

PROVINCE OF BRITISH COLUMBIA
OFFICE OF THE COMPTROLLER OF WATER RIGHTS

IN THE MATTER OF
the *Water Utility Act*, R.S.B.C. 1996, Chapter 485
and
the *Utilities Commission Act*, R.S.B.C. 1996, Chapter 473
and
Corix Multi-Utility Services Inc. – Panorama Water
Application for Revenue Requirement and Rates
For 2023 through to 2026

Corix Multi-Utility Services Inc. – Panorama Water
FINAL SUBMISSION

Submitted 21st April 2023

Table of Contents

I.	INTRODUCTION.....	1
II.	OVERVIEW	1
III.	APPROVALS SOUGHT	2
IV.	JUSTIFICATION	3
A.	Customer comments that the proposed rate increases are too high	3
B.	Utility System Water Softening Solution	4
C.	Bed Units calculation methodology	6
D.	Bed Units rate design	7
E.	Back-Billing	8
F.	Contribution in Aid of Future Construction.....	9
G.	Operating and Maintenance expenses.....	9
H.	O&M Allocations	10
I.	Deemed interest rate	11
J.	Return on Equity (ROE).....	12
K.	Sales forecast.....	12
L.	Comparison to other water utilities	13
M.	Updating to 2022 Actuals	14
N.	Revenue Deficiency Deferral Account.....	14
O.	Rates and bills between Residential and Commercial customer classes	15
P.	Proposed rates.....	15
Q.	Errata	17
V.	CONCLUSION.....	17

I. INTRODUCTION

1. This submission summarizes the position of Corix Multi-Utility Services Inc. (“Corix”) on the Application for Revenue Requirement and Rates For 2023 through to 2026.
2. This submission briefly reviews the main aspects of the Application and, in light of the information requests, clarifies and provides justification for the approvals sought by Corix.

II. OVERVIEW

3. Corix owns and operates the water utility (“the Utility”) providing service to Panorama Mountain Village (“Panorama Water”). In addition to the water utility, Corix also owns and operates the propane and wastewater utilities at Panorama. Corix is a subsidiary of Corix Utilities Inc., which is a subsidiary of a privately held Vancouver-based corporation, Corix Infrastructure Inc. (“CII”), owned by the British Columbia Investment Management Corporation.
4. Customer rates for the Utility were last approved in Order No. 2584 issued by the Office of the Comptroller of Water Rights (“Comptroller”), on April 22, 2021. Order No. 2584 approved a revenue requirement and a water rate and tariff structure for the test years 2020, 2021 and 2022. Water Tariff No. 5 was approved for new rates effective January 1, 2021 and January 1, 2022.
5. On December 30, 2022, Corix filed its Application for Revenue Requirement and Rates For 2023 through to 2026 (“Application”) for rates effective January 1, 2023. On January 18, 2023, the Comptroller issued Order No. 2622 making the then-existing tariff terms and conditions interim as of January 1, 2023, and approving an interim and refundable rate increase effective January 1, 2023. Order No. 2622 also set the Regulatory Timetable for the hearing.
6. The Comptroller in its March 2, 2023 letter to Corix advised the following were logged as interveners.
 - a) Jonathan Bitonti and Marcel Beatch
 - b) Jonathan Bitonti and Michelle Sander
 - c) Sandy Murphy
 - d) Panorama Subdivision Owners Association (“PSOA”)
 - e) Panorama Owners Council
 - f) Homeowners, Trappers Ridge Subdivision (“Trappers Ridge”)
 - g) Panorama Mountain Resort
 - h) NES 2502 Wildwood Strata
7. In addition to the registered interveners, the Comptroller received eleven customer letters of comments. Customer letters opposed the magnitude of the request rate increase in the Application and also expressed support for a centralized community water softening solution for Panorama Mountain Village.

8. Information Requests (“IR”) No. 1 were received from the Comptroller, J. Bitonti, PSOA, and Trappers Ridge.
9. On March 31, 2023, Corix filed its responses to the four Information Requests No. 1. Corix also provided an Errata to the Application. Corix’s justification for the final approvals sought based on the Application are discussed in the Justification section below.

III. APPROVALS SOUGHT

10. Based on the Application, Corix requests the following, pursuant to Sections 59 to 61 and Sections 89 and 90 of the *Utilities Commission Act* (“UCA”):
 - i. Approval of the proposed revenue requirements for test years 2023, 2024, 2025 and 2026 as described in the Application. These are based on:
 - a. The operating and maintenance expenses presented in Section 3 of the Application;
 - b. The rate base as presented in Section 6;
 - c. The revenue requirements for the test years 2023 to 2026 as provided in Section 7;
 - d. A deemed capital structure of 57.5% debt and 42.5% equity as discussed in Section 5.1.1;
 - e. Long term debt financing costs estimated at 4.98% per annum as calculated in Section 5.1.2;
 - f. A return on equity (ROE) of 9.5%, as discussed in Section 5.1.3; and
 - g. The depreciation rates as outlined in Section 5.2.
 - ii. Approval of Customer rates as shown in the table below:

	Effective January 1, 2023	Effective January 1, 2024	Effective January 1, 2025	Effective January 1, 2026
Residential Fixed Charge per bed unit per month	\$13.55	\$14.33	\$15.08	\$15.39
Residential Metered Rate per cubic meter	\$8.24	\$8.71	\$9.17	\$9.36
Commercial Fixed Charge per bed unit per month	\$15.04	\$15.91	\$16.74	\$17.08
Commercial Metered Rate per cubic meter	\$8.63	\$9.13	\$9.61	\$9.81

- iii. That the rates applied for in the above table be set on a permanent and final basis effective January 1, 2023. Corix requests that the interim rates be subsequently adjusted if and as

required based on the Comptroller's final decision when rendered on this application, with any refund or additional charges to be accounted for with interest, retroactive to January 1, 2023.

- iv. Approval:
 - a. to continue the Revenue Deficiency Deferral Account ("RDDA") to smooth rates and for the recovery of the RDDA;
 - b. that the RDDA be trued-up to actual for the four test years (2023 to 2026) for certain non-controllable items that include deemed interest expense, revenue variances arising from customer consumption differences, and taxes;
 - c. that the RDDA be trued-up during the test years (2023 to 2026) for potential changes to how the BCUC sets the cost of capital for thermal energy systems, regarding the flow through of potential return on equity and capital structure differences from approved test years, commencing on January 1, 2023 for the entire test year period; and
 - d. to file the RDDA compliance filing for actual year end results.

Details are discussed in Sections 5.1.4 and 7.3 of the Application.

- v. Approval of the tariff housekeeping amendments to amend the terms and conditions of the tariff with regard to adding a back-billing provision and clarifying Schedule F as outlined in Section 13 of this Application.
- vi. That the existing permanent Water Tariff No. 5 for water service at Panorama, with rates effective January 1, 2022 be updated to Water Tariff No. 6 on a final and permanent basis, with rates effective January 1, 2023 based on the approvals regarding the proposals within this Application.

IV. JUSTIFICATION

- 11. This section addresses key topics that were raised through information requests and customer comments.

A. Customer comments that the proposed rate increases are too high

- 12. The Comptroller received a large number of customer letters of comment that opposed the magnitude of the rate increase and supported a lower rate increase. Corix submits the proposed rates are reasonable and that the rate increases have been justified in the Application and throughout the proceeding.
- 13. With the completion of the Groundwater Source Development Program (GSDP) project, the higher quality well water, ultraviolet (UV) disinfection, and chlorine treatment now meet the Interior

Health Authority 4-3-2-1-0 Drinking Water Objective.¹ In addition, the GSDP project replaced aging infrastructure that was at risk of damage from potential debris torrents during high mountain stream events. The Utility now provides much better drinking water quality than before the GSDP project and customers no longer receive annual summer-long boil water advisories due to turbidity in the source water. This investment in water infrastructure to achieve the clean drinking water standard came at a cost of \$7.8 million.

14. In addition to the costs associated with the GSDP project, other costs have increased over time. Corix provides explanations for all rising costs in the Application and in response to information requests. Corix submits that these costs are necessary and prudent and Corix is taking multiple steps to reduce the impact of the rate increase. These include:
 - (i) Using the RDDA to smooth annual rate increases;
 - (ii) Delaying capital projects where possible;
 - (iii) Not pursuing certain capital projects; and
 - (iv) Operating the utility in a prudent manner.
15. In the previous rate application, Corix anticipated that the RDDA balance would be recovered by 2026. Given the impact of the rate increases in this Application, Corix's proposals to smooth the rate increase impact will result in delays to the recovery of the RDDA balance. Corix now anticipates that the RDDA balance will not be recovered until 2028. This is evidence that Corix is delaying the recovery of prudently incurred costs in an effort attempt to smooth rate increases for customers.

B. Utility System Water Softening Solution

16. In Section 4.2 of the Application (Hard Water at Panorama), Corix discussed the hard water supply, Health Canada's Drinking Water Guidelines, public outreach, risk and cost pressures, and its assessment of the water softening project.
17. On page 23 of the Application, Corix stated: "Given the uncertainty Corix has decided not to request approval for the capital project in this rate application. The high cost of the water softening project, the accumulated RDDA balance, and the proposed rate increases would increase customer bills to higher levels that would unfavourably impact residential customers."
18. Many customer letters of comment in this proceeding were submitted to the Comptroller expressing support for the system wide water softening solution. The Riverbend letter stated: "Individual condo owners have confined spaces where plumbing is accessible. Most would NOT have sufficient space to install an individual point-of-use water softener large enough to mitigate the hardness effects of the existing incoming water supply on the existing plumbing and hot-water use appliances (laundry, dishwasher, hot water tank etc.)."
19. Opposition to the system wide water softening solution was indicated in the Trappers Ridge Information Request #1, Item 13 where Trappers Ridge stated: "Trappers Ridge subdivision agrees with and supports Corix Panorama Water's conclusion not to proceed with this project."

