FROM:	Corix Multi-Utility Services Inc. (CMUS), Panorama Water
DOCUMENT:	Response to Information Request
INFORMATION REQUEST NO:	1
REQUESTOR NAME:	Water Utility Regulation Section, Water Management Branch Ministry of Forests
RESPONSE DATE:	March 31, 2023
REFERENCE NO:	7915
APPLICATION NAME:	2023-2026 Revenue Requirements & Rate Application

1.0 Reference: Application, pg. 1 & 35, Four year Test Period

Explanation: CMUS states: "In this Application Corix proposes a four-year test period from 2022 to 2026 with continuation of the Revenue Deficiency Deferral Account (RDDA) to smooth rates for customers."

And "The forecast income tax for the Utility is presented in Table 21 below. Corix forecasts that the accumulated tax loss carry forward will be used up in 2025. Therefore, the Utility will be a taxable basis for income tax in 2025. Schedule 9 in the Financial Schedules provides the figures from 2020 to 2026."

Request:

1.1 It has been more customary for the Comptroller to consider a revenue test period up to 3 years. What are the advantages and disadvantages of a 4 year test period that led CMUS to choose this longer test period?

Corix Response:
The advantages of a 4-year test period include:

- Lower regulatory hearing costs per year. Filing a rate application requires a significant amount of utility time and effort followed by a regulatory review process. The total costs of a regulatory review hearing are substantially the same whether it is a 2, 3, or 4-year test period.
- Certainty of customer rates for a 4-year period providing greater ability for customers to budget their annual costs.
- Corix owns another water utility in Alberta where it had previously applied for a 3-year test period. A 4-year test period for Panorama would allow internal Corix resources to stagger the workload for future rate applications to ensure applications are complete and fully supported without the need to hire additional resources. Corix would incur higher regulatory expenses in order to prepare and submit multiple rate applications due simultaneously with concurrent regulatory review processes. The higher regulatory expenses, which would be passed on to ratepayers, would be driven by the need for a new hire or the use of external consultants to meet the regulatory deadlines associated with multiple concurrent rate applications.
- Corix has applied for proposed O&M costs that will not be subject to true-up in the test years. Once the Comptroller approves test year O&M costs for the 4 years that it finds reasonable, those costs are fixed and will not change rates and cost recovery

from customers. This provides certainty of costs for the customers.

- Corix has forecast moderate amounts of sustaining capital additions for services, meters, and other plant that have an immaterial impact to rate base (see Financial Schedules – Schedule 4: Utility Plant in Service) if there are minor variances in actual capital additions.

The disadvantages of the 4-year test period include:

- Regulatory lag if an event within the test year is not approved or reviewed by the regulator until the next rate application.
- Regulatory review of actual costs in a public setting is delayed until the next rate application.
- If actual consumption and customer use, differ from the approved test years the test year rates will not change. With a shorter test period, rates are reset in the next revenue requirement using the latest consumption data that reflect customer use.

Corix proposed the 4-year test period because it spreads out the regulatory costs over a longer period and allows for Corix to manage its resources better internally in developing and filing rate applications to its regulated utilities. There are limited disadvantages for the customer of using a longer test period.

1.2 What safeguards are there to ensure customers are not disadvantaged by the 4 year period?

Corix Response:
The primary safeguard, which is also applicable to a 3-year test period, is that Corix has proposed that it will 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.

1.3 If the tax loss carry forward is forecast to be used up in 2025, would it be better to have a 3 year test period?

Corix Response:
The tax loss carry forward when used up in 2025 means that any equity return would no longer be shielded from income tax. Schedule 9 line 18 shows the 2024 closing tax loss carry forward balance is $32,881which is mostly depleted. In the 2025 test year the utility would be mostly fully taxable. In 2026 the utility becomes fully taxable without the tax shield from the loss carry forward.

The tax loss carry forward is mostly used up in 2024, and there is no remaining balance in 2025 and 2026. Corix submits that the tax loss carry forward is not a relevant matter for the determination of whether the use of a 3 or 4-year test period is reasonable and fair.

Examples of other taxable entities with rate applications over a long period include FortisBC Energy Inc. (FEI) and FortisBC Inc. (FBC) which applied to the British Columbia Utilities Commission (BCUC) for approval of a proposed Multi-Year Rate Plan for the years 2020 through 2024. They were approved in a Decision dated June 20, 2020 with Order G-165-20 and G-166-20. The five-year multi-year rate plan was approved based on a formulaic approach to setting revenue requirements that included annual updates based on cost drivers and customers. The Panorama Water 4 year rate application and FortisBC multi-year rate applications for 5 years are all similar in duration. In the case of the two FortisBC utilities they are taxable in each of the years of the rate application.

2.0 Reference: Application, pg. 4, Merger with CII and Southwest

Explanation: Corix states that "The transaction is expected to close by the end of 2023, subject to the satisfaction of all required regulatory approvals and customary closing conditions. This includes a regulatory application to the Comptroller seeking the relevant approvals associated with the merger, which was submitted to the Comptroller on November 16, 2022."

Request:

2.1 To what extent will this merger lead to reduced intercorporate charges to Panorama in 2024 and beyond?

Corix Response:

The Proposed Transaction is expected to produce financial benefits associated with increased scale. While the allocation methodology for common costs has not yet been determined for the combined company, the Joint Petitioners compared the costs associated with the Director Fees and the Senior Executive Costs of the going forward business ("Intermediate Newco") with the sum of the costs of the separate companies to come up with a preliminary estimate of the potential financial benefits associated with reductions in costs of governance and senior executives, which amount is approximately $3.4 million. The estimates are based on 2022 costs, and the actual Director Fees and Senior Executive Costs are not known at this time. Note that the estimates are based on 2022 standalone costs for CII and SWWC. Adjustments to Director Fees and Senior Executive Costs may be necessary to reflect that the combined company will be larger and more geographically diverse than both CII and SWWC on a standalone basis.

Senior Executive Costs – The Joint Petitioners compared the combined Senior Executive Costs ("SEC") for both CII and SWWC to the estimated SEC for Intermediate Newco. The combined SEC from CII and SWWC includes salaries, incentive compensation, taxes, vehicle allowance, and benefits of twelve executives - six CII executives, and six SWWC executives. Adjustments were made to the CII costs to reflect allocations to the Excluded Business, as defined in the Transaction Agreement, because these SEC costs are not attributable to the Corix water, wastewater and related business. Adjustments were made to the SWWC SEC costs to reflect the impact of executives who may transition to non-

executive roles with Intermediate Newco. The estimated SEC for Intermediate Newco includes salaries, incentive compensation, taxes, vehicle allowance, and benefits of seven executives - three current CII executives and four current SWWC executives. The comparison: (1) does not include any reduction to CMUS's allocated portion of SEC due to the increased number of connections from Intermediate Newco; and (2) does not consider the impact of SEC not requested or recovered from customers.

Director Fees – The Joint Petitioners compared the combined directors' fees for both CII and SWWC to the estimated directors' fees for Intermediate Newco. The calculation only includes director fees and excludes travel costs or miscellaneous fees. The estimated costs for Intermediate Newco were based on SWWC's actual directors' fees, and only includes costs for the four paid independent Intermediate Newco directors. The comparison does not include any reduction to CMUS's allocated portion of directors' fees due to the increased number of connections from Intermediate Newco.

Audit Expenses – Any potential financial benefits have not yet been estimated. At a minimum, the following would need to occur before any potential financial benefits can be quantified:

- Selection of an audit firm;
- Determine which entities are to be audited;
- Receive quotes for scope of work; and
- Determine any additional work to prepare historical information to support the first post-merger audit.

The results of the comparisons are shown below, illustrating approximately $3.4 million in potential gross savings based on 2022 costs. This analysis does not take into consideration numerous factors that might influence actual savings experienced by customers in future rate making proceedings, which include, but are not limited to, one-time and on-going costs incurred to achieve such savings, changes in employment market conditions, changes in the operations of CII and SWWC that might occur between now and closing or following closing, and macroeconomic factors that might reduce savings. Nor have the Joint Applicants attempted to adjust historical Senior Executive Costs and Director Fees to reflect adjustments that might be necessary because the combined company will be larger than either of CII or SWWC on a standalone basis.

Senior Executive Costs

Description		Expense
Corix and SouthWest Adjusted Senior Executive Costs	$	8,863,314
Intermediate Newco Estimated Senior Executive Costs		6,008,861
Estimated Senior Executive Consolidation Savings	$	2,854,453

Director Fees

Description		Expense
Corix and SouthWest Adjusted Corix Board Fees and SWWC Board Fees	$	1,081,571
Intermediate Newco Estimated Board Fees		495,000
Estimated Board Consolidation Savings	$	586,571
Estimated Governance Consolidated Savings	**$**	**3,441,024**

Note:
These costs are estimated and should not be used for rate setting purposes.

3.0 Reference: Application, pgs. 5-6 and 36, RDDA

Explanation: The Utility is seeking approval to:

a. "proposes "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."

And "Corix proposes in this Application 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. Revenue variances occur because of differences in forecast consumption due to customer count and customer use. Corix proposes that the RDDA true-up be for the four test years 2023 to 2026.

In this Application, Corix 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.

Please refer to Section 5.1.4 that includes a proposal regarding the use of the RDDA for potential ROE and capital structure differences from approved test years (2023 to 2026) arising from how the BCUC sets the cost of capital for thermal energy systems."

Request:

3.1 The RDDA removes many risks. What RRA cost elements remain at risk outside of the true ups of the RDDA?

Corix Response:
The RRA cost elements that remain at risk to the shareholder outside of the true ups of the RDDA is the risk of actual O&M costs being higher than an approved O&M costs. If the realized O&M is higher than the approved amounts the shareholder is at risk. Corix similarly is also at risk for any plant additions and consequential depreciation during the test years.

Corix in the Application in Section 3.1 General Inputs and Assumptions outlined the escalators used for CPI, electricity, and Wages and Salaries. The assumptions used are modest and reasonable given that inflation in BC was 6.2% in January 2022 (12-month period). BC Stats stated: "In 2022, the average annual inflation rate in British Columbia was 6.9%, the highest it has been in 40 years."[1]

Corix submits that given the modest escalators used in this Application there is higher risk that the actual CPI is higher than escalators proposed in the Application. Corix also submits there is a relatively higher upside risk than a downside risk with regards to CPI.

3.2 By what date each year will CMUS file its RDDA compliance filing?

Corix Response:
Corix proposed to file its RDDA compliance filing when it files its Annual Report to the Comptroller in the following year on April 30th, as indicated in the Application on page 37 in Section 7.3.2 RDDA Compliance Filing for Actual Year-End Results.

[1] BC Stats, Consumer Price Index, Reference date January 2023, Released February 21, 2023, https://www2.gov.bc.ca/assets/gov/data/statistics/economy/cpi/cpi_highlights.pdf

4.0 Reference: Application, pgs. 8 and 22, GSDP and Hard Water

Explanation: "The Comptroller determined the Groundwater Source Development Program ("**GSDP**") Project to be in the public interest and approved the GSDP project and the use of rate base/rate of return regulation for the Utility through Order No. 2498, dated October 5, 2017."

And "Panorama Water is supplying hard water, which is water that has a high concentration of dissolved minerals such as calcium and magnesium. Continued use of hard water leads to issues such as incrustation and scaling within hot water pipes and industrial, commercial and domestic appliances that heat water or use hot water. Some customers requested that Corix provide a solution to this issue, stating that they are facing increased costs due to increases in maintenance and equipment replacement due to the formation of scale in heating and other infrastructure.

Hard water has historically been supplied to the community. Previously, water was supplied from Taynton Creek which had hard water and was subject to seasonal turbidity and boil water advisories. Presently with the new water system the water source are deep wells not subject to seasonal turbidity. However, the source water continues to be hard.

Health Canada Drinking Water Guidelines

Health Canada's Guidelines for the Canadian Drinking Water Quality recommend hardness levels between 80 and 100 mg/L as CaCO3 to provide acceptable balance between corrosion and incrustation. Prior to the 2019 water upgrade, the total hardness from the Taynton Creek source was 205 mg/L. The current well is 274 mg/L. Based on Health Canada Guidelines water over 180 mg/L is classified as "Very Hard".

While the hardness levels result in what can be considered poor water quality, 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.

Water Softening Project Assessment

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. Given all this, Corix concludes that customers seeking a water softening solution should consider a point of use solution that would provide a better balance of costs and desired water softness level."

Request:

4.1 During 2022 were there any boil water advisories and were the wells adequate to provide sufficient supply to meet customer demands during the prolonged drought conditions? Please discuss.

Corix Response:

Boil Water Advisories

Precautionary boil water advisories were issued on Oct. 5th, Oct. 12th, and Nov. 14th of 2022, in anticipation of watermain depressurization to facilitate watermain and service line leak repairs. However, all three notices were rescinded as described below.

- Oct. 5th Notice: Rescinded and amended to Oct. 12th due to postponement of work.
- Oct. 12th Notice: Rescinded due to work not requiring the depressurization of the watermain.
- Nov. 14th Notice: Rescinded due to postponement of work to April 2023.

There was no occasion in 2022 when a Boil Water Advisory was necessary.

Wells

There was no occasion when Well 15-02 or Well 20-03 were unable to provide adequate supply.

4.2 Will CMUS be considering a system wide water softening solution in its next RRA? What are the costs vs benefits of a system wide water softening solution compared to each customer considering their own water softener? Please discuss.

Corix Response:

Subject to the outcome of this current RRA, the next RRA would be submitted in 2026, which is several years away. At this time Corix has not made a decision on whether or not it will consider a system-wide water softening solution in the next RRA. Corix is not opposed to considering a system wide water softening solution in its next RRA. The costs versus benefits are discussed below.

