Cost for Potable Water)		KDM Utilities Ltd.				\$ 8,183.33							
Concrete Supply (1/3 of Cost for Potable Water)		LaFarge				\$ 42,887.54							
Testing		McElhanney				\$ 682.50							
Instrumentation		Measurement and Control				\$ 2,853.48							
Security		National Alarm & Southern Sound				\$ 165.00							
Concrete Equipment (1/3 of Cost for Potable Water)		National Concrete Accessories				\$ 474.65							
Concrete Placement (1/3 of Cost for Potable Water)		Perma-Cast Concrete Contracting				\$ 4,363.03							
Pipe Stand Coating		Pro Coat Coatings Ltd.				\$ 774.00							
Courier Fees		Prurolator				\$ 118.42							
Fencing		Rite-Way				\$ 200.00							
Levy's		Rocky View County				\$ 3,459.00							
Building Structure (1/3 of Cost for Potable Water)		RollFab				\$ 8,774.45							
Building Materials		RONA				\$ 120.62							
Security		Secure Protection Service Inc.				\$ 1,470.00							
Engineering (1/3 of Cost for Potable Water)		Sim-Flo Systems				\$ 33,888.67							
Instrumentation		SRP Controls				\$ 38,340.00							
Building (1/3 of Cost for Potable Water)		Straight Up Metal Buildings				\$ 55,239.61							
Misc		Home Depot				\$ 158.89							
Testing		Titan Water Systems				\$ 9,258.00							
Network Routers		TNT Intra-Networks									\$ 1,600.00		
Building Piling Survey (1/3 of Cost for Potable Water)		Tri-Tech Surveys				\$ 4,328.33							
Equipment Rental (1/3 of Cost for Potable Water)		United Rentals				\$ 3,838.45							
Precast Tanks		Westcon Precast	\$ 1,127.00										
Underground Piping Systems (1/3 of Cost for Potable Water)		Borger Construction				\$ 70,358.77							
Septic Pumping		Wildrose Vacuum Services				\$ 1,832.25							

CARMEK UTILITY SERVICES**Potable Water****Schedule 3.5: Asset Classes**

Item	Description	Rate (yrs)
1	Underground Piping	50
2	Fire Hydrants	25
3	Underground Storage Tanks	50
4	Building and Structures	25
5	Treatment Systems	
	- Filtration	17.5
	- Reverse Osmosis	17.5
	- Waste water Treatment Plant	17.5
6	Pumps and Motors	5
7	Emergency Generators	10
8	Control and Monitoring (Industrial	5
9	Computer Systems	2
10	Wastewater ponds	25
11	Water pivots	5
12	Landscaping	10
13	Utilities	10
14	WWTP	25
15	Irrigation Pond	25
16	Insurance	10

CARMEK UTILITY SERVICES
Potable Water
Schedule 4: Rate Base, Cost of Capital and Return