¹ Interior Health Authority 4-3-2-1-0 Drinking Water Objective, https://www.obwb.ca/fileadmin/docs/43210_Drinking_Water_Objective.pdf

20. The Comptroller in its Information Request #1, Question 4.2 asked Corix on the plans for the system wide water softening solution and the cost versus benefits. Corix provided its response that compared the estimated bill impact for a centralized utility softening solution to a Residential Customer-Owned Softening Solution. The high-level estimate indicated a centralized solution would increase 2022 bills by +20%, while a residential customer-owned solution would be +15%. In the response Corix also provided Table 2, which outlined the advantages and disadvantages of a centralized or customer-owned solution. The table shows that a centralized solution has more advantages than a customer-owned solution. The table also shows the customer-owned solution has more disadvantages than a centralized solution. The table indicates that a centralized solution has higher net intangible benefits than a customer-owned solution.
21. The bill impact shows that a centralized solution would cost +5% more. However, the centralized solution has more net intangible benefits than a customer-owned solution. Overall, when the bill impact and intangible net benefits are taken into account the centralized solution is similar to the customer-owned solution. There is no clear indication that either option is superior to the other.
22. Hard water is not uncommon in the area. Panorama has hard water whether sourcing from a river intake or from wells. Hard water is not considered by the Interior Health Authority as part of its performance target since hard water does not impact risk to human health. The benefits of well source water over run off creek water are greater as it is more reliable and safer. With the change in water source the water remains at the “Very Hard” level based on Health Canada Guidelines. While the hardness levels are higher than preferred, the Guidelines for Canadian Drinking Water Quality document indicates that it is of no direct public health concern to utility customers. Furthermore, there is no direction from Interior Health Authority to reduce water hardness.
23. A centralized hard water solution will be a costly project that would increase customer bills by +20% on 2022 bills. Based on the public outreach there appears to be generally broad support for a centralized utility owned solution. There was one customer group opposition to the project. Some customers were undecided and needed additional information.
24. A centralized hard water solution will impact all customers at Panorama Water Utility whether they prefer or do not prefer a utility solution to the hard water. If the centralized solution were built it would result in a large increase in customer rates and it would require the RDDA balance recovery to be pushed even further into the future.
25. Corix as the service provider must balance not only the cost of providing service but also consider the preferences of the customers while acknowledging that Health Canada does not consider this matter a public health concern. Given the risk and cost pressures associated with the implementation of the centralized utility water softening solution and the potential impact to customer rates, Corix decided to not to request approval for this project at this time.

26. Given the letters of comment in support of the project, Corix seeks a Comptroller decision and direction in this proceeding for this matter. After considering all the information in this proceeding, including customer preference, the Comptroller can:
- a) direct Corix to file a major capital project application seeking approval to implement a centralized water softening solution; or
 - b) direct Corix to abandon any further work on a centralized water softening solution.

If the Comptroller does not make a direction to Corix, the Comptroller could instead provide the specific criteria, considerations, and issues for Corix to assess and report on in the next rate application.

27. Direction from the Comptroller in the final order of this proceeding would avoid having Corix spending time and incurring costs to make an application and then potentially for it being denied by the Comptroller if it decides it is not in the public interest.
28. Interveners in the proceeding may wish to make their submissions to the Comptroller on this matter.

C. Bed Units calculation methodology

29. A number of information requests involved how bed units are calculated for residential and commercial customers.²
30. The water tariff defines bed units and how it is calculated. Since 2011, the bed units are calculated as follows:³
- Single family dwellings have a default of 10 bed units. If documents are submitted to the utility with proof that a dwelling is smaller than typical, then it would qualify for 6 bed units instead of 10 bed units. Small dwellings are typically older single family houses with a smaller square area than newer houses.
 - A residential condominium or townhouse has bed units measured by the square meter size of the dwelling. The current tariff has 3 categories of area size resulting in 2, 3 or 4 bed units.
 - The commercial customers bed units are determined by the size of water meter as outlined in the tariff.

² Comptroller IR #1, Q. 8.0; Trappers Ridge IR #1, Q. 17.1; Panorama Subdivision Owners Association IR #1, Q. 1.0.

³ Corix Response to Trapper Ridge IR #1, Q. 17.2.

31. In 2021 a commercial customer changed its meter size from 2" (80 bed units) to 1" (25 bed units) which resulted in a bed unit reduction of 55.⁴ Corix is expecting all existing commercial customers to maintain their meter size and does not forecast any new commercial customers in the test period.⁵
32. One information request questioned why residential customers are being requested to share a bigger fixed charge cost burden relative to commercial customers.⁶ The analysis by Corix shows that commercial customers have a higher total bed unit count than residential customers and also have higher consumption. The rates for commercial for the fixed charge and the metered consumption charge are also higher than residential customers. Overall, the commercial customers pay 61.7% of total revenue in Forecast 2023 while its bed units are 53% of the total bed units. The overall results show that commercial customers are paying their fair share of costs to operate the water utility. This includes both capacity costs (measured in bed units) and operational costs.