Centralized Utility Water Softening Solution

i. Capital Costs

Corix obtained a Class C engineering capital cost estimate for the contemplated water softening solution. In February 2022, the capital cost estimate was $1.575 million. At that time Corix estimated the bill impact of the project to be about +18% on 2022 customer bills. This capital cost estimate included the costs listed below.

- Structural (new building) costs
- Treatment Equipment Supply
- Process Mechanical and Building Mechanical
- EI&C Upgrades
- Allowance for Contingency of 30%

- Professional fees (e.g. engineering and project management).

ii. Operating Costs

In addition to the capital costs the project results in incremental operation costs as well. These would occur as a result of:

- An increase in salaries due to a higher certification requirement for plant operators;
- An increase in annual electricity usage, which increases annual utilities costs;
- An increase in annual repairs and maintenance costs; and
- An increase in shared cost allocations that would be driven by the increase in Gross Property Plant and Equipment.

iii. Revised capital costs since last estimate

To account for inflation since the preparation of the engineering cost estimate, the capital cost estimate is considered to have risen to approximately $1.81 million by December 2022. This revision results in an average +20% increase on 2022 customer bills. Corix notes that the percentage increases are average ongoing increases since any capital expenditure has uneven rate impacts in the first number of years as it is placed in service due to tax, depreciation, and timing differences.

Customer-Owned System

The high-level estimated cost for a commercial-sized building softening system is approximately $20,000 of capital costs plus $1,000 per year in operating costs (electrical, material, labour). It is estimated that a residential solution ranges from $700 to $1,500 for initial installation, with some annual operating/maintenance costs that follow.

Centralized Utility Water Softening Solution versus Customer-Owned System

The table below outlines the costs and benefits of a centralized system-wide utility water softening solution versus a residential customer-owned water softening system. The capital cost annuitized amount has been estimated based on equipment life of 15 years and plus a 6% carrying costs which is roughly equivalent to 9% of the initial capital costs.

The estimated residential impact smoothed annual costs on the 2022 bills are:

- +20% (Centralized Utility Solution); and
- +15% (Residential Customer-Owned Solution).

The smoothed annual costs were used to compare the two options. The actual costs will vary each year due to one-time expenditures, depreciation, and carrying costs. The results indicates that the centralized utility solution is moderately more expensive that a customer-owned softening solution. However, if other intangible costs were factored in the community solution with a higher costs and higher intangible benefits would be similar to the customer-owned system which has lower costs but also lower intangible benefits.

Table 1: Bill Impact Comparison of Water Softening Solutions (Utility-owned vs. Residential Customer-owned)

	Residential Bill Impacts on 2022 Bills	2022 Bill*	Estimated Bill Impact	Bill Impact (%)
1	**Centralized Utility Softening Solution**			
2	Smoothed Annual Costs	$1,278	$261	**+20%**
3				
4	**Residential Customer-Owned Softening Solution**			
5	One Time Capital Cost Impact	$1,278	$1,000	+128%
6	Annualized Equivalent Capital Cost Impact		$90	+7%
7				
8	Ongoing Operating Costs	$1,278	$100	+8%
9				
10	Smoothed Annual Costs (lines 6 + 8)	$1,278	$190	**+15%**

* - 2022 Bill represents an average residential customer for 2022 at Panorama Water

Table 2: Advantages and Disadvantages Comparison of Water Softening Solutions (Utility-owned vs. Customer-owned)

Item	Centralized Utility Softening Solution	Customer-Owned Softening Solution
	Advantages	**Advantages**
1	All customers of the utility (including future customers) would benefit from improved water quality, as opposed to only a portion of customers that can afford an individual solution.	All customers have the option of avoiding incremental costs for softer water if they have no issue with the current water hardness.
2	No high upfront capital costs for customers.	Customers that choose to install water softening solutions have the option to select the technology best suited for their particular application.
3	Customers would not be required to manage the maintenance of their individual systems.	Water Utility rates are not impacted and customers have more control over long-term costs of their water softening solution.
4	The softening process would be carefully performed by professionals mitigating against the risk of corrosive "soft water" (under 80 ppm), which damages appliances and infrastructure over time, eventually leading to heavy metals leaking into the water supply.	
5	Utility can mitigate against chloride loading and chloride pollution by choosing the most appropriate technology.	
6	Academic literature review supports the construction of centralized softening solutions as opposed to individual, point-of-use alternatives.	
7	The contemplated NF/RO solution does not use hazardous chemicals, unlike other methods (e.g. Lime-Soda Ash).	

	Disadvantages	Disadvantages
1	Leads to higher water and wastewater utility bills in the medium to long-term.	Upfront capital costs for each customer to install their own solution in the near-term.
2	The nano-filtration option uses a significant additional amount of water for softening thus impacting the available capacity of the WTP.	Physical space requirements to install the necessary equipment for water softening. Some customers may not have the space to install the equipment.
3		Customers would be required to manage the maintenance of their individual systems.
4		Increased risk of corrosion and damage to appliances and infrastructure over time, when compared to a utility-scale solution, leading to heavy metals leaking into the water supply. This can occur if softening process is not carefully performed, resulting in "soft water" (under 80 ppm).
5		An academic literature review supports the construction of centralized softening solutions as opposed to individual, point-of-use alternatives.[2, 3, 4]
6		Extensive use of home-based water softeners could contribute significantly to chloride loading at wastewater treatment plants and chloride pollution, depending on the technologies chosen.[5]

5.0 Reference: Application, pgs. 25 - 26, Deemed Interest Rate

Explanation: "The deemed interest rate on debt financing was determined using the credit spread that reflects BBB or BBB (low) rated debt relative to the 10-year Government of Canada ("**GOC**") bond yield, consistent with the approach outlined for calculating a default debt component for small Thermal Energy System ("**TES**") utilities from the BCUC's GCOC Stage 2 proceeding decision."

[2] Bakshi B, Doucette EM, Kyser SJ, Centralized softening as a solution to chloride pollution: An empirical analysis based on Minnesota cities, *"PLoS ONE 16(2)*, (2021)
[3] Camilla Tang, et al., Water softeners add comfort and consumer water – comparison of selected centralized and decentralized softening technologies, "*Water Science & Technology",* (2019)
[4] Mart Beeftink, et al., Carbon footprint of drinking water softening as determined by life cycle assessment, "*Journal of Cleaner Production 278",* (2021)
[5] Bakshi B, Doucette EM, Kyser SJ, Centralized softening as a solution to chloride pollution: An empirical analysis based on Minnesota cities, *"PLoS ONE 16(2)*, (2021)

Request:

5.1 Please identify the sources used to calculate Table 15.

Corix Response:
The source of the deemed interest rates is based on 1) 10-year Government of Canada bond yields[6] and 2) the credit spreads from confidential information provided by one of the six large nationally regulated chartered banks in Canada.

Corix is now able to report the Actual 2022 Deemed interest rate is 5.19%. The Application had projected for 2022 a deemed interest rate of 4.98%.

In the Application Table 15, the BBB/BBB(low) Premium companies in the utility cohort were:

- Emera Inc.
- Nova Scotia Power Inc.
- AltaGas Ltd.
- Algonquin Power Co.

In the interest of transparency, Corix recently calculated the February 2023 corporate credit spread (premium) which included another company, Liberty Utility Co. (Liberty). Liberty became a credit issuer in its own name in Canada and is rated BBB(high) by DBRS; BBB by S&P; Baa2 by Moody's; and BBB+ by Fitch. Liberty has a split credit rating with an overall average rate of approximately around BBB(mid) to BBB(high). Liberty appears to be on the upper portion of BBB/BBB(high). Liberty was included in the utility cohort because it was 1) rated BBB(mid) by S&P and Moody's and 2) operates regulated water, wastewater, natural gas, and electric utilities in small and mid-sized communities.

5.2 Please confirm that the same sources and methodology will be used for the true up in each of the test years.

Corix Response:
Corix confirms the same methodology will be used for the true up in each of the test years. Corix confirms that it will source its information from at least one of the big six nationally regulated chartered banks and if possible, add to its available bank sources. Corix confirms it will continue using the same methodology for BBB/BBB(low) utility companies. However, as shown in February 2023, the credit market is dynamic and a debt issuing company may be added or removed based on the stated criteria.

Corix wishes to note that the British Columbia Utilities Commission (BCUC) currently has its Generic Cost of Capital (GCOC) proceeding still in progress. The GCOC proceeding appears that it may have a decision in summer 2023 on the benchmark utility and its ROE.

[6] V122543: Government of Canada benchmark bond yields - 10 year, Canadian bond yields: 10-year lookup - Bank of Canada

It is unclear at this time if the benchmark utility will remain as FortisBC Energy Inc. (gas utility) or change to a new benchmark (FortisBC Inc. (electric utility)) and what will be the new ROE. After that decision, the BCUC will then turn to reviewing the cost of capital methodology for the non-FortisBC utilities which include the Corix Thermal Energy System small utilities.

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.

6.0 Reference: Application, pgs. 27 & 28, ROE

Explanation: "Corix proposes in this Application a return on equity ("**ROE**") of 9.5% which is unchanged from the last rate application approved by Orders No. 2578 and No. 2584. The Comptroller in the last rate application approved the 9.5% ROE based on the approved ROE for the benchmark low-risk utility as determined by the BCUC from time to time, currently set at 8.75%, plus a minimum default equity risk premium above the benchmark utility's return. Corix incorporates a minimum default equity risk premium of 75 basis points, equal to the equity risk premium approved by the BCUC for small TES utilities."

And "Given the potential timing for the changes to how the BCUC sets the cost of capital for thermal energy systems, Corix proposes in this Application for 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 period into the RDDA. If the BCUC approves a different ROE and/or capital structure for thermal energy systems, Corix will calculate the differences from the Panorama Water approved test years for the same parameters and flow through those changes in the actual RDDA true-up. For example, if the Comptroller approves a 9.5% ROE, 57.5% debt / 42.5% equity capital structure and the BCUC subsequently approves a different ROE percentage and a different capital structure for small utilities, Corix will settle the re-calculated shortfall or surplus into the RDDA true-up for each year of the test period for which it is applicable."

Request:

6.1 What are the advantages of carrying the ROE and capital structure changes in the RDDA

as opposed to flowing the changes through to rates in each of the test years?

Corix Response:
Any changes to the ROE and capital structure for small utilities from the anticipated BCUC decision will not be fully known until sometime in 2024. The BCUC may decide on the benchmark utility ROE later this summer but its decision on small utilities ROE and capital structure will probably be completed sometime 2024. The Comptroller Decision on rates is expected sometime this summer. Given the water rates will be set by the Comptroller well before the BCUC decides on the cost of capital matters, the options for Corix are more limited. Options for any changes are as follows:

1. Capture any difference in a new deferral account for recovery in the remaining test years via a rate rider in each test year.
2. Capture any difference in a new deferral account for later recovery.
3. Capture any difference in the existing RDDA for later recovery.

Option 1 is possible but will require more time and effort to make the compliance calculations and seek Comptroller approval. At this time, it is unknown whether this would be a debit or credit rate rider. Customers may be confused on the rate rider that may change for each test year.

Options 2 and 3 are similar options. They are the simplest to calculate and have less regulatory process. However, if the difference is a debit the costs are deferred to the future. If the difference is a credit (refund), the refund is delayed into the future. Since the RDDA has a debit balance and there was a credit for the ROE changes, it would simply reduce the RDDA balance.

Overall, Corix submits it would be much simpler to calculate the differences (debit or credit) and place them the existing RDDA. This would reduce regulatory time and effort and be more efficient.

7.0 Reference: Application, pg. 33, GSDP final costs

Explanation: "Corix estimates the total variance from the October 2020 cost estimate to be $125,134. This increase is due to inflation pressures, PST on SCADA software, and additional costs for the well consultant for the testing and commissioning of the well."

Request:

7.1 Please expand on reasons for these final cost overruns.

Corix Response:
The dollar contributions to the variance are outlined in the chart below and followed by a further explanation of each category.

GSDP Variance from October 2020 Estimate	**$125,134**
Excess cost for Well 20-03	$33,813
SCADA Software and PST	$27,532
Inflation and Other	$63,789

Excess cost for Well 20-03: As mentioned in the June 2020 Evidentiary update, during the initial commissioning of the GSDP system, Well 15-02 failed to produce clear water with turbidity less than the threshold of 1.0 NTU. At this stage, additional costs were incurred to:

- Attempt to develop Well 15-02 to an operational status. However, these attempts were unsuccessful; and
- Develop a new viable well capable of supplying the required quantity and quality of water. Three wells were drilled until Well 20-03 proved to meet operational requirements.

Additional total costs incurred to the GSDP project were largely related to developing Well 20-03 which included:

- Fabrication and installation of the pitless adapter, installation of well pump/motor and associated piping;
- Installation of a flush point for start up well testing;
- Testing and operational parameters consultation – well produces turbid water above acceptable thresholds if flowrate exceeds certain levels;
- Reprogramming well controls to ensure water production meets quality standard requirements; and
- Installation of a raw water supply main and connection to the existing supply main.

Although most of these costs were factored into the original estimate, upon drilling and developing Well 20-03, it was discovered that this well had the potential for producing excess turbidity in the water depending on flowrate at start up and overall. Therefore, Corix incurred the $33,813 in excess costs to assess and program operational parameters into Well 20-03 production to ensure excess turbidity is not entrained into the raw water supply.

SCADA Software and PST: There were additional costs related to the SCADA system that were not factored into the original costs of the project. These include the following:

- Upgrading the alarm reporting unit to a ethernet version;
- PRV station controller replaced with ethernet;
- Upgrading the SCADA screen;
- Operational support on installation of upgrades mentioned above
- As software cost are PST applicable, upon capitalization of these assets in 2021, it was discovered that some of these costs needed to be self-assessed; therefore, this was not picked up in the original cost estimate.