Line No.		March 1, 2023 to February 29, 2024	March 1, 2024 to February 28, 2025	March 1, 2025 to February 28, 2026	March 1, 2026 to February 28, 2027	Supporting Schedule
	Rate Base					
1	Beginning Year Gross Assets	\$2,179,598	\$2,179,598	\$2,179,598	\$2,179,598	3.1
2	Year End Gross Assets	<u>\$2,179,598</u>	<u>\$2,179,598</u>	<u>\$2,179,598</u>	<u>\$2,179,598</u>	3.1
3	Mid Year Gross Assets ((L1+L2)/2)	<u>\$2,179,598</u>	<u>\$2,179,598</u>	<u>\$2,179,598</u>	<u>\$2,179,598</u>	
4	Beginning Year Accumulated Depreciation	\$387,079	\$441,414	\$495,750	\$550,085	3.2
5	Year End Accumulated Depreciation	<u>\$441,414</u>	<u>\$495,750</u>	<u>\$550,085</u>	<u>\$604,420</u>	3.2
6	Mid Year Accumulated Depreciation ((L4+L5)/2)	<u>\$414,247</u>	<u>\$468,582</u>	<u>\$522,917</u>	<u>\$577,253</u>	
7	Mid-year plant in service	\$1,765,351	\$1,711,016	\$1,656,681	\$1,602,345	
	Average Working Capital					
8	1/8 OM&A	\$0	\$0	\$0	\$0	2
9	Mid-year rate base	<u>\$1,765,351</u>	<u>\$1,711,016</u>	<u>\$1,656,681</u>	<u>\$1,602,345</u>	
	Deemed Capital Ratio:					
10	Debt	60%	60%	60%	60%	
11	Equity	40%	40%	40%	40%	
	Total	100%	100%	100%	100%	
	Cost Rate:					
12	Debt	6.45%	6.45%	6.45%	6.45%	
13	Equity	9.28%	9.28%	9.28%	9.28%	
	Return:					
14	Debt (L9 * L10 * L12)	68,319	66,216	64,114	62,011	
15	Equity (L9 * L11 * L13)	65,530	63,513	61,496	59,479	
16	Total (L14 + L15)	133,849	129,729	125,610	121,490	

CARMEK UTILITY SERVICES

Potable Water

Schedule 5: Cost Allocation and Rate Determination

Line No.		March 1, 2019 to February 29, 2020	March 1, 2020 to February 28, 2021	March 1, 2021 to February 28, 2022	March 1, 2022 to February 28, 2023	March 1, 2023 to February 29, 2024	March 1, 2024 to February 28, 2025	March 1, 2025 to February 28, 2026	March 1, 2026 to February 28, 2027
1	Gross Revenue Requirement (Schedule 1)					\$174,278	\$192,131	\$202,163	\$205,668
2	Other Income	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Net Revenue Requirement (L1 - L2)	\$0	\$0	\$0	\$0	\$174,278	\$192,131	\$202,163	\$205,668
Developed Acres/Water Usage									
4	Additional Land Area (acres)	58	0	5	30	55	25	0	0
5	Land Area at End of Year (acres)	58	58	63	94	149	173	173	173
6	Average Land Area (acres)	58	58	61	79	121	161	173	173
7	Additional Service Population	285	60	80	80	265	80	0	0
8	Service Population End of Year	285	345	425	505	770	850	850	850
9	Average Service Population	285	315	385	465	638	810	850	850
10	Average Water Usage (L/person/day)	20	20	20	17	17	17	17	17
11	Number of Days per Week Water is Delivered	6	6	7	7	7	7	7	7
12	Total Yearly Water Usage (c.m.)	1778	1966	2803	2877	3945	5012	5260	5260
Proposed Rates									
13	Annual Escalation				10.0%	5.0%	5.0%	5.0%	5.0%
14	Fixed Charge Water (\$/month/acre)	\$ 43.270	\$ 43.270	\$ 43.270	\$ 47.597	\$ 49.98	\$ 52.48	\$ 55.10	\$ 57.86
15	Consumption Charge Water (\$/c.m)	\$ 4.250	\$ 4.250	\$ 4.250	\$ 4.6750	\$ 4.91	\$ 5.15	\$ 5.41	\$ 5.68
Revenues at Proposed Rates									
16	Fixed Charge Water (\$/yr)	\$30,230	\$30,230	\$31,591	\$44,871	\$72,644	\$101,405	\$114,698	\$120,433
17	Consumption Charge Water(\$/c.m./yr)	\$7,558	\$8,354	\$11,912	\$13,452	\$19,365	\$25,833	\$28,466	\$29,891
18	TOTAL WATER	\$ 37,788	\$ 38,584	\$ 43,502	\$ 58,323	\$ 92,010	\$ 127,238	\$ 143,164	\$ 150,324
19	Revenue Deficiency					\$ (82,268)	\$ (64,892)	\$ (59,000)	\$ (55,344)