D. Bed Units rate design

33. Two Interveners raised issues around bed units and its methodology. PSOA in its information request suggested an alternative methodology for calculating bed units using assessed property tax values.⁷ Trappers Ridge questioned the new townhomes to be added at 4 bed units.⁸

Bed units based on assessed property values

34. PSOA requested that Corix assess the practicality of assigning bed units by incorporating assessed property values for property tax purposes, in a manner similar to how Panorama strata fees have been allocated. Corix submits a change to bed units utilizing property assessment values should not be implemented. Water utility rate design incorporates different concepts from strata fee allocation, with a key concept of water utility rate design being cost causation. Fixed charges at water utilities are typically allocated based on the capacity requirements imposed on the water utility system by each customer and customer group. Property assessments may result in similar sized properties with similar water utility capacity requirements having materially different property values due to factors that include, but are not limited to, the location of each property and the age of each property. This is not consistent with cost causation principles for water utility rate design. Furthermore, the use of property values would be cumbersome, time consuming, and subject to annual change. Given the difficulty of obtaining and utilizing property values and given that it departs from using a proxy for customer capacity demands, Corix submits that calculating bed units using assessed property tax values should not be considered. The current bed unit methodology driven by customer capacity demands on the water system should be continued.

Bed units refinement for townhouses

35. Trappers Ridge questioned why the new townhomes (at least 36) at the base of the Silver Platter should be considered to have only 4 bed units, given that they have 3 to 5 bedrooms, all have

⁴ Corix Response to Comptroller IR #1, Q. 8.1.

⁵ Corix Response to Comptroller IR #1, Q. 8.2.

⁶ Trappers Ridge IR #1, Q. 26.1.

⁷ Corix response to PSOA IR #1, Q. 1a.

⁸ Corix response to Trappers Ridge IR #1, Q. 17.1.

individual hot tubs and have square footage ranging from 1300 to 1800 sq.ft. (all greater than 100 sq.m.), greater than many single residences which are considered to have 10 bed units.

36. Corix in its response to Trappers Ridge explained the current methodology in the water tariff, the Panorama Mountain Village Official Community Plan utilizing bed units, and the previous 2010 Water Tariff Rate Design for residential (bed units implementation) and commercial (meter size implementation).⁹ The calculation of the bed units for the new townhomes is based on the approved Utility tariff in effect at the time of the application for approval to connect the townhomes.

37. In the analysis¹⁰ Corix with the new information regarding large townhouses discussed a possible change to the Water Tariff No. 6 that could be as follows:

- “ii. residential condominium or townhouse:
 - (i) up to 55 square meters = 2 Bed Units
 - (ii) between 56 and 100 square meters = 3 Bed Units
 - (iii) between 101 and 150 square meters = 4 Bed Units
 - (iv) between 151 and 200 square meters = 5 Bed Units
 - (v) in excess of 200 square meters = 6 Bed Units”
[potential changes in underline]

38. The above possible change would expand the possible range of bed units (currently 2 bed units to 4 bed units) to a larger range (2 bed units to 6 bed units) based on square meter size. The above potential changes to the definition for residential and condominium or townhouse would expand the definition up to 6 bed units which is equivalent to a smaller size single family dwelling. A smaller size single family dwelling (historical older homes) with lawn irrigation at 6 bed units would be an appropriate proxy for a townhouse of 200 square meters or greater, with more limited irrigation needs but may have other water capacity using appliances.

39. Corix is not opposed to the above refinement of bed units for residential condominiums and townhouses. If approved by the Comptroller, Corix submit that this change should be applicable only to new applications for service submitted on or after January 1, 2023, the contemplated effective date of the updated tariff.

E. Back-Billing

40. Corix in the Application proposed a Back-Billing section in the water tariff for Panorama Water based on the Back-Billing provision previously approved by the Comptroller of Water Rights in Water Tariff No. 2 for Cultus Lake Water Utility.

⁹ Corix response to Trappers Ridge IR #1, Q. 17.1.

¹⁰ Corix response to Trappers Ridge IR #1, Q. 17.1.

41. Trappers Ridge commented that it supports the tariff back-billing amendment.¹¹
42. Information requests were received on back-billing regarding the consistency of wording in proposed sections 26.5 (under-billing) and 26.7 (over-billing) regarding the applicable interest rate in each circumstance.¹² Corix in the response acknowledged that the proposed section 26.5 wording for under-billing, which relies on section 2 (Billing and Payment) results in a rate of 1.5% per month was higher than proposed section 26.7 short-term bank loan rate applicable to the Utility.
43. Corix would be amendable to revise the proposed section 26.5 wording for Panorama Water. An amended wording could be as follows:
- “Under-billing resulting from circumstances described above will bear simple interest, computed at the short-term bank loan rate applicable to the Utility on a monthly basis from the date of the original under-billed invoice until the amount under-billed is paid in full.”
44. The above wording change, if approved, would then have the over-billing and under-billing matters in section 26 Back-Billing in the tariff to have the same applicable interest rate.