Inflation and Other: Although some of the costs as mentioned above were factored into the original cost estimates from 2020, the forecast was completed in 2020 and costs of products and services mentioned above have risen significantly in the last few years. As the forecast does not breakdown each product and service directly, Corix cannot attribute an exact dollar figure to the inflation category. The balance of this category is related to the understatement of the costs of the Well asset in the original 2020 application.

8.0 Reference: Application, pg. 38, Commercial Customers

Explanation: "As shown in Schedule 1, for commercial customers the number of bed units has decreased from 2,429 in 2020 to 2,383 in 2021, due to a commercial customer changing its meter from 2" to 1", which resulted in a bed unit reduction of 55. The current commercial 2,383 bed units are expected to remain constant in the near term as Corix forecasts no changes to commercial customer count or the number of bed units during the forecast period."

Request:

8.1 What is the best estimate of the actual bed units for the commercial customer changing its meter and why is it different from the average forecast?

Corix Response:
The approved Water Tariff in the Definitions section under (b)(iii) states the following: "Bed Unit" "commercial customers according to size of water meter.

- 1" meter = 25 bed units,
- 2" or larger meter = 80 bed units"

Based on the tariff the customer went from a 2" meter at 80 bed units to a 1" meter at 25 bed units. Therefore, the bed units as per the tariff went down by 55 bed units (80 to 25).

Historically, the commercial customers bed units have been stable since no new commercial customers have been added. The only reason for the change in commercial bed units was because an existing commercial customer changed its meter size and that resulted in a new bed unit amount for the customer.

8.2 Does this call into question the methodology for forecasting commercial bed units? Why?

Corix Response:
Corix submits the proposed method to forecast commercial customers is appropriate.

Corix is expecting all existing commercial customers to maintain their meter size and does not forecast any new commercial customers in the test period. Therefore, the current commercial bed units are the most appropriate going forward. An average methodology is not appropriate since commercial customers are stable, and the best predictor of future bed

units is what they are using now plus any known future adjustments. Corix at this time is not aware of any future commercial customer adjustment or changes.

9.0 Reference: Application, pg. 38, Sales forecast

Explanation: In this Application, the Utility has based the 2023 average customer bed unit consumption on the 2022 results.

Request:

9.1 Is 2022 a representative year, given the Covid pandemic, snow conditions and variations as a result of being a resort community? Why?

Corix Response:
Corix would not consider any of the last three years including 2022 to be a truly representative year given the Covid pandemic and possibly of a 2023 economic recession. However, 2022 is the most recent year available and the best predictor of 2023. 2023 is a year where it should be the first full year 'normal' year after the effects of Covid. However, 2023 is also a challenging year that appears to have continued high inflation, as evidenced by the first two months of 2023, and also predictions by economists that Canada and the U.S. is or will be in recession.

With regards to Covid, 2020 was the first year of Covid particularly after March 2020 where Covid restrictions had the most dramatic impact. 2021 was a full year under Covid pandemic restrictions. 2022 was the first year where restrictions were relaxed and was considered a recovery year with regards to Covid but it was also the first full year of sustained inflation.

Corix notes that the proposed continuation of the RDDA includes customer consumption true-ups from test year. This means that if the approved test year consumption was lower than actual consumption, the actual higher consumption will bring in higher metered revenue charges which will be captured in the RDDA and thus lower the RDDA balance when compared to test year. In summary, the proposed RDDA will capture any consumption differences so the customer will not be disadvantaged if the actual consumption was higher than approved in the test year.

9.2 What would the sales forecast be if the Utility used a 3 year average of 2020, 2021, and 2022 actuals?

Corix Response:
This response has been calculated using the updated Actual 2022 consumption figures consistent with the response to Comptroller Information Request #1, Question 13.1.

The table below calculates the consumption by using the residential and commercial unit consumption using 2022 only (Scenario A); average of the last three years from 2020 to

2022 (Scenario B); and average of the last two years from 2021 to 2022 (Scenario C).

- Scenario A (lines 1 to 4: 2022) has forecast 2023 consumption at 83,700 m^3.
- Scenario B (lines 6 to 9: 2-yr average) has forecast 2023 consumption at 86,229 m^3.
- Scenario C lines (11 to 14: 3-yr average) has forecast 2023 consumption at 84,008 m^3.

The results show no clear trend.

	Scenarios Annual Consumption (cu. m)	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	**A) 1 Year - 2022 Actual**					
2	Annual Consumption - Residential	26,244	26,105	26,943	27,568	28,177
3	Annual Consumption - Commercial	58,177	57,595	57,019	56,449	55,884
4	Total Annual Consumption	84,421	83,700	83,962	84,016	84,062
5						
6	**B) 3 Average - 2020 to 2022**					
7	Annual Consumption - Residential	26,244	28,949	29,878	30,571	31,247
8	Annual Consumption - Commercial	58,177	57,281	56,708	56,141	55,579
9	Total Annual Consumption	84,421	86,229	86,585	86,711	86,826
10						
11	**C) 2 Average - 2021 to 2022**					
12	Annual Consumption - Residential	26,244	28,040	28,940	29,611	30,266
13	Annual Consumption - Commercial	58,177	55,968	55,408	54,854	54,306
14	Total Annual Consumption	84,421	84,008	84,348	84,466	84,572

10.0 Reference: Application, pg. 38, Conservation impact

Explanation: "However, the Utility recognizes that the proposed rate increases could lead to a change in consumption patterns due to conservation. Therefore, the Utility 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."

Request:

10.1 What is the basis or derivation of the 1% reduction factor?

Corix Response:
Panorama Water has approved a two-part rate design structure:

1. A Fixed Charge per month
2. A Metered Rate per cubic meter

The Metered Rate provides a customer conservation incentive to use water wisely and avoid wasting water. When the metered charge rates increase, it provides a financial incentive to conserve. Corix has modelled a nominal conservation amount of 1% from the price signal of the proposed rate increases consistent with the approach taken in the last approved rate application. In the last rate application, Corix stated:

> "However, the Utility recognizes that the proposed rate increases could lead to a change in consumption patterns due to conservation. Therefore, the Utility applied a reduction factor to the forecast consumption per bed unit, for both residential and commercial customers, of 1% per year from 2020 to 2024."[7]

It was approved in Orders No. 2578 and 2584. For consistency, Corix has continued the 1% reduction factor given the magnitude of the proposed rate increase in 2023.

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 trued-up.

10.2 If there are no longer summer boil water advisories, wouldn't one expect consumption to rise?

Corix Response:
The GSDP project with its new well and reservoir went into service in Feb 2020 which eliminated the annual summer long boil water advisories. The actual summer consumption in 2020 to 2022 had no summer long boil water advisories.

Corix submits that the historical data used to forecast consumption already incorporates the absence of boil water advisories due to the completion of the GSDP project.

[7] Corix Panorama Rate Application 2020 to 2022, Evidentiary Update, https://www.corix.com/docs/default-source/communities/system-specific/panorama-pdfs/8_cmus_pmv_evidentiary_update_2020-06-30_public.pdf?sfvrsn=711c6e5d_2

11.0 Reference: Application, pgs. 40 & 41, Customer Rates

Explanation: "The proposed rates shown in the above table reflect the following rate changes: 58% in 2023, 6% in 2024, 5% in 2025, and 2% in 2026. After the discontinuance of the CDA Rate rider at the end of 2022, the rate changes result in residential bill changes of 43% in 2023, 6% in 2024, 5% in 2025, and 2% in 2026 which is further discussed in Section 12."

And "In order to smooth, or phase-in, rate increases, the Utility proposes the continued use of the Revenue Deficiency Deferral Account ("**RDDA**")."

Request:

11.1 Please discuss why the Utility did not use the RDDA to further smooth rates and mitigate the rate shock of the 2023 rate increases.

Corix Response:
In the last rate application Corix requested and received approval to establish the RDDA. The last rate application followed the commencement of service from the Groundwater Source Development Program that involved substantial infrastructure investments in the source wells, water treatment plant and reservoir. The one-time GSDP project capital costs were placed in rate base and depreciated over its useful life. When setting revenue requirements, the one-time GSDP rate base investment resulted in very large annual revenue requirements. To mitigate the rate impact of the capital expenditure the RDDA was approved. In the early years the actual revenues would under-recover the year's revenue requirement. As rate increases subsequently followed in the next years, the revenue requirements annual deficit would be reduced until the cross-over occurred when revenues charged were higher than annual revenue requirements. Thus, with each successive year the surplus would pay down the accumulated RDDA until it was fully recovered. Upon fully recovery, the rates would then be adjusted so that the revenues are equal to the annual revenue requirements.

In 2023 the deficit in the RDDA is primarily a result of the higher operating expenses and not capital expenditures. One-time capital expenditures can be smoothed with the associated rate increase being spread over a number of years instead of in one year. However, with ongoing operating expenses the RDDA would build large deficits until the rates increase to cover ongoing costs of service causing a compounding of deficits. The RDDA can be used to manage O&M costs if they increase in one year and decrease in other years but it has a more limited ability to smooth rates since O&M costs are ongoing.

In the Financial Schedules in Schedule 10 line 10 shows the closing RDDA balances. In 2022 the closing balance is $1.3 million. In Forecast 2023 the closing balance is $1.2 million and then $0.95 million 2024. The $1.2 million balance is after the proposed 58% rate change in 2023 (see Schedule 11 line 51).

Corix has modelled Scenario A (40%) below using the filed Application as a comparison,

assuming the large proposed tariff increase of 58% in 2023 was set at a lower figure such as at 40% in 2023. This scenario would cause the RDDA closing balance to rise from $1.2 million to $1.34 million in 2023. To maintain the same RDDA balances in 2024 to 2026, the residential bill increases would 27% in 2023, 33% in 2024, -5% in 2025, and 2% in 2026.

The 2023 proposed rates can be moderated but it would result in a large rate increase in 2024 if the RDDA balances from 2024 to 2026 is maintained as in Scenario A. Scenario A has the RDDA balances moderately being reduced and fully recovered by the end of 2028.

Scenario A (40%): RDDA Recovery in 2028	2023	2024	2025	2026
Total Revenue Requirements (excl. CDA Rider 1)	$1,376,388	$1,370,118	$1,507,763	$1,518,559
Rate Residential (Fixed and Metered Charge)	40%	33%	-5%	2%
Rate Commercial (Fixed and Metered Charge)	40%	33%	-5%	2%
Target % Recovery of Total Rev. Req. (excl CDA)	97.0%	131.9%	114.0%	116.0%
Target Revenue Requirement	$1,335,096	$1,807,586	$1,718,477	$1,761,528
RDDA Balance ($)	$1,337,501	$900,033	$689,319	$446,349
Residential Bill Impact	27%	33%	-5%	2%
Commercial Bill Impact	21%	33%	-5%	2%

Corix has provided a further scenario by reducing the rates in 2023 and also 2024 with recovery in 2033 in the response to Trappers Ridge Information Request #1, Question 21.1 as Scenario D. This Scenario D has more gradual rate changes but it increases the RDDA balances in 2023 and 2024 and has a longer recovery period to 2033.

12.0 Reference: Application, pg. 48 and Appendix 1, Back Billing

Explanation: "Corix proposes to add a new section (Section 26) in the Panorama Water Tariff No. 6 tariff to include back-billing. The proposed wording will be substantially identical to the wording previously approved by the Comptroller and included in the current Water Tariff No. 2 for Corix's Cultus Lake Water Utility …"

Request:

12.1 What is the "… the applicable limitation period provided by law" identified in Tariff clause 26.3?

Corix Response:
The basic limitation period is two years from the date of discoverability, although that

could change if the BC *Limitation Act* was amended.

12.2 In Tariff clause 26.5, what is the current interest rate charged on "unpaid accounts"? How can one be sure that interest would not be charged on under-billing resulting from a previously estimated bill issued by the Utility?

Corix Response:
The proposed Back-Billing wording in s. 26.5 for Panorama Water is "Under-billing resulting from circumstances described above will bear interest at the rate normally charged by the Utility on unpaid accounts from the date of the original under-billed invoice until the amount under-billed is paid in full."

The rate for "unpaid accounts" or "delinquent accounts" is 1.5% per month as found in Section 2 Billing and Payment in the water tariff.

12.3 In the case of over-billing by the Utility (section 26.7), shouldn't the customer expect to receive an interest rate credit equal to that charged for under-billing? Please discuss whether this low rate could become an incentive for the Utility to issue high estimated bills?

Corix Response:
The proposed Back-Billing wording for Panorama Water was based on the Back-Billing provision previously approved by the Comptroller of Water Rights in Water Tariff No. 2 for Cultus Lake Water Utility.

The proposed Back-Billing wording in s. 26.7 for Panorama Water is "In every case of over-billing, the Utility will refund to the customer all money incorrectly collected for the duration of the error, subject to the applicable limitation period provided by law. Simple interest, computed at the short-term bank loan rate applicable to the Utility on a monthly basis, will be paid to the customer."

Corix acknowledges that the proposed s. 26.5 wording for under-billing which relies on s. 2 Billing and Payment results in a rate of 1.5% per month. This is much higher than proposed s. 26.7 short-term bank loan rate applicable to the Utility.

Corix does not agree this would incent the Utility to issue high estimated bills as the intended reason for including the Back-Billing section was to provide customer clarity on how back-billing whether over-billing or under-billing would be applied. The application of interest for over and under billing was an incidental result for completeness when including Back-Billing provisions which was missing from the water tariff. It is not the intention of Corix to profit from any interest as any interest applied would be relatively nominal.

Corix would be amendable to revise the proposed s. 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."

The above amended wording if approved would then have the over-billing and under-billing matters in s. 26 Back-Billing in the tariff to have the same applicable interest rate.

13.0 Reference: Application, Tables, Projected 2022

Explanation: At the time of filing the Application, the final 2022 costs and revenues were not known.

Request:

13.1 Please update and refile all Tables and Schedules that have "Projected 2022" costs or revenues with "Actual 2022" costs and revenues.