Schedule 5.1 Projected Development Area and Population
Potable Water

Serviceable Developed Land Area (Acres)	March 1, 2019	March 1, 2020	March 1, 2021	March 1, 2022	March 1, 2023	March 1, 2024	March 1, 2025	March 1, 2026
	to February 29, 2020	to February 28, 2021	to February 28, 2022	February 28, 2023	to February 29, 2024	to February 28, 2025	to February 28, 2026	to February 28, 2027
THIS HAS TO STAY CUMULATIVE WHERE ACRES COME ONLINE OVER TIME								
Harris Rebar	13.91	13.91	13.91	13.91	13.91	13.91	13.91	13.91
Light Speed	12.37	12.37	12.37	12.37	12.37	12.37	12.37	12.37
Siman	17.57	17.57	17.57	17.57	17.57	17.57	17.57	17.57
TRI					7.41	7.41	7.41	7.41
Hopewell					28.20	28.20	28.20	28.20
GFL	14.37	14.37	14.37	14.37	14.37	14.37	14.37	14.37
Twin Bridges (West Condo)			5.24	5.24	5.24	5.24	5.24	5.24
4.49 Acres (south of Harris)					4.49	4.49	4.49	4.49
GFL 2 - 2.00 Acres (south of GFL)				2.00	2.00	2.00	2.00	2.00
2.96 Acres (south of GFL)					2.96	2.96	2.96	2.96
28.17 Acres - Hopewell 3					28.17	28.17	28.17	28.17
4.13 Acres					4.13	4.13	4.13	4.13
Boychuk - 7.779 Acres					7.779	7.779	7.779	7.779
8.33 Acres (Hopewell 2)						8.33	8.33	8.33
16.55 acres (Hopewell 2)						16.55	16.55	16.55
Cumulative Total by Year	58.22	58.22	63.46	93.66	148.60	173.48	173.48	173.48

Serviceable Developed Land Area (Acres)	March 1, 2019	March 1, 2020	March 1, 2021	March 1, 2022	March 1, 2023	March 1, 2024	March 1, 2025	March 1, 2026
	to February 29, 2020	to February 28, 2021	to February 28, 2022	February 28, 2023	to February 29, 2024	to February 28, 2025	to February 28, 2026	to February 28, 2027
Harris Rebar	13.91							
Light Speed	12.37							
Siman	17.57							
TRI					7.41			
Hopewell					28.20			
GFL	14.37							
Twin Bridges (West Condo)			5.24					
4.49 Acres (south of Harris)					4.49			
GFL 2 - 2.00 Acres (south of GFL)				2.00				
2.96 Acres (south of GFL)					2.96			
28.17 Acres - Hopewell 3					28.17			
4.13 Acres					4.13			
Boychuk - 7.779 Acres					7.779			
8.33 Acres (Hopewell 2)						8.33		
16.55 acres (Hopewell 2)						16.54		
Annual Total	58.22	0.00	5.24	30.20	54.94	24.87	0.00	0.00

Estimated Service Population	March 1, 2019	March 1, 2020	March 1, 2021	March 1, 2022	March 1, 2023	March 1, 2024	March 1, 2025	March 1, 2026
	to February 29, 2020	to February 28, 2021	to February 28, 2022	February 28, 2023	to February 29, 2024	to February 28, 2025	to February 28, 2026	to February 28, 2027
Harris Rebar	13.91	50						
Light Speed	12.37	175						
Siman	17.57	60						
TRI	7.41					20		
Hopewell	28.2				80			
GFL	14.37	60						
Twin Bridges (West Condo)	5.24		80					
4.49 Acres (south of Harris)	4.49				25			
GFL 2 - 2.00 Acres (south of GFL)	2				35			
2.96 Acres (south of GFL)	2.96				35			
28.17 Acres - Hopewell 3	28.17				80			
4.13 Acres	4.13				25			
Boychuk - 7.779 Acres	7.779				45			
8.33 Acres (Hopewell 2)	8.33					20		
16.55 acres (Hopewell 2)	16.55					60		
Annual Total	173.48	285	60	80	80	265	80	0