F. Contribution in Aid of Future Construction

45. The Application on pages 45 to 46 provided a response to the Comptroller’s directive in the last decision regarding Contribution in Aid of Construction (“CIAC”). Trappers Ridge questioned why the gross plant per bed unit is valued at \$1,829 is not set as the CIAC to help mitigate rates for the customers who are currently burdened by the costs of the GSDP.
46. Corix would not be opposed this proposal to revise the CIAC to \$1,829 per bed unit if customers saw merit to this proposal. It could be implemented for January 1, 2023 which was the effective date of the interim rate order for the tariff. However, Corix notes that any CPCN application made before January 1, 2023 should be based on the approved Water Tariff No. 5 which was effective at the time of the CPCN application.¹³

G. Operating and Maintenance expenses

47. Rate increases at water utilities are necessitated by the increasing revenue requirements of the utility. Revenue requirements for the Panorama Water Utility comprise operating and maintenance (O&M) expenses, administrative and general expenses. Areas of interest included CPI, Customer Experience, and allocations. O&M Allocations are discussed in the following section.

¹¹ Trappers Ridge IR #1, Q. 25.0.

¹² Corix response to Comptroller IR #1, Q. 12.3.

¹³ Corix response to Trappers Ridge IR #1, Q. 23.1.

Consumer Price Index (CPI)

48. Corix has included in its Application on page 10 the assumption of the Consumer Price Index (CPI) of 3% in 2023; 3% in 2024; 2% in 2025; and 2% in 2026. The latest Bank of Canada CPI projection is 2.6% for 2023 and 2.0% for 2024.¹⁴
49. Corix considers that the three recent actual CPIs of December 2022 (at 6.3%), January 2023 (at 5.9%) and February 2023 (at 5.2%) indicate that the final December 2023 CPI will likely be higher than the BOC predicted CPI of 2.6%.
50. Based on the past optimistic forecasting of the Bank of Canada¹⁵ and the recent high January and February 2023 CPI results, Corix submits the recent continued inflation indicates both 2023 and 2024 CPI will be well beyond the 2.0% long term inflation Bank of Canada target. Therefore, Corix concludes its 3.0% CPI for each of 2023 and 2024 is a reasonable forecast of inflation for the next two years.

Customer Experience

51. It was assumed that there were no costs allocated for Customer Experience in the 2020 application. However, Customer Experience was allocated in the 2020 application but located under the Billing & Customer Care section on the Schedule of Operating and Maintenance expenses. The Customer Experience activity was always performed and costed in both the 2020 application and the current application.¹⁶

H. O&M Allocations

52. Panorama Water in its O&M expenses have three types of allocations: (i) Common Admin, (ii) Regional Services, and (iii) Corporate Services. The Application on pages 14 and 15 explained the Common Admin Allocation. The Regional and Corporate allocations were explained in pages 16 to 20 of the Application.
53. Corporate and Regional Services Costs are expenses that include costs related to support functions that are incurred at a corporate level and a regional level respectively and subsequently allocated to the relevant utilities, including Panorama Water.
54. Corix operates in a multi-utility business model while attaining economies of scope with Common Admin, Regional and Corporate services. The Common Admin costs are local operations costs located in the Kootenay's where local operators and administrative staff work on local utilities in the region including Panorama Water and Wastewater. These operational costs are shared which reduces the cost to Panorama Water if it were operated as a separate stand-alone utility with no shared resources. Outside of the local area are Regional services located in BC and Alberta who provide support to the Western Canadian businesses of which Panorama Water is one of the supported utilities. If the Regional services were not shared then the specialized expertise from

¹⁴ Response to Comptroller IR #1, Q. 16.1.

¹⁵ Response to Comptroller IR #1, Q. 16.1.

¹⁶ Response to Trappers Ridge IR #1, Q. 11.2.

these resources would need to be provided at the local Kootenay level which would become more costly. The company-wide costs are called Corporate Services which are support services such as executive management, finance, accounting and tax, human resources, IT, customer experience, customer billing, health, safety and environment, legal and risk management, and internal audit. These Corporate services provide specialized services to support the local utility.