Corix Response:
The updated evidentiary update of Tables and Schedules for Actual 2022 is included in the Attachment Response to Question 13.1.

The notes to the evidentiary update are as follows:

1. Actual 2022 has been updated for O&M, revenues, consumption, plant, deferrals and rate base.
2. The test years have been included as indicative forecast years with follow on updates for the following with regards to Forecast 2023 to 2026.
    a. O&M for the test years is unchanged from the Application figures.
    b. Plant accounts have been updated based on Actual 2022.
    c. Rate base have been updated based on Actual 2022 plant and deferral balances.
    d. Forecast 2023 opening RDDA in Schedule 6 has been corrected for the CDA deferral account balanced transferred to the RDDA.
    e. With the residential consumption updated for Actual 2022, the Forecast 2023 to 2026 consumption has been updated using Actual 2022 consumption less 1% conservation to calculate the 2023 consumption.
    f. The Actual 2022 deemed interest rate is 5.19% instead of the projected 4.98% rate. Deemed interest rates for Forecast 2023 to Forecast 2026 has been unchanged from the initial 4.98% rate forecast.
    g. The % Target Revenue Requirement was unchanged from the Application 110.0%, 119.0%, 114.0%, and 116.0% for 2023 to 2026, respectively, which results in small changes to the indicated Schedule 13 residential bills from the proposed rate in the Application.
    h. Schedule 13 indicative rates is shown only for illustrative purposes in response to this information request based on the update to 2022 Actuals. Schedule 13 shows the indicated residential annual bill change would 44%

in 2023, 6% in 2024, 5% in 2025, and 3% in 2026. These indicative changes show little change from the proposed rates in the Application.

i. The response to this information request with the Forecast 2023 to Forecast 2026 years has been shown for illustrative purposes only to show the Actual 2022 update has a nominal impact on these test years.

13.2 Are there any surprises to individual costs or revenues as a result of updating to 2022 Actuals?

Corix Response:
There were no significant surprises as a result of updating to 2022 Actuals. The updated figures are shown in the table below with small differences between actual and projected 2022 costs. Actual 2022 O&M was lower by $1,022 than initially projected. As noted in the Errata, Corporate and Regional Services in the Application was presented as $231,330 for Projected 2022 when it should have been projected $229,630. The actual 2022 Corporate and Regional Services was $227,733.

The largest difference in cost was from higher deemed interest of $10,039 (Actual 5.19% rate compared to the Projected 4.98% rate). The lower revenues of $10,407 are a result of lower residential consumption of 1,792 m^3 offset by a small increase in commercial consumption of 139 m^3 (see lines 29 to 34 in the table below).

Corix Multi-Utility Services Inc.
Panorama Water Utility
Revenue Requirements and Revenue Deficiency Deferral Account
Comparison of Actual 2022 to Projected 2022

Line No.	Revenue Requirement	Actual 2022	Projected 2022	Difference
1	Operating and Maintenance Expenses	$638,916	$639,939	($1,022)
2	Depreciation Expense	177,396	177,263	133
3	Amortization of CIAC	(19,099)	(19,099)	0
4	Amortization of Deferred Decommissioning Costs	3,230	3,230	0
5	Interest on Debt	240,009	229,970	10,039
6	Return on Equity	324,717	324,255	462
7	Income Tax Expense (Recovery)	0	0	0
8	**Revenue Requirement**	**$1,365,169**	**$1,355,557**	**$9,612**
9	Revenue	$948,629	$959,036	($10,407)
10	Surplus (Shortfall)	($416,541)	($396,521)	($20,020)
11				
12	**Revenue Deficiency Deferral Account**	**Actual 2022**	**Projected 2022**	**Difference**
13				

Revenue Deficiency Deferral Account			
Opening Balance	$899,688	$899,688	$0
Revenue Required	1,365,169	1,355,557	9,612
Revenue Received	948,629	959,036	(10,407)
Revenue deficiency (surplus)	$416,541	$396,521	$20,020
Ending Balance (before CDA transfer)	$1,316,229	$1,296,210	$20,020

Rate Base	**Actual 2022**	**Projected 2022**	**Difference**
Mid-Year Net Plant in Service	$6,780,016	$6,778,454	$1,562
Mid-Year Deferral Accounts	1,182,648	1,172,638	10,010
Working Capital	79,865	79,992	(128)
Mid-Year Rate Base	$8,042,528	$8,031,084	$11,444

Customer Consumption	**Actual 2022**	**Projected 2022**	**Difference**
Annual Consumption (cu. m)			
Annual Consumption - Residential	26,244	28,036	(1,792)
Annual Consumption - Commercial	58,177	58,038	139
Total Annual Consumption	**84,421**	**86,073**	**(1,653)**

14.0 Reference: Application, pg. 18, Table 6, Corporate Cost Allocations

Explanation: Table 6 provides the 2023 Corporate Cost Allocations to Panorama.

Request:

14.1 Please expand Table 6 to include the Corporate Service Costs for each year from 2020.

Corix Response:
Please refer to Table 3 below, which excludes Business Development costs.

Table 3: Corporate Cost Allocations to Panorama Water

Item	Corporate Services Cost Categories	Corporate Cost Allocations to Panorama Water			
		Actual	Actual	Actual	Forecast
		2020A	2021A	2022A	2023F
1	Executive Management	6,870	6,276	8,403	11,605
2	Customer Experience	-	2,898	16,947	14,058
3	Regulatory Support & Operational Technology	3,403	3,778	5,640	10,435
4	Corporate Finance and FP&A	7,964	3,900	7,716	10,887
5	Accounting and Tax	7,687	9,668	8,345	12,882
6	Human Resources	7,497	6,072	6,856	10,581
7	Corporate Communication	444	1,696	2,129	3,102
8	Information Technology	28,019	33,411	43,388	61,130
9	Accounts Payable	6,554	1,859	2,464	3,349
10	Support Services Management	-	2,755	4,589	6,390
11	Customer Billing	-	2,820	4,894	4,890
12	Procurement	-	-	913	1,643
13	Fleet	-	6,261	5,870	5,932
14	Continuous Improvement	2,046	3,825	1,739	2,926
15	Health, Safety & Environment	5,423	3,139	3,615	5,178
16	Legal and Risk Management	9,586	4,778	6,890	11,053
17	Internal Audit	279	337	442	947
	Total Corporate Costs	**$85,772**	**$93,474**	**$130,840**	**$176,988**
	Annual Increase in Total Corp. Costs (%)	**N/A**	**9.0%**	**40.0%**	**35.3%**

14.2 For any years that have increased total Corporate Costs greater than 2% from the previous year, please explain why the increase exists.

Corix Response:
Please refer to Table 3 in response to Question 14.1 above for the annual increase in total Corporate Costs allocated to Panorama Water. Corporate Costs allocated to Panorama Water have increased greater than 2% each year due to a combination of the following:

- Changes to the allocation inputs (Gross Property, Plant and Equipment (PPE), Revenue, Headcount) for Panorama Water relative to other utilities owned by Corix;
- Increases to Corporate Costs;
- Annual Inflation; and
- Divestments of other utilities.

Allocation Inputs
CII uses a point-in-time approach to calculate the forecast allocation percentages for the following year. The allocation percentages are determined based on data at June 30th each year. For example, the 2022 forecast allocations would be based on data from June 30, 2021. This provides stability for budgeting and actual allocations as well as a reference point for year-over-year comparisons. If an event is identified that is deemed probable to occur and would materially impact the setting of the following year's allocation, management could use its judgement to adjust the allocation inputs to account for the event.

The table below shows the progression of the Panorama Water inputs for the Corporate Cost allocation methodology. Gross PPE has increased significantly during this time, which is expected due to the completion of the GSDP project and its associated capital costs. The table also shows that trailing twelve-month (TTM) revenue has increased since 2020, primarily driven by the rate increases necessitated due to the GSDP project and updates to O&M costs. TTM Revenue spans the period July 1st of the previous year to June 30th of the existing year.

Some Corix staff headcount reside in cost centres, as opposed to each utility. This allows for the efficient sharing of resources. In order for Corporate Cost recovery to take place, the headcounts residing in cost centres need to be distributed to business units that earn revenue (profit centres). The headcount (Full-Time Equivalent (FTE)) in the cost centres are distributed to the utility profit centres to determine the Headcount inputs for the Corporate Cost allocation model. This occurs for all business units that is not a cost centre. The increase in Panorama Water headcount from 2021 to 2022 accounts for an internal reorganization that combined Corix Canada's utility management and leadership into one cost centre, which provided water and wastewater utilities access to more internal resources (for example, the Project Management Office within Corix). This resulted in an increased headcount in all cost centres relevant to Corix's water and wastewater utilities in Canada.

Table 4: Corporate Cost Allocation Model Inputs for Panorama Water

	Corporate Cost Allocation Model Inputs for Panorama Water				
Item	**Inputs at June 30th of:**	**2019**	**2020**	**2021**	**2022**
1	Gross PPE ($)	4,697,922	7,614,081	7,949,711	8,323,030
	Year-over-Year % Change		62%	4%	5%
2	TTM Revenue ($)	489,183	354,593	561,798	986,730
	Year-over-Year % Change		-28%	58%	76%
3	Headcount	1.2	1.1	1.6	2.6
	Year-over-Year % Change		-8%	45%	63%

It is important to remember that all three inputs for all utilities within CII's portfolio are constantly changing and cost allocations increase or decrease depending on the magnitude and change in one utility's input relative to the magnitude and change in all other utilities' inputs as of June 30th each year. Panorama Water has experienced significant infrastructure upgrades in recent times, followed by changes in revenue requirements and ultimately annual revenue to account for these infrastructure upgrades. At the same time, many other utilities have not experienced such levels of infrastructure upgrades.

Increases to Corporate Costs and Annual Inflation

CII's total corporate costs have experienced increases over the past few years as shown below.

- Actual 2021: Increase of 5.7% compared to 2020.
- Actual 2022: Increase of 3.0% compared to 2021.
- Forecast 2023: Increase of 2.0% compared to 2022.

The above figures include inflation as it would not be reasonable to attempt to isolate actual annual inflation. The above increases contribute to increases in Panorama Water's annual Corporate Cost allocations.

Divestments

Another reason for Corporate Cost Allocation increases is the divestment of utilities or businesses that receive a portion of corporate costs. Corix Water Services Inc. (CWSI), an entity previously owned by CII, received a portion of Corporate Costs through the cost allocation model up to and including 2021. In 2021 CWSI's share accounted for 2% of total Corporate Costs. Beginning in 2022 there was an increase in allocations to all other utilities due to the divestment of CWSI.

14.3 What economies of scale have been achieved as a result of acquisitions by Corix to spread Corporate costs over a larger base?

Corix Response:
Customers benefit from economies of scale and scope. Customers also receive the benefits of affiliation with a larger organization. For instance, the Company can leverage the bargaining power of the Corix portfolio of companies to achieve efficiencies that would not be achieved by the Company on a stand-alone basis. Affiliation with the larger organization also allows for improved employee technical expertise, specialization, and work performance. Finally, larger, geographically diverse companies have better access to debt markets than would any single stand-alone entity.

15.0 Reference: Application, pgs. 18-20 and Schedule 2, Corporate and Regional Costs

Explanation: Corporate and Regional Costs have risen dramatically since 2020.

Request:

15.1 Please provide a detailed explanation of why these costs have nearly doubled in 3 years and now make up more than 50% of Total selling, general and administration costs?

Corix Response:
Table 5 below summarizes the cost allocations in recent years.

Table 5: Corporate and Regional Cost Allocations to Panorama Water

Item	Cost Categories	Allocations to Panorama Water			
		Actual	Actual	Actual	Forecast
		2020A	2021A	2022A	2023F
1	Corporate Services Costs	$85,772	$93,474	$130,840	$176,988
2	Regional Services Costs	$41,486	$55,138	$96,893	72,046
	Total Corporate and Regional Services Costs	**$127,258**	**$148,612**	**$227,733**	**$249,034**

Please refer to the responses to Questions 14.1 and 14.2 for detailed explanations regarding the Corporate Services Costs and the drivers behind annual increases.

Regional services costs allocations follow the same allocation methodology as the Corporate services costs. However, it only includes the inputs related to the utilities in the region that are benefiting directly from that pool of costs. In 2020 and 2021 this included all of Corix's Canadian utilities except the District Energy utilities.

In 2020, Panorama Water received 2.47% of the total pool of Regional costs which was derived from our Corporate cost model as submitted to the British Columbia Utilities

Commission and approved through Order G-349-20 and also fully reviewed on the Panorama Water 2020 annual audit by Ernst & Young LLP.

In 2021, Regional allocations followed the same allocators as the internal Corporate CAM model as indicated above which reflected a large addition in both Gross PPE and Revenue; therefore, Panorama Water's portion of the pool of Regional costs was 3.18%.

In 2022, Corix underwent a Corporate restructure in which all Canadian utilities were merged under one President (District Energy and water/wastewater combined). Due to this change, the total pool of costs under the regional services cost department experienced a material increase, but as additional utility inputs were added to the calculation, Panorama Water's contribution dropped to 2.4% of the total pool of Regional costs. Some specific advantages seen from the increase of these costs to the Panorama water utility have been: 1) The addition of a Project management office: Panorama has a dedicated Project manager who could work on negotiating pricing, tracking and reviewing costs, and ensuring the best quality at a good price for the utility; 2) Additional regulatory resources, 3) Business operations support to review and ensure customer issues are addressed and followed up on and proper procedures are in place to minimize errors

16.0 Reference: Application, pg. 10

Explanation: Consumer Price Index (CPI)

Request:

16.1 Based on recent statements of the BOC, would it not be more appropriate to reduce expected inflation in 2024 to 2.5% rather than 3%? Please explain.