55. A number of information requests were with regards to the three allocations. Corix further explained the Common Admin Costs.¹⁷ Also, Corix provided more detail showing the Corporate Services costs from 2020 to 2023 by cost categories and explained the changes from the previous year.¹⁸ In addition, cost changes for Regional Services costs were further explained.¹⁹
56. Panorama Water is forecasted to be allocated 30% of the total Common Admin costs and 4.4% of the total Regional Services costs for each of the years during the test period.²⁰ It is important to note that Panorama Water when using shared resources still benefits from the business model since acquiring resources as a stand-alone utility with no shared resources would be more costly to obtain and could negatively impact reliability since any changes in labour would be much more difficult to fill.
57. Corix submits that the Application and the information requests have explained and justified that allocations for Common Admin, Regional Services, and Corporate Services are based on a methodology that is widely accepted and used throughout the industry and the costs are reasonable. The pooled resources approach provides Panorama Water the benefit of the efficient use of resources, which mitigate against the difficult and associated cost of procuring these necessary services on a standalone basis.

I. Deemed interest rate

Methodology

58. Corix proposes to continue using the Deemed Interest Rate methodology previous approved in the last rate application. Table 15: Debt Financing on page 26 of the Application shows the methodology to calculate the rate. There is no information in evidence that indicates that the previously approved methodology is no longer appropriate.
59. Corix in response to Comptroller IR #1, Question 5.1 provided further information on the methodology. Corix was able to report that the Actual 2022 Deemed interest rate is 5.19%. The Application had projected for 2022 a deemed interest rate of 4.98%. Table 15 as filed include 4 companies that were included in the BBB/BBB(low) cohort. For February 2023, Corix reported in the response that another new company is now in the cohort so the total is now 5 companies used to determine the BBB-BBB(low) premium on corporate bonds.

¹⁷ Response to Comptroller IR #1, Q. 18.1 and Response to Trappers Ridge IR #1, Q. 5.3 and 9.1.

¹⁸ Response to Comptroller IR #1, Q. 14.1 and 14.2 and Response to Trappers Ridge IR #1, Q. 11.1.

¹⁹ Response to Comptroller IR #1, Q. 15.1.

²⁰ Application, Table 3, p. 15; Table 7, p. 19.

Deemed Interest Rate True-up in Test Years

60. Corix proposes to continue using the same methodology to true-up deemed interest rate methodology. However, Corix wishes to note that the British Columbia Utilities Commission (“BCUC”) currently has its Generic Cost of Capital (“GCOC”) proceeding still in progress. The BCUC process is relevant to the water utility since Corix relies on the BCUC’s decision on small utilities cost of capital for Panorama Water. If the BCUC simply updates the input parameters, Corix will be able to simply update the inputs for the water utility. If the BCUC makes significant changes in its approach to small utility cost of capital, Corix will attempt to continue to implement the Comptroller approved cost of capital parameters with updates from the BCUC decision. If the BCUC approved change is fundamentally different, Corix will make an application to the Comptroller to address any outstanding differences in calculating cost of capital to calculate the interest rate impact to the RDDA. The Comptroller will always be fully aware of the cost of capital matters when Corix files the RDDA Annual Review for each respective year of the test period.²¹

J. Return on Equity (ROE)

61. The Application in Section 5.1.4 Potential BCUC Changes to the Benchmark Utility and Small Utility Cost of Capital noted that the BCUC is currently conducting its BCUC 2021 GCOC proceeding. Similar to Deemed Interest Rate, Corix will update the RDDA for the BCUC’s decision on cost of capital. If the BCUC simply updates the inputs, Corix will update its calculations. If the BCUC approved change is fundamentally different, Corix will make an application to the Comptroller to address any outstanding differences in calculating cost of capital to calculate the ROE impact to the RDDA.

K. Sales forecast

Methodology

62. Corix in the Panorama Water Rate Application has based the 2023 average bed unit consumption on the 2022 results.²² A number of information requests asked about 2022 as being a representative year and the use of a 3-year average (2020 to 2022)²³ and to use commercial consumption at 2019 levels²⁴.

63. Corix does not consider any of the last three years, including 2022, to be a truly representative year given the COVID-19 pandemic and the possibility of a 2023 economic recession. However, 2022 is the most recent year and the best predictor of 2023. Corix provided further analysis of using a 3-year average and a 2-year average to forecast consumption.²⁵ The results show there is no clear consumption trend in the last three years.

²¹ Corix response to Comptroller IR #1, Q. 5.2.

²² Corix Panorama Water 2023 to 2026 Rate Application, p. 38.

²³ Comptroller IR #1 Q. 9.1 and 9.2.

²⁴ Trappers Ridge IR #1, Q. 19.1.

²⁵ Corix response to Comptroller IR #1, Q. 9.2.

64. Corix provided an analysis in the hypothetical scenario if the 2023 commercial consumption using 2019 pre-Covid as the basis for the forecast.²⁶ Commercial consumption at Panorama has not yet returned to 2019 pre-Covid levels. There has been no clear indication that 2023 will be much different than 2022 given the uncertainty of an economic recession and continued inflation in 2023.

1% reduction factor for Consumption

65. Corix applied a reduction factor to the forecast consumption per bed unit, for both residential and commercial customers, of 1% per year from 2023 to 2026.²⁷ The 1% reduction factor was approved in Orders No. 2578 and 2584 in the last rate application. For consistency, Corix has continued the 1% reduction factor given the magnitude of the proposed rate increase in 2023 and the reasonable expectation there will be a reduction in consumption during the test period.

RDDA mitigates needs for a highly accurate sales forecast

66. Corix notes that the proposed continuation of the RDDA with true-ups for actual revenue to forecast revenue materially mitigates the need for an extensive review of the consumption forecast as consumption (via actual revenue) will be true-up. This means if the customers use more consumption that approved in the test years, the additional revenues would be used to pay down the RDDA to the benefit of all customers. Given the RDDA, highly accurate consumption forecasting is not necessary to set customer rates.

67. Corix submits its sales forecast provides a fair and reasonable estimate of consumption and revenues during the test period. Given the RDDA true-up for actual revenues which reflect actual customer consumption a highly accurate sales forecast is not required.

L. Comparison to other water utilities

68. Trappers Ridge in its information request requested that Corix provide an annual bill comparison of Corix Panorama Water utility to 15 other water utilities as was provided in the 2020 rate application. Corix declined to respond to the question to conduct further research since Corix has not previously prepared the water utility comparison for this rate application and the time and effort to research the 15 updates for comparison would be extensive. Corix submits the cost and time to prepare the information would far exceed the benefit received.²⁸ To be responsive, Corix provided BC CPI for 2020 to 2022 which totaled 11% which can be used as a high-level comparison of what the other utilities would be now if those rates were updated on an annual basis to account for changes in O&M costs.

²⁶ Corix response to Trappers Ridge IR #1, Q. 19.1.

²⁷ Corix Panorama Water 2023 to 2026 Rate Application, p. 38.

²⁸ Corix response to Trappers Ridge IR #1, Q. 24.1.

M. Updating to 2022 Actuals

69. Corix has updated the Projected 2022 costs and revenues with Actual 2022.²⁹ The update shows small differences between the projected and actual 2022 figures. Corix submits the update shows that the Application rate requests based on Projected 2022 remain valid and reasonable.

N. Revenue Deficiency Deferral Account

RDDA proposal

70. Corix proposed in the Application on page 5 and 6 for the following:
- a) to continue the Revenue Deficiency Deferral Account (“RDDA”) to smooth rates and for the recovery of the RDDA;
 - b) that the RDDA be trued-up to actual for the four test years (2023 to 2026) for certain non-controllable items that include deemed interest expense, revenue variances arising from customer consumption differences, and taxes;
 - c) that the RDDA be trued-up during the test years (2023 to 2026) for potential changes to how the BCUC sets the cost of capital for thermal energy systems, regarding the flow through of potential return on equity and capital structure differences from approved test years, commencing on January 1, 2023 for the entire test year period; and
 - d) to file the RDDA compliance filing for actual year end results.
71. On page 36 of the Application Corix noted that it is not proposing to true-up for any differences from approved for O&M expense and plant balances including plant additions and consequential depreciation expense as these expenses are considered to be controllable.

Risk to shareholder

72. Corix in response to an information request explained what it was at risk for during the test years when the RDDA is trued up for non-controllable items.³⁰
73. Corix submits that the shareholder being responsible for the risk of O&M and capital additions strikes a reasonable balance in the setting of rates and cost of service. Corix has now been operating Panorama Water with the GSDP in-service since 2020. This track record of operations allows Corix to take the risk of O&M and plant addition costs during the test years.

RDDA Compliance Filing for Actual Year-End Results

74. Corix has proposed that it will continue to file annually the RDDA compliance report results that shows the RDDA balance for the applicable test year. In that review process, the Comptroller will be able to review the past year results compared to test year. The Comptroller will have the ability in its review to seek further information before it accepts the financial results of the RDDA balance. This process will ensure the Comptroller will be informed throughout the four-year test period.

²⁹ Corix response to Comptroller IR #1, Q. 13.1.

³⁰ Corix response to Comptroller IR #1, Q. 3.1.

O. Rates and bills between Residential and Commercial customer classes

75. Trappers Ridge questioned why residential customers are being requested to share a bigger fixed charge cost burden relative to commercial customers.³¹
76. The tariff structure has commercial customers paying a higher Fixed Rate per bed unit and a higher Metered Rate per cubic metre. Based on the unitized charges commercial customers pay more than residential customers. The total revenues collected from residential and commercial customers depends on the bed units and consumption of each rate class. Commercial customers have more bed units in total than residential customers. Also, commercial customers have higher total annual consumption than residential customers.
77. Overall, the commercial customers pay 61.7% of total revenue in Forecast 2023 while its bed units are 53% of the total bed units. The overall results show that commercial customers are paying their fair share of capacity costs (measured in bed units) and operational costs to operate the water utility.
78. Corix submits the current tariff structure and rates for residential and commercial customers continue to be appropriate. The current rate structure with bed units appropriately accounts for the capacity demand and resulting revenue of both customer groups.