Corix Response:
It would not be more appropriate to reduce expected inflation as explained below.

The latest Bank of Canada CPI projection is 2.6% for 2023 and 2.0% for 2024.[8] The monetary report is updated quarterly with the last report issued late January 2023.

In December 2021 the CPI (12-month period) was 4.8% and in December 2022 the CPI (12-month period) was 6.3%.[9] For January 2023 the CPI was 5.9% (12-month period). Most recently, the February 2023 CPI was 5.2% (12-month period).

Last year, the BOC in its Monetary Policy Report for January 2022 (issued on January 26, 2022) stated "Canadian CPI inflation outlook Consumer price index (CPI) inflation is

[8] Bank of Canada, Monetary Report, January 2023, Table 3: Summary of quarterly projection for Canada, p. 19, https://www.bankofcanada.ca/wp-content/uploads/2023/01/mpr-2023-01-25.pdf
[9] Bank of Canada, Consumer Price Index, 2022 to present, Total CPI, CANSIM v41690973, https://www.bankofcanada.ca/rates/price-indexes/cpi/

expected to be higher than projected in October. The outlook for CPI inflation in 2022 is revised up by about three-quarters of a percentage point to 4.2% and remains unchanged in 2023 at 2.3%."[10]

Despite the fact that actual CPI was 4.8% in December 2021 and 5.1% in January 2022, the BOC had forecast in January 2022 that the CPI for 2022 year would be 4.2%. It is interesting to note that the BOC predicted that 2022 CPI was going to be lower than the most two recent months it was aware of. Also, the BOC boldly predicted 2023 CPI would be 2.3% in a highly optimistic forecast to "talk down" inflation.

The 2022 year-end CPI projection at 4.2% was lower than the actual 4.8% in December 2021 and also lower than the actual 5.1% in January 2022. Given that the first month was 5.1% in January 2022 that should have been given greater weight when predicting the year-end CPI of 2022. A reasonable estimate could have used the last two months of data available (4.8% and 5.1%) to predict the 2022 CPI. If this was done the 2022 prediction would have been 4.9% (average of 4.8% and 5.1%) which would have been very close to the 2022 actual of 4.8%.

This recent 2023 BOC prediction approach is similar to its previously highly optimistic forecast one year prior for 2022. The actual results so far in 2023 indicate that the Bank of Canada's forecast of 2.6% would be difficult to achieve at the end of the year. If the inflation trend continues to persist in 2023, the BOC will need to revise its optimistic 2023 CPI forecast. Corix submits that the two recent actual CPIs of January 2023 (at 5.9%) and February 2023 (at 5.2%) indicate that the final December 2023 CPI will probably be higher than the BOC predicted CPI of 2.6%. An average of the last two months indicates that 2023 year-end CPI will be 5.55% (average of 5.9% and 5.2%).

A recent CBC News article with the Bank of Canada[11] reported the following:

> "Speaking to the Manitoba Chambers of Commerce on Thursday in her hometown of Winnipeg, the Bank of Canada's senior deputy governor, Carolyn Rogers, implied that despite the bank's pause this week, there may be higher interest rates ahead.
>
> "**We can all agree, inflation is still too high**," Rogers told the business audience. "It's come down a bit, but at 5.9 per cent, **we have a long way to go to get back to the two per cent target**." [emphasis added]
>
> "**While the deputy governor held to the recent Bank of Canada forecast that the inflation rate would hit three per cent this year and be right on target at two per cent by 2024, some of those listening to her speech sensed she was**

[10] Bank of Canada Monetary Policy Report, January 2022, p. 4, https://www.bankofcanada.ca/wp-content/uploads/2022/01/mpr-2022-01-26.pdf
[11] CBC News, "Soaring food prices, surging jobs could put pressure on Bank of Canada to return to rate hikes: U.S. rate hikes, wages, food price anger may add pressure for higher interest rates", March 10, 2023, https://www.cbc.ca/news/business/rogers-inflation-hikes-column-don-pittis-1.6773350

> **hinting those goals were optimistic if interest rates don't rise further**."
> [emphasis added]
>
> "Addressing the difficulty of battling inflation in the face of a still-strong jobs market where wages are outpacing productivity — with the danger of imported inflation from our biggest trading partners and on the prospect that energy prices could yet rise again — Rogers repeated the bank's view that this week's pause in its key interest rate depends on how the economy unfolds."

In her speech, the BOC deputy governor general admitted that there is a "long way to go to get back to the two per cent target". Based on the past optimistic forecasting of the Bank of Canada 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.

17.0 Reference: Application, pgs. 30-31, Schedule 2, Wages and Salaries

Explanation: "Labour-related costs are escalated based on Corix's senior leadership's direction regarding the workforce budgets. The annual escalation is 4.3% in 2023, and 3% each year thereafter. Given the challenges that Corix and the market as a whole have experienced in attracting and retaining qualified staff, this figure was determined to be a reasonable increase to encourage staff retention and maintain a level higher than the target inflation rate, while minimizing increases to fixed costs for Corix."

Request:

17.1 Why were Wages-Operators so much lower in 2021compared to other years?

Corix Response:
A resignation of a Senior operator occurred in April of 2021 and that vacancy was not filled until late July 2021; therefore, there was less operator time charged to the utilities in the area for one quarter of 2021.

17.2 Please identify the "challenges" that Corix has faced in finding and retaining operators in the Kootenays. What staff turnover has occurred in the past 3 years?

Corix Response:

<u>Staffing Challenges</u>
Most applicants for vacant utility operator positions are either;

- Certified operators who reside outside of the Columbia Valley, usually elsewhere

in British Columbia, or in Alberta; or
- Are not qualified for the role (ie. not certified) but currently reside locally.

For applicants outside of the region, securing housing is the main obstacle. The Columbia Valley is a tourist destination, resulting in higher-than-average real estate costs. A lack of long-term rental housing and cost of real estate are barriers to potential employees relocating to the area.

Panorama Mountain Resort, located in the Columbia Valley, is a remotely rural community. Attracting qualified applicants from urban communities (eg. Calgary, Kelowna, Lower Mainland) is challenging as there may not be career opportunities for spouses.

Staff Turnover

A Senior Operator resigned in April 2021 (four years tenure). The individual left a utility role to return to operating heavy logging equipment. Employee was seeking a position where work did not overlap with personal time.
- Corix backfilled the position internally with tenured operator (promotion).
- Corix backfilled internal vacancy with former Parks Canada contract employee local to Invermere

Utility Operator Level 1 resigned in Oct. 2021. This employee had twelve years tenure with Corix (Lower Mainland), three years as a Utility Operator in the Kootenays. The employee relocated to Cranbrook, BC due to spouse's career. The commute to Invermere was not sustainable.
- Corix backfilled position with an Operator-in-Training; an individual who is local to Invermere, familiar with utility plant equipment, and a certified industrial electrician.

17.3 To what extent did the acquisition of Columbia Ridge bring efficiencies in operations for the 6 full-time operators and why is that not apparent in the overall costs for Panorama?

Corix Response:

Given that the Columbia ridge purchase was not finalized until October of 2022, the full effect of any possible cost savings for Panorama Water have not been factored into the forecast as of yet as maximum efficiencies and time required to operate this new system has not been determined. At the area allocation level (Common Admin), Columbia Ridge was factored in to take a portion of the Kootenay area administration costs and this has been projected in this forecast to be a cost savings to Panorama Water of $10,154 in 2023, $10,474 in 2024, and $10,757 in 2025. The Corporate and Regional Services cost allocations are calculated at June 30th of each year and therefore the next update will be at the end of June in 2023.

18.0 Reference: Application, pg. 14 and Schedule 2, Common Admin. Allocation

Explanation: "Historically these costs existed, and the above utilities and operations received administrative services, but the allocation was given based on different factors. Prior to 2021, an allocation of 25.7% was applied to shared costs, but the area was split into two cost centres at that time; therefore, some shared costs were omitted from the calculation. For 2021, the allocations to Panorama Water for shared costs were based on the expected time the shared resources would be working on Panorama Water activities relative to the expected time that they will be working on activities for other utilities or operations. This resulted in an allocation percentage of 13.75% of a combined cost centre for the entire region. In 2022, following an organizational restructuring, and to be consistent with standard cost causation and cost recovery practices, Corix began allocating the Common Admin costs according to a consistent allocation methodology as used in all other allocations across the business. This individual line item in operating expenses will receive one allocation encompassing all shared administrative costs for the Kootenay business unit. This approach reduces the administrative burden by streamlining processes within the accounting department."

Request:

18.1 Common Admin. Costs have doubled since 2021. Please further explain why the Common Admin Costs allocated to Panorama Water are so high. What shared costs were previously omitted?

Corix Response:
The majority of the variance between the 2021 and 2022 cost resulted from the change of the Common Admin cost allocation methodology.

- In 2021, the allocation was based on estimated operator time spent on Panorama Water which resulted in a 13.75% allocation of the total pool of costs of the area cost centre to Panorama Water.
- In 2022, the methodology was changed to follow the Corporate Services allocators (Revenue, Gross PPE, and Headcount) which caused the allocation to Panorama Water to increase to 27% of the total pool of costs of the area cost centre.

Panorama Water's allocation of the total pool of costs increased by 13.25% from that of 2021 which added additional cost of $48,656 to the utility. Between these two years, the total pool of cost remained consistent. There were no costs omitted between 2021 and 2022.

18.2 Please provide a detailed explanation of the "consistent allocation methodology as used in all other allocations across the business".

Corix Response:

For any type of expense that is not able to be directly charged to a utility, the cost is captured in its associated cost centre; whether it be the specific area, regional, or corporate cost centre. Costs in these cost centres are then allocated out based on the same composite allocators used by Corix Infrastructure Inc's Corporate cost model which measures the gross revenue (33%), headcount (33%), and gross property, plant and equipment (33%) of each utility as equal factors. The only differences from the allocations would be the total utilities that are included in the calculation. The area cost centre would be allocating only to the utilities within the Kootenays area; the regional cost centre would be allocating to utilities in Canada; and the corporate cost centre includes all CII utilities and business units in Canada and USA. As the Corporate Cost allocation methodology has been reviewed and approved, Corix has replicated its use for all allocations.

Attachment Comptroller 13.1

Response to Comptroller Information Request #1, Question 13.1

- Financial Schedules with 2022 Actuals

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Customer Count, Consumption and Historical Revenue
Schedule 1

Line No.		Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	Number of Customers (Average per year)							
2	Residential - metered	292	293	294	295	316	333	350
3	Commercial	29	29	29	29	29	29	29
4	Commercial - Irrigation	8	8	8	8	8	8	8
5	**Total metered customers**	**329**	**330**	**331**	**332**	**353**	**370**	**387**
6	Residential Standby Customers	29	28	27	26	57	40	23
7	**Total Customers**	**358**	**358**	**358**	**358**	**410**	**410**	**410**
8								
9	**Average Annual Number of bed units (bu)**							
10	Residential bu	2,068	2,091	2,107	2,117	2,207	2,281	2,355
11	Commercial bu	2,429	2,383	2,383	2,383	2,383	2,383	2,383
12	**Total Annual bu**	**4,497**	**4,474**	**4,490**	**4,500**	**4,590**	**4,664**	**4,738**
13								
14	**Annual Consumption (cu. m)**							
15	Annual Consumption - Residential	30,351	29,904	26,244	26,105	26,943	27,568	28,177
16	Annual Consumption - Commercial	61,707	54,890	58,177	57,595	57,019	56,449	55,884
17	Total Annual Consumption	**92,058**	**84,794**	**84,421**	**83,700**	**83,962**	**84,016**	**84,062**
18								
19	**Sales Revenue**							
20	Residential - Basic Charge (excl. accruals)	$76,675	$165,369	$216,684	$347,779	$383,566	$415,483	$439,693
21	Residential - Usage (excl. accruals)	$57,060	$119,915	$136,732	$217,261	$237,221	$254,391	$266,523
22	Residential Sales Revenue (excl. accruals)	$133,735	$285,285	$353,416	$565,040	$620,787	$669,875	$706,216
23								
24	Commercial - Basic Charge (excl. accruals)	$99,971	$209,323	$271,948	$434,417	$459,580	$481,673	$493,722
25	Commercial - Usage (excl. accruals)	$121,563	$230,538	$317,645	$502,340	$526,123	$545,901	$553,961
26	Commercial Sales Revenue (excl. accruals)	$221,534	$439,861	$589,593	$936,757	$985,703	$1,027,573	$1,047,683
27								
28	Accruals - Residential	($1,101)	($3,657)	($2,249)	$0.00	$0.00	$0.00	$0.00
29	Accruals - Commercial	($3,904)	($28,822)	($1,301)	$0.00	$0.00	$0.00	$0.00
30	Total Accruals *(see note 1)*	($5,005)	($32,480)	($3,549)	$0.00	$0.00	$0.00	$0.00
31								
32	Total Sales Revenue (incl. Accruals)	$350,264	$692,666	$939,460	$1,501,797	$1,606,490	$1,697,448	$1,753,899
33								
34	Other Revenue							
35	Residential - Availability of Service (Rent) Charges	$7,934	$6,474	$8,192	$7,020	$12,510	$9,360	$6,210
36	Residential Connection Fees	$2,065	$1,125	$225	$225	$6,025	$3,825	$3,825
37	Other Income	$436	$0	$753	$100	$100	$100	$100
38	**Total Sales Revenue (incl. Other Revenue)**	$360,699	$700,265	$948,629	$1,509,142	$1,625,125	$1,710,733	$1,764,034
39	Replacement Revenue Trust Fund (RRTF) Contributions	$0	$0	$0	$0	$0	$0	$0
40	**Total Sales Revenue to Corix** *(excludes Rate Rider)*	$360,699	$700,265	$948,629	$1,509,142	$1,625,125	$1,710,733	$1,764,034