P. Proposed rates

Four-Year Test Period

79. The Application proposes rates for three test years (2023, 2024, 2025 and 2026) with rate changes on January 1st of each year, respectively. Corix has also provided indicative rates for the years from 2027 to 2028 by modelling the RDDA drawdown and its effects on the indicative rate changes (Application: Table 26).
80. Corix provided a response regarding the advantages and disadvantages of a four-year test period.³² Corix's response shows that the four-year test period has many advantages, and the disadvantages are minimal. Therefore, Corix submits a four-year test period is appropriate and does not disadvantage customers.

Drivers of the 2023 rate increase

81. Corix in the Application included Table 25: 2023 Residential Bill Change Estimated Drivers on page 41 of the Application which provides the estimated drivers for the 2023 rate changes. Corix in response to an information request further explained the drivers for the 2023 rate increase.³³

³¹ Corix response to Trappers Ridge IR #1, Q. 26.1.

³² Corix response to Comptroller IR #1, Q. 1.1.

³³ Corix response to Trappers Ridge IR #1, Q. 3.1.

Rate smoothing scenarios and recovery period

82. A number of information requests were regarding further rate smoothing scenarios in Comptroller IR #1, Question 11.1 and Trappers Ridge IR #1, Question 21.1.
83. Corix included an additional Scenario A (40%) in response to Comptroller IR #1, Question 11.1. It provides smoothing the rate increase across 2023 and 2024 resulting in residential bill impacts of 27% in 2023 and 33% in 2024 with a targeted RDDA recovery in 2028.
84. Corix also calculated Scenario D in response to Trappers Ridge IR #1, Question 21.1. It provides a scenario for additional smoothing that sets 2023 with a 102.0% Target Percentage Recovery of Total Revenue Requirement and full RDDA recovery in 2033. Scenario D's smoothing results in estimated typical residential bill impacts of 33% in 2023 and 4% in 2024 with a targeted RDDA recovery in 2033.
85. Scenario D moderates the 2023 rate impact but unfavourably impacts the RDDA balance where the forecast average RDDA balance from 2024 to 2026 it is approximately \$1.05 million for those years. In contrast, the forecast average RDDA balance from 2024 to 2026 associated with Scenario A is approximately \$679,000. Scenario D stretches the RDDA recovery period to 2033 which is significantly longer than initially contemplated. Corix considers that this is not reasonable and increases the risk of recovery of the RDDA to the Utility.
86. Corix's proposal in the Application target the full recovery of the RDDA by the end of 2028. Corix considers that rate smoothing is inherent in its proposal considering that when the RDDA was established, the intent was for full recovery by 2026. If Corix had kept the original 2026 RDDA recovery target, the proposed rate increases would be higher.³⁴
87. Corix submits that the proposed rates provide the most optimal balance of: reducing the RDDA balance within a reasonable time period; mitigating the rate increases by extending the RDDA recovery to 2028; avoiding large swings in rates (such as that seen in 2025 in Scenario A (40%)); more accurately reflecting the drivers of the costs in this Application, and reducing lag in operating cost recovery. The rate increases in this Application is primarily driven by O&M cost increases which have already occurred. Unlike capital expenditure, O&M cost increases are immediate and represent a step increase to the cost of operating the utility.
88. Corix submits that the rate increases should be approved as proposed. Explanations and justifications have been provided throughout the regulatory review process and Corix considers the proposed rates to be just and reasonable. Should the Comptroller determine that Corix's proposal is unjust and unreasonable, Corix would be amenable to a Comptroller direction to smooth the 2023 rate increase to both 2023 and 2024 only, specifically as shown in Scenario A (40%)³⁵.

³⁴ Application, Section 9.2, pp 42-43.

³⁵ Corix response to Comptroller IR #1, Q. 11.1.

Q. Errata

89. On March 31, 2023, Corix along with response to the information requests filed an Errata on four matters found during the response to the information requests. Of the four matters three were presentation issues which were corrected in the Errata. Once matter had a minor impact on the financial model. The error had no impact on the requested rates for the test years in the Application. The error in the model was corrected in the response to Comptroller IR #1 Question 13.1 when updating Projected 2022 to Actual 2022.

V. CONCLUSION

90. The rate increase requests in the Application are necessary in order to recover the targeted revenue requirements while managing the RDDA at a reasonable level for a reasonable period of time.

91. Throughout the proceeding, Corix adequately clarified and justified each request in the Application.

92. Section 59(1) of the *Utilities Commission Act* (UCA) states that:

“A public utility must not make, demand or receive

(a) an unjust, unreasonable, unduly discriminatory or unduly preferential rate for a service provided by it in British Columbia, or

(b) a rate that otherwise contravenes this Act, the regulations, orders of the commission or any other law.”

The requests in the Application result in rates that are just and reasonable and are not discriminatory or unduly preferential, nor do they contravene the UCA, regulations, orders of the commission, or any other law.

Vancouver, BC

April 21, 2023

ALL OF WHICH IS RESPECTFULLY SUBMITTED



Errol South

Director, Regulatory Affairs