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**

Panorama Water Utility

Schedule of Operating and Maintenance Expenses

Schedule 2

Line No.		Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	**Cost of Goods Sold**							
2	Chlorine and Supplies	$8,319	$2,230	$8,558	$9,270	$9,548	$9,739	$9,934
3	Contracting	1,945	3,175	0	0	0	0	0
4	Billing & Customer Care	10,211	12,700	0	0	0	0	0
5	Water testing	5,158	5,742	4,168	4,366	4,497	4,587	4,679
6	Wages - Operators	132,854	89,279	126,884	136,442	142,056	146,416	150,808
7	Utilities	52,961	33,805	46,087	48,042	49,339	50,326	51,332
8	**Total Cost of Goods Sold**	**$211,448**	**$146,931**	**$185,697**	**$198,120**	**$205,440**	**$211,068**	**$216,753**
9								
10	**Selling, General and Administration Expenses**							
11	Advertising	$0	$0	$0	$0	$0	$0	$0
12	Accounting	9,000	0	0	0	0	0	0
13	Vehicles/Travel	16,576	11,135	19,093	22,194	22,860	23,317	23,783
14	Freight	3,089	3,450	4,220	5,078	5,230	5,335	5,442
15	Insurance	30,599	21,183	18,994	22,350	23,021	23,481	23,951
16	Wages - Administration	0	0	0	0	0	0	0
17	Licenses and Permits	1,232	1,438	2,082	2,129	2,193	2,237	2,281
18	Hydrant maintenance	0	0	0	0	0	0	0
19	Repairs and maintenance	11,524	8,867	54,662	21,003	21,633	22,065	22,507
20	Office expenses	3,408	3,479	6,940	4,803	4,947	5,046	5,147
21	Shop supplies	5,879	4,178	7,031	4,619	4,758	4,853	4,950
22	Training	0	0	0	0	0	0	0
23	Bad Debt	0	3,566	1,246	0	0	0	0
24	Corporate and Regional Services	127,258	148,612	227,733	249,034	255,792	261,368	266,596
25	Common Admin Allocation	36,000	53,421	111,218	105,891	109,172	112,073	114,314
26	Regulatory Costs	18,000	7,644	0	7,000	0	0	0
27	**Total selling, general and administration**	**$262,565**	**$266,972**	**$453,219**	**$444,100**	**$449,605**	**$459,775**	**$468,970**
28								
29	**Total Operating and Maintenance Expenses**	**$474,013**	**$413,903**	**$638,916**	**$642,220**	**$655,045**	**$670,843**	**$685,724**

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**
Panorama Water Utility
Corporate Services Cost Allocations
Schedule 3

Line No.	Function	2023 Forecast CAD$	2023 Forecast % Breakdown
1	Executive Management	$11,605	7%
2	Customer Experience	14,058	8%
3	Regulatory Support and Operational Technology	10,435	6%
4	Corporate Finance and FP&A	10,887	6%
5	Accounting and Tax	12,882	7%
6	Human Resources	10,581	6%
7	Corporate Communication	3,102	2%
8	Information Technology	61,130	35%
9	Accounts Payable	3,349	2%
10	Support Services Management	6,390	4%
11	Customer Billing	4,890	3%
12	Procurement	1,643	1%
13	Fleet	5,932	3%
14	Continuous Improvement	2,926	2%
15	Health, Safety & Environment	5,178	3%
16	Legal and Risk Management	11,053	6%
17	Internal Audit	947	1%
18	**Total Allocation (CAD$)**	**$176,988**	**100%**

Notes
(1) All Business Development costs are excluded from cost recovery.
(2) Forecast based on Gross Revenue, Headcount and Gross PPE as at June 30, 2022.

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Schedule 4: Utility Plant in Service
For the Period Ending December 31, 2022 (Actual)

			COST			ACCUMULATED DEPRECIATION			NET BOOK VALUE	
Line No.	Account		Balance as at Dec 31, 2021	Additions	Balance as at Dec 31, 2022	Balance as at Dec 31, 2021	Depreciation Provision	Balance as at Dec 31, 2022	Balance as at Dec 31, 2021	Balance as at Dec 31, 2022
1	**A. Source of Supply**									
2	304.2	Supply-Structures and Improvements	$416,041		$416,041	$14,913	$8,328	$23,241	$401,128	$392,800
3	307	Supply-Wells and Springs	449,000	50,852	499,852	16,201	11,926	28,127	432,799	471,725
4	309	Supply-Mains	113,421	824	114,245	2,668	1,522	4,190	110,753	110,055
5	339.2	Supply-Other Misc Water Source Plant	25,110		25,110	0	1,004	1,004	25,110	24,106
6										
7	**Total Source of Supply**		1,003,571	51,676	1,055,247	33,782	22,780	56,562	969,789	998,686
8										
9	**B. Pumping Plant**									
10	311	Pumping Equipment	107,485		107,485	7,709	4,307	12,016	99,776	95,469
11										
12	**Total Pumping Plant**		107,485	0	107,485	7,709	4,307	12,016	99,776	95,469
13										
14	**C. Water Treatment Plant**									
15	304.3	WTP-Structures and Improvements	1,886,627		1,886,627	67,832	37,760	105,593	1,818,795	1,781,034
16	320	WTP-Treatment Equipment	217,410	3,416	220,826	15,429	8,825	24,254	201,980	196,572
17	339.3	WTP-Other Misc. Treatment Plant	135,773		135,773	9,789	5,438	15,227	125,984	120,546
18										
19	**Total Water Treatment Plant**		2,239,810	3,416	2,243,226	93,051	52,023	145,074	2,146,759	2,098,152
20										
21	**D. Transmission and Distribution Plant**									
22	331	TD-Mains	932,580	450	933,029	22,210	12,445	34,655	910,370	898,374
23	333	TD-Services	239,331	31,563	270,894	4,620	4,893	9,513	234,711	261,380
24	334	Meters and Meter Installations	0	8,215	8,215	0	27	27	0	8,187
25	330	TD-Distribution Reservoirs	2,342,809	0	2,342,809	84,440	46,887	131,326	2,258,369	2,211,483
26	339.4	TD-Other Misc T&D Plant	87,905		87,905	6,446	3,516	9,963	81,459	77,942
27										
28	**Total Water Treatment Plant**		3,602,625	40,227	3,642,852	117,716	67,768	185,485	3,484,909	3,457,367
29										
30	**E. General Plant**									
31	304.5	GP-Structures and Improvements	985,678	869	986,547	35,763	19,732	55,495	949,916	931,052
32	346.1	GP-Comm Equip SCADA	92,264	27,382	119,646	16,163	10,786	26,948	76,101	92,697
33										
34	**Total Water Treatment Plant**		1,077,942	28,251	1,106,193	51,925	30,518	82,443	1,026,017	1,023,750
35										
36										
37	**TOTAL PLANT**		**$8,031,434**	**$123,570**	**$8,155,004**	**$304,184**	**$177,396**	**$481,580**	**$7,727,249**	**$7,673,423**
38										
39										
40	**Contributions in Aid of Construction**									
41	271.1	CIAC	($974,434)		($974,434)	($35,015)	($19,099)	($54,114)	($939,419)	($920,320)
42										
43	**TOTAL CIAC**		**($974,434)**	**$0**	**($974,434)**	**($35,015)**	**($19,099)**	**($54,114)**	**($939,419)**	**($920,320)**
44										
45										
46	**TOTAL NET PLANT**		$7,057,000	$123,570	$7,180,570	$269,169	$158,297	$427,467	$6,787,830	$6,753,103

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Schedule 4: Utility Plant in Service
For the Period Ending December 31, 2023 (Forecast)

			COST			ACCUMULATED DEPRECIATION			NET BOOK VALUE	
Line No.	Account		Balance as at Dec 31, 2022	Additions	Balance as at Dec 31, 2023	Balance as at Dec 31, 2022	Depreciation Provision	Balance as at Dec 31, 2023	Balance as at Dec 31, 2022	Balance as at Dec 31, 2023
1	**A. Source of Supply**									
2	304.2	Supply-Structures and Improvements	$416,041		$416,041	$23,241	$8,321	$31,562	$392,800	$384,479
3	307	Supply-Wells and Springs	499,852		499,852	28,127	12,496	40,623	471,725	459,229
4	309	Supply-Mains	114,245		114,245	4,190	1,523	5,713	110,055	108,532
5	339.2	Supply-Other Misc Water Source Plant	25,110		25,110	1,004	1,004	2,009	24,106	23,101
6										
7	**Total Source of Supply**		1,055,247	0	1,055,247	56,562	23,345	79,907	998,686	975,341
8										
9	**B. Pumping Plant**									
10	311	Pumping Equipment	107,485		107,485	12,016	4,299	16,316	95,469	91,169
11										
12	**Total Pumping Plant**		107,485	0	107,485	12,016	4,299	16,316	95,469	91,169
13										
14	**C. Water Treatment Plant**									
15	304.3	WTP-Structures and Improvements	1,886,627		1,886,627	105,593	37,733	143,325	1,781,034	1,743,302
16	320	WTP-Treatment Equipment	220,826		220,826	24,254	8,833	33,087	196,572	187,739
17	339.3	WTP-Other Misc. Treatment Plant	135,773		135,773	15,227	5,431	20,658	120,546	115,115
18										
19	**Total Water Treatment Plant**		2,243,226	0	2,243,226	145,074	51,997	197,071	2,098,152	2,046,156
20										
21	**D. Transmission and Distribution Plant**									
22	331	TD-Mains	933,029		933,029	34,655	12,440	47,095	898,374	885,934
23	333	TD-Services	270,894	30,000	300,894	9,513	5,718	15,231	261,380	285,662
24	334	Meters and Meter Installations	8,215	21,900	30,115	27	767	794	8,187	29,321
25	330	TD-Distribution Reservoirs	2,342,809		2,342,809	131,326	46,856	178,183	2,211,483	2,164,626
26	339.4	TD-Other Misc T&D Plant	87,905	28,000	115,905	9,963	4,076	14,039	77,942	101,866
27										
28	**Total Water Treatment Plant**		3,642,852	79,900	3,722,752	185,485	69,857	255,342	3,457,367	3,467,410
29										
30	**E. General Plant**									
31	304.5	GP-Structures and Improvements	986,547		986,547	55,495	19,731	75,226	931,052	911,321
32	346.1	GP-Comm Equip SCADA	119,646		119,646	26,948	11,965	38,913	92,697	80,733
33										
34	**Total Water Treatment Plant**		1,106,193	0	1,106,193	82,443	31,696	114,139	1,023,750	992,054
35										
36										
37	**TOTAL PLANT**		**$8,155,004**	**$79,900**	**$8,234,904**	**$481,580**	**$181,193**	**$662,774**	**$7,673,423**	**$7,572,130**
38										
39										
40	**Contributions in Aid of Construction**									
41	271.1	CIAC	($974,434)		($974,434)	($54,114)	($19,099)	($73,212)	($920,320)	($901,222)
42										
43	**TOTAL CIAC**		**($974,434)**	**$0**	**($974,434)**	**($54,114)**	**($19,099)**	**($73,212)**	**($920,320)**	**($901,222)**
44										
45										
46	**TOTAL NET PLANT**		$7,180,570	$79,900	$7,260,470	$427,467	$162,095	$589,561	$6,753,103	$6,670,908

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Schedule 4: Utility Plant in Service
For the Period Ending December 31, 2024 (Forecast)

			COST			ACCUMULATED DEPRECIATION			NET BOOK VALUE	
Line No.	Account		Balance as at Dec 31, 2023	Additions	Balance as at Dec 31, 2024	Balance as at Dec 31, 2023	Depreciation Provision	Balance as at Dec 31, 2024	Balance as at Dec 31, 2023	Balance as at Dec 31, 2024
1	**A. Source of Supply**									
2	304.2	Supply-Structures and Improvements	$416,041		$416,041	$31,562	$8,321	$39,883	$384,479	$376,158
3	307	Supply-Wells and Springs	499,852		499,852	40,623	12,496	53,119	459,229	446,732
4	309	Supply-Mains	114,245		114,245	5,713	1,523	7,236	108,532	107,008
5	339.2	Supply-Other Misc Water Source Plant	25,110		25,110	2,009	1,004	3,013	23,101	22,097
6										
7	**Total Source of Supply**		1,055,247	0	1,055,247	79,907	23,345	103,251	975,341	951,996
8										
9	**B. Pumping Plant**									
10	311	Pumping Equipment	107,485		107,485	16,316	4,299	20,615	91,169	86,870
11										
12	**Total Pumping Plant**		107,485	0	107,485	16,316	4,299	20,615	91,169	86,870
13										
14	**C. Water Treatment Plant**									
15	304.3	WTP-Structures and Improvements	1,886,627		1,886,627	143,325	37,733	181,058	1,743,302	1,705,569
16	320	WTP-Treatment Equipment	220,826	0	220,826	33,087	8,833	41,920	187,739	178,906
17	339.3	WTP-Other Misc. Treatment Plant	135,773		135,773	20,658	5,431	26,089	115,115	109,684
18										
19	**Total Water Treatment Plant**		2,243,226	0	2,243,226	197,071	51,997	249,067	2,046,156	1,994,159
20										
21	**D. Transmission and Distribution Plant**									
22	331	TD-Mains	933,029		933,029	47,095	12,440	59,536	885,934	873,494
23	333	TD-Services	300,894	30,000	330,894	15,231	6,318	21,549	285,662	309,344
24	334	Meters and Meter Installations	30,115	9,957	40,072	794	1,404	2,198	29,321	37,874
25	330	TD-Distribution Reservoirs	2,342,809		2,342,809	178,183	46,856	225,039	2,164,626	2,117,770
26	339.4	TD-Other Misc T&D Plant	115,905		115,905	14,039	4,636	18,675	101,866	97,230
27										
28	**Total Water Treatment Plant**		3,722,752	39,957	3,762,709	255,342	71,654	326,996	3,467,410	3,435,712
29										
30	**E. General Plant**									
31	304.5	GP-Structures and Improvements	986,547		986,547	75,226	19,731	94,957	911,321	891,591
32	346.1	GP-Comm Equip SCADA	119,646		119,646	38,913	11,965	50,877	80,733	68,768
33										
34	**Total Water Treatment Plant**		1,106,193	0	1,106,193	114,139	31,696	145,834	992,054	960,359
35										
36										
37	**TOTAL PLANT**		**$8,234,904**	**$39,957**	**$8,274,861**	**$662,774**	**$182,991**	**$845,764**	**$7,572,130**	**$7,429,096**
38										
39										
40	**Contributions in Aid of Construction**									
41	271.1	CIAC	($974,434)		($974,434)	($73,212)	($19,099)	($92,311)	($901,222)	($882,123)
42										
43	**TOTAL CIAC**		**($974,434)**	**$0**	**($974,434)**	**($73,212)**	**($19,099)**	**($92,311)**	**($901,222)**	**($882,123)**
44										
45										
46	**TOTAL NET PLANT**		$7,260,470	$39,957	$7,300,427	$589,561	$163,892	$753,453	$6,670,908	$6,546,974

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Schedule 4: Utility Plant in Service
For the Period Ending December 31, 2025 (Forecast)

			COST			ACCUMULATED DEPRECIATION			NET BOOK VALUE	
Line No.	Account		Balance as at Dec 31, 2024	Additions	Balance as at Dec 31, 2025	Balance as at Dec 31, 2024	Depreciation Provision	Balance as at Dec 31, 2025	Balance as at Dec 31, 2024	Balance as at Dec 31, 2025
1	**A. Source of Supply**									
2	304.2	Supply-Structures and Improvements	$416,041		$416,041	$39,883	$8,321	$48,203	$376,158	$367,838
3	307	Supply-Wells and Springs	499,852		499,852	53,119	12,496	65,616	446,732	434,236
4	309	Supply-Mains	114,245		114,245	7,236	1,523	8,760	107,008	105,485
5	339.2	Supply-Other Misc Water Source Plant	25,110		25,110	3,013	1,004	4,018	22,097	21,092
6										
7	**Total Source of Supply**		1,055,247	0	1,055,247	103,251	23,345	126,596	951,996	928,651
8										
9	**B. Pumping Plant**									
10	311	Pumping Equipment	107,485		107,485	20,615	4,299	24,914	86,870	82,571
11										
12	**Total Pumping Plant**		107,485	0	107,485	20,615	4,299	24,914	86,870	82,571
13										
14	**C. Water Treatment Plant**									
15	304.3	WTP-Structures and Improvements	1,886,627		1,886,627	181,058	37,733	218,790	1,705,569	1,667,837
16	320	WTP-Treatment Equipment	220,826	0	220,826	41,920	8,833	50,753	178,906	170,073
17	339.3	WTP-Other Misc. Treatment Plant	135,773		135,773	26,089	5,431	31,520	109,684	104,253
18										
19	**Total Water Treatment Plant**		2,243,226	0	2,243,226	249,067	51,997	301,064	1,994,159	1,942,163
20										
21	**D. Transmission and Distribution Plant**									
22	331	TD-Mains	933,029		933,029	59,536	12,440	71,976	873,494	861,053
23	333	TD-Services	330,894	30,000	360,894	21,549	6,918	28,467	309,344	332,427
24	334	Meters and Meter Installations	40,072	8,414	48,486	2,198	1,771	3,969	37,874	44,517
25	330	TD-Distribution Reservoirs	2,342,809		2,342,809	225,039	46,856	271,895	2,117,770	2,070,914
26	339.4	TD-Other Misc T&D Plant	115,905		115,905	18,675	4,636	23,311	97,230	92,594
27										
28	**Total Water Treatment Plant**		3,762,709	38,414	3,801,123	326,996	72,622	399,618	3,435,712	3,401,504
29										
30	**E. General Plant**									
31	304.5	GP-Structures and Improvements	986,547		986,547	94,957	19,731	114,688	891,591	871,860
32	346.1	GP-Comm Equip SCADA	119,646		119,646	50,877	11,965	62,842	68,768	56,804
33										
34	**Total Water Treatment Plant**		1,106,193	0	1,106,193	145,834	31,696	177,530	960,359	928,663
35										
36										
37	**TOTAL PLANT**		**$8,274,861**	**$38,414**	**$8,313,275**	**$845,764**	**$183,958**	**$1,029,722**	**$7,429,096**	**$7,283,552**
38										
39										
40	**Contributions in Aid of Construction**									
41	271.1	CIAC	($974,434)		($974,434)	($92,311)	($19,099)	($111,410)	($882,123)	($863,024)
42										
43	**TOTAL CIAC**		**($974,434)**	**$0**	**($974,434)**	**($92,311)**	**($19,099)**	**($111,410)**	**($882,123)**	**($863,024)**
44										
45										
46	**TOTAL NET PLANT**		$7,300,427	$38,414	$7,338,841	$753,453	$164,859	$918,312	$6,546,974	$6,420,528

Corix Multi-Utility Services Inc. — **WC IR#1, Q. 13.1 - Update for 2022 Actuals**

Panorama Water Utility

Schedule 4: Utility Plant in Service

For the Period Ending December 31, 2026 (Forecast)

			COST			ACCUMULATED DEPRECIATION			NET BOOK VALUE	
Line No.	Account		Balance as at Dec 31, 2025	Additions	Balance as at Dec 31, 2026	Balance as at Dec 31, 2025	Depreciation Provision	Balance as at Dec 31, 2026	Balance as at Dec 31, 2025	Balance as at Dec 31, 2026
1	**A. Source of Supply**									
2	304.2	Supply-Structures and Improvements	$416,041		$416,041	$48,203	$8,321	$56,524	$367,838	$359,517
3	307	Supply-Wells and Springs	499,852		499,852	65,616	12,496	78,112	434,236	421,740
4	309	Supply-Mains	114,245		114,245	8,760	1,523	10,283	105,485	103,962
5	339.2	Supply-Other Misc Water Source Plant	25,110		25,110	4,018	1,004	5,022	21,092	20,088
6										
7	**Total Source of Supply**		1,055,247	0	1,055,247	126,596	23,345	149,941	928,651	905,306
8										
9	**B. Pumping Plant**									
10	311	Pumping Equipment	107,485		107,485	24,914	4,299	29,214	82,571	78,271
11										
12	**Total Pumping Plant**		107,485	0	107,485	24,914	4,299	29,214	82,571	78,271
13										
14	**C. Water Treatment Plant**									
15	304.3	WTP-Structures and Improvements	1,886,627		1,886,627	218,790	37,733	256,523	1,667,837	1,630,104
16	320	WTP-Treatment Equipment	220,826		220,826	50,753	8,833	59,586	170,073	161,240
17	339.3	WTP-Other Misc. Treatment Plant	135,773		135,773	31,520	5,431	36,951	104,253	98,822
18										
19	**Total Water Treatment Plant**		2,243,226	0	2,243,226	301,064	51,997	353,060	1,942,163	1,890,166
20										
21	**D. Transmission and Distribution Plant**									
22	331	TD-Mains	933,029		933,029	71,976	12,440	84,417	861,053	848,613
23	333	TD-Services	360,894	15,000	375,894	28,467	7,368	35,835	332,427	340,059
24	334	Meters and Meter Installations	48,486	8,475	56,961	3,969	2,109	6,078	44,517	50,883
25	330	TD-Distribution Reservoirs	2,342,809		2,342,809	271,895	46,856	318,751	2,070,914	2,024,058
26	339.4	TD-Other Misc T&D Plant	115,905		115,905	23,311	4,636	27,947	92,594	87,958
27										
28	**Total Water Treatment Plant**		3,801,123	23,475	3,824,598	399,618	73,410	473,028	3,401,504	3,351,570
29										
30	**E. General Plant**									
31	304.5	GP-Structures and Improvements	986,547		986,547	114,688	19,731	134,418	871,860	852,129
32	346.1	GP-Comm Equip SCADA	119,646		119,646	62,842	11,965	74,807	56,804	44,839
33										
34	**Total Water Treatment Plant**		1,106,193	0	1,106,193	177,530	31,696	209,225	928,663	896,968
35										
36										
37	**TOTAL PLANT**		**$8,313,275**	**$23,475**	**$8,336,750**	**$1,029,722**	**$184,746**	**$1,214,468**	**$7,283,552**	**$7,122,281**
38										
39										
40	**Contributions in Aid of Construction**									
41	271.1	CIAC	($974,434)		($974,434)	($111,410)	($19,099)	($130,509)	($863,024)	($843,925)
42										
43	**TOTAL CIAC**		**($974,434)**	**$0**	**($974,434)**	**($111,410)**	**($19,099)**	**($130,509)**	**($863,024)**	**($843,925)**
44										
45										
46	**TOTAL NET PLANT**		$7,338,841	$23,475	$7,362,316	$918,312	$165,647	$1,083,959	$6,420,528	$6,278,357

Corix Multi-Utility Services Inc.
Panorama Water Utility
Capital Cost Allowance (CCA)
Schedule 5

WC IR#1, Q. 13.1 - Update for 2022 Actuals

Line No.	Capital Cost Allowance		Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1									
2	**UCC Pools**								
3	Additions								
4	Class 1	4%	$6,879,479	$95,459	$96,188	$79,900	$39,957	$38,414	$23,475
5	Class 8	20%	0	0	0	0	0	0	0
6	Class 10.1	30%	0	0	0	0	0	0	0
7	Class 14	5%	0	0	0	0	0	0	0
8	Class 14.1	5%	0	0	0	0	0	0	0
9	Class 50	55%	82,061	0	27,382	0	0	0	0
10	Subtotal		$6,961,540	$95,459	$123,570	$79,900	$39,957	$38,414	$23,475
11									
12	**CCA Deductions**								
13	Class 1	4%	$137,590	$271,585	$264,554	$257,494	$249,591	$241,175	$232,766
14	Class 8	20%	$0	0	0	0	0	0	0
15	Class 10.1	30%	$0	0	0	0	0	0	0
16	Class 14	5%	$0	0	0	0	0	0	0
17	Class 14.1	5%	$0	0	0	0	0	0	0
18	Class 50	55%	$22,567	32,722	22,255	17,545	7,895	3,553	1,599
19	Subtotal		$160,156	$304,307	$286,809	$275,039	$257,486	$244,728	$234,365
20									
21	**UCC Balance**								
22	Class 1	4%	$6,741,889	$6,565,764	$6,397,398	$6,219,804	$6,010,170	$5,807,409	$5,598,118
23	Class 8	20%	$0	$0	$0	$0	$0	$0	$0
24	Class 10.1	30%	$0	$0	$0	$0	$0	$0	$0
25	Class 14	5%	$0	$0	$0	$0	$0	$0	$0
26	Class 14.1	5%	$0	$0	$0	$0	$0	$0	$0
27	Class 50	55%	$59,494	$26,772	$31,899	$14,355	$6,460	$2,907	$1,308
28	Subtotal		$6,801,384	$6,592,536	$6,429,297	$6,234,159	$6,016,629	$5,810,315	$5,599,426

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**
Panorama Water Utility
Revenue Requirements and Revenue Deficiency Deferral Account
Schedule 6

Line No.	Revenue Requirement	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	Operating and Maintenance Expenses	$474,013	$413,903	$638,916	$642,220	$655,045	$670,843	$685,724
2	Depreciation Expense	132,131	172,053	177,396	181,193	182,991	183,958	184,746
3	Amortization of CIAC	(15,916)	(19,099)	(19,099)	(19,099)	(19,099)	(19,099)	(19,099)
4	Amortization of Deferred Decommissioning Costs	1,305	3,131	3,230	3,328	3,328	3,328	3,328
5	Interest on Debt	109,782	139,342	240,009	234,153	225,473	215,126	204,747
6	Return on Equity	239,397	310,610	324,717	330,152	317,914	303,325	288,690
7	Income Tax Expense (Recovery)	0	0	0	0	0	143,162	172,584
8	**Revenue Requirement**	**$940,712**	**$1,019,940**	**$1,365,169**	**$1,371,947**	**$1,365,651**	**$1,500,643**	**$1,520,719**
9	Revenue	$360,699	$700,265	$948,629	$1,509,142	$1,625,125	$1,710,733	$1,764,034
10	Surplus (Shortfall)	($580,013)	($319,675)	($416,541)	$137,195	$259,474	$210,090	$243,315
11								
12								

Line No.	Revenue Deficiency Deferral Account	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
13								
14								
15	Revenue Deficiency Deferral Account							
16	Opening Balance	$0	$580,013	$899,688	$1,370,050	$1,232,856	$973,382	$763,292
17	Revenue Required	940,712	1,019,940	1,365,169	1,371,947	1,365,651	1,500,643	1,520,719
18	Revenue Received	360,699	700,265	948,629	1,509,142	1,625,125	1,710,733	1,764,034
19	Revenue deficiency (surplus)	$580,013	$319,675	$416,541	($137,195)	($259,474)	($210,090)	($243,315)
20								
21	Ending Balance	$580,013	$899,688	$1,316,229	$1,232,856	$973,382	$763,292	$519,977

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**
Panorama Water Utility
Rate Base
Schedule 7

Line No.	Rate Base	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	Plant in Service							
2	Balance at beginning of year	$7,561,749	7,935,974	$8,031,434	$8,155,004	$8,234,904	$8,274,861	$8,313,275
3	Balance at end of year	7,935,974	8,031,434	8,155,004	8,234,904	8,274,861	8,313,275	8,336,750
4	Mid-Year Plant in Service	6,457,385	7,983,704	8,093,219	8,194,954	8,254,882	8,294,068	8,325,012
5								
6	Accumulated Depreciation							
7	Balance at beginning of year	0	(132,131)	(304,184)	(481,580)	(662,774)	(845,764)	(1,029,722)
8	Balance at end of year	(132,131)	(304,184)	(481,580)	(662,774)	(845,764)	(1,029,722)	(1,214,468)
9	Mid-Year Accumulated Depreciation	(55,055)	(218,158)	(392,882)	(572,177)	(754,269)	(937,743)	(1,122,095)
10	Mid-Year Plant in Service , net of Acc. Depr.	$6,402,330	$7,765,546	$7,700,336	$7,622,776	$7,500,613	$7,356,324	$7,202,917
11								
12	Contributions in aid of construction (CIAC)							
13	Balance at beginning of year	($974,434)	($974,434)	($974,434)	($974,434)	($974,434)	($974,434)	($974,434)
14	Balance at end of year	(974,434)	(974,434)	(974,434)	(974,434)	(974,434)	(974,434)	(974,434)
15	Mid-Year CIAC	(812,028)	(974,434)	(974,434)	(974,434)	(974,434)	(974,434)	(974,434)
16								
17	Accumulated Amortization							
18	Balance at beginning of year	0	15,916	35,015	54,114	73,212	92,311	111,410
19	Balance at end of year	15,916	35,015	54,114	73,212	92,311	111,410	130,509
20	Mid-Year Accumulated Amortization	6,632	25,465	44,564	63,663	82,762	101,861	120,960
21	Mid-Year CIAC, net of Acc. Amor.	($796,113)	($939,419)	($920,320)	($901,222)	($882,123)	($863,024)	($843,925)
22								
23	Mid-Year Net Plant in Service	5,606,217	$6,826,127	$6,780,016	$6,721,555	$6,618,490	$6,493,300	$6,358,992
24	Mid-Year Deferral Accounts	273,748	815,268	1,182,648	1,375,316	1,173,654	935,545	705,514
25	Working Capital	49,376	51,738	79,865	80,277	81,881	83,855	85,715
26	**Mid-Year Rate Base**	**$5,929,342**	**$7,693,132**	**$8,042,528**	**$8,177,149**	**$7,874,025**	**$7,512,700**	**$7,150,222**

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**
Panorama Water Utility
Capital Structure and Cost of Capital
Schedule 8

Line No.	Rate Base Financing	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	**Capital Structure**							
2	Debt	57.5%	57.5%	57.5%	57.5%	57.5%	57.5%	57.5%
3	Equity	42.5%	42.5%	42.5%	42.5%	42.5%	42.5%	42.5%
4	Total Capital Structure	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
5								
6	**Cost of Capital**							
7	Deemed Interest Rate	3.22%	3.15%	5.19%	4.98%	4.98%	4.98%	4.98%
8	Return on Equity	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%	9.50%
9								
10								
11	**Rate Base Financing**							
12	Debt	$3,409,372	$4,423,551	$4,624,454	$4,701,860	$4,527,565	$4,319,803	$4,111,378
13	Equity	2,519,970	3,269,581	3,418,075	3,475,288	3,346,461	3,192,898	3,038,844
14	Rate Base Financing	$5,929,342	$7,693,132	$8,042,528	$8,177,149	$7,874,025	$7,512,700	$7,150,222
15								
16	**Cost of Capital**							
17	Interest on Debt	$109,782	$139,342	$240,009	$234,153	$225,473	$215,126	$204,747
18	Return on Equity	239,397	310,610	324,717	330,152	317,914	303,325	288,690
19	Return on Rate Base	$349,179	$449,952	$564,726	$564,305	$543,386	$518,451	$493,437

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Income Tax
Schedule 9

Line No.	Income Tax	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1								
2	Revenue	$360,699	$700,265	$948,629	$1,509,142	$1,625,125	$1,710,733	$1,764,034
3	Rate Rider 1 Revenue (CDA)	106,917	96,867	125,666	0	0	0	0
4	Operating and Maintenance Expenses	(474,013)	(413,903)	(638,916)	(642,220)	(655,045)	(670,843)	(685,724)
5	Decommissioning Expense	(78,287)	0	(4,906)	0	0	0	0
6	Interest on Debt	(109,782)	(139,342)	(240,009)	(234,153)	(225,473)	(215,126)	(204,747)
7	CCA	(160,156)	(304,307)	(286,809)	(275,039)	(257,486)	(244,728)	(234,365)
8	Taxable income before LCF	($354,623)	($60,419)	($96,345)	$357,731	$487,121	$580,036	$639,199
9	Tax Loss Carryforward (Utilized)	354,623	60,419	96,345	(357,731)	(487,121)	(49,807)	0
10	Taxable Income	$0	$0	$0	$0	$0	$530,228	$639,199
11	Tax Rate	27%	27%	27%	27%	27%	27%	27%
12	**Current Income Tax**	**$0**	**$0**	**$0**	**$0**	**$0**	**$143,162**	**$172,584**
13								
14	Tax Loss Carryforward (LCF)							
15	Opening Balance	$383,272	$737,895	$798,314	$894,659	$536,928	$49,807	$0
16	Additions	354,623	60,419	96,345	0	0	0	0
17	Losses Utilized	0	0	0	(357,731)	(487,121)	(49,807)	0
18	Closing Balance	$737,895	$798,314	$894,659	$536,928	$49,807	$0	$0
19								
20								
21	Notes							
22	(1) The $383,272 is the actual Consumption Deferral Account balance as of December 31, 2019.							
23	(2) Decommissioning expenses are not eligible for CCA and treated as a current period expense.							

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**
Panorama Water Utility
Continuity of Deferred Charges
Schedule 10

Line No.	Deferral Accounts	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1								
2	**Total Mid-Year Deferred Charges in Rate Base**	**$273,748**	**$815,268**	**$1,182,648**	**$1,375,316**	**$1,173,654**	**$935,545**	**$705,514**
3								
4								
5	**Revenue Deficiency Deferral Account**							
6	Opening Balance	$0	$580,013	$899,688	$1,316,229	$1,232,856	$973,382	$763,292
7	Transfer of Consumption Deferral Account				$53,821			
8	Adjusted Opening Balance				$1,370,050			
9	Revenue deficiency (surplus)	580,013	319,675	416,541	(137,195)	(259,474)	(210,090)	(243,315)
10	**Closing Balance - RDDA**	$580,013	$899,688	$1,316,229	$1,232,856	$973,382	$763,292	$519,977
11	**Mid-Year Rate Base Balance**	**$241,672**	**$739,851**	**$1,107,959**	**$1,301,453**	**$1,103,119**	**$868,337**	**$641,634**
12								
13								
14	**Decommissioning Costs Deferral Account**							
15	Gross							
16	Opening Balance	$0	$78,287	$78,287	$83,193	$83,193	$83,193	$83,193
17	Additions	78,287	0	4,906	0	0	0	0
18	Closing Balance	$78,287	$78,287	$83,193	$83,193	$83,193	$83,193	$83,193
19								
20	Accumulated Amortization							
21	Opening Balance	$0	($1,305)	($4,436)	($7,666)	($10,994)	($14,321)	($17,649)
22	Amortization	(1,305)	(3,131)	(3,230)	(3,328)	(3,328)	(3,328)	(3,328)
23	Closing Balance	($1,305)	($4,436)	($7,666)	($10,994)	($14,321)	($17,649)	($20,977)
24								
25	**Net Closing Balance - Decommissioning**	$76,983	$73,851	$75,527	$72,199	$68,872	$65,544	$62,216
26	**Mid Year Rate Base Balance**	**$32,076**	**$75,417**	**$74,689**	**$73,863**	**$70,536**	**$67,208**	**$63,880**
27								
28								
29								
30	**Non-Rate Base Deferral Account:**							

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**
Panorama Water Utility
Continuity of Deferred Charges
Schedule 10

Line No.	Deferral Accounts	Actual 2020	Actual 2021	Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
31	Consumption (CDA)							
32	Beginning Balance	$383,272	$276,355	$179,488	$0	$0	$0	$0
33	Additions/Deductions	$0	$0					
34	Amortization	($106,917)	($96,867)	($125,666)	$0			
35	Transfer of Closing Balance to RDDA			($53,821)				
36	**Ending Balance**	**$276,355**	**$179,488**	**$0**	**$0**	**$0**	**$0**	**$0**
37								
38	Note:							
39	2020 Mid-year balance adjusted for rate base commencing on March 1, 2020							

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Customer Rates
Schedule 11

Line No.		Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	Total Revenue Requirement excluding CDA		$1,371,947	$1,365,651	$1,500,643	$1,520,719
2						
3	Percentage Recovery of Revenue Requirement		110%	119%	114%	116%
4	**Total Revenue Requirement to be recovered**		**$1,509,142**	**$1,625,125**	**$1,710,733**	**$1,764,034**
5	Total Revenue Requirement to be recovered (net of Rent Charge)		$1,501,797	$1,606,490	$1,697,448	$1,753,899
6						
7	Bed Units					
8	Number of bed units - Residential (bu)	2,107	2,117	2,207	2,281	2,355
9	Number of bed units - Commercial (bu)	2,383	2,383	2,383	2,383	2,383
10	Total Annual bu	4,490	4,500	4,590	4,664	4,738
11						
12	Annual Usage (cu. meter)					
13	Annual Usage - Residential	26,244	26,105	26,943	27,568	28,177
14	Annual Usage - Commercial	58,177	57,595	57,019	56,449	55,884
15	Total Annual Usage	84,421	83,700	83,962	84,016	84,062
16						
17	Proposed Revenues					
18	Availability of Service (Rent) Charge Revenue	$8,192	$7,020	$12,510	$9,360	$6,210
19						
20	Residential Sales Revenue					
21	Fixed Charges	$216,684	$347,779	$383,566	$415,483	$439,693
22	Variable Charges	$136,732	$217,261	$237,221	$254,391	$266,523
23	Total Residential Sales Revenue	$353,416	$565,040	$620,787	$669,875	$706,216
24						
25	Commercial Sales Revenue					
26	Fixed Charges	$271,948	$434,417	$459,580	$481,673	$493,722
27	Variable Charges	$317,645	$502,340	$526,123	$545,901	$553,961
28	Total Commercial Sales Revenue	$589,593	$936,757	$985,703	$1,027,573	$1,047,683

Line No.		Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
29	Other Revenue	$978	$325	$6,125	$3,925	$3,925
30	**Total Proposed Revenue excluding CDA**	**$952,178**	**$1,509,142**	**$1,625,125**	**$1,710,733**	**$1,764,034**
31						
32	Consumption Deferral Account Rider 1	$125,666	$0	$0	$0	$0
33	Total Proposed Revenue including CDA	$1,077,844	$1,509,142	$1,625,125	$1,710,733	$1,764,034
34						
48	Total Revenue at Prior Year Rates excluding Rent Charge		**$940,136**	**$1,518,530**	**$1,619,592**	**$1,711,094**
49	Target Revenue excluding Rent Charge		**$1,501,797**	**$1,606,490**	**$1,697,448**	**$1,753,899**
50	**Revenue Surplus/(Deficiency)**		**($561,661)**	**($87,960)**	**($77,856)**	**($42,805)**
51	**Rate Change Required Increase/(Decrease)**		**59.7%**	**5.8%**	**4.8%**	**2.5%**

Line No.		Actual 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
52						
53	**Tariff Rates**					
54						
55	**Proposed Customer Rates**					
56	Residential Basic service charge per bed unit (bu) per month	$8.57	$13.69	$14.48	$15.18	$15.56
57	Residential Metered Usage Rate (per cu. meter)	$5.21	$8.32	$8.80	$9.23	$9.46
58	Commercial Basic service charge per bu per month	$9.51	$15.19	$16.07	$16.84	$17.27
59	Commercial Metered Usage Rate (per cu. meter)	$5.46	$8.72	$9.23	$9.67	$9.91
60	Availability of Service (Rent) Charge (per bu per annum)	$45.00	$45.00	$45.00	$45.00	$45.00
61	Consumption Deferral Account (CDA) Rate Rider	$1.46	$0.00	$0.00	$0.00	$0.00
62						
63	**Customer Rates at Prior Year/Existing Rates**					
64	Residential Basic service charge per bed unit (bu) per month	$6.59	$8.57	$13.69	$14.48	$15.18
65	Residential Metered Usage Rate (per cu. meter)	$4.01	$5.21	$8.32	$8.80	$9.23
66	Commercial Basic service charge per bu per month	$7.32	$9.51	$15.19	$16.07	$16.84
67	Commercial Metered Usage Rate (per cu. meter)	$4.20	$5.46	$8.72	$9.23	$9.67
68	Availability of Service (Rent) Charge (per bu per annum)	$45.00	$45.00	$45.00	$45.00	$45.00
69	Consumption Deferral Account (CDA) Rate Rider	$1.46	$0.00	$0.00	$0.00	$0.00
70						
71	Annual Rate Increase					
72	Residential Basic service charge per bed unit (bu) per month	30%	60%	6%	5%	3%
73	Residential Metered Usage Rate (per cu. meter)	30%	60%	6%	5%	3%
74	Commercial Basic service charge per bu per month	30%	60%	6%	5%	3%
75	Commercial Metered Usage Rate (per cu. meter)	30%	60%	6%	5%	3%
76	Availability of Service (Rent) Charge (per bu per annum)	0%	0%	0%	0%	0%
77	Consumption Deferral Account (CDA) Rate Rider	21%	-100%			

Corix Multi-Utility Services Inc. **WC IR#1, Q. 13.1 - Update for 2022 Actuals**
Panorama Water Utility
Consumption Deferral Account and Rate Rider
Schedule 12

Line No.	CDA Rate Rider and Deferral Account	Actual 2020	Actual 2021	Projected 2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	CDA Rate Rider (Rider 1) ($/cu. M)							
2	Rider 1 - Approved by Order No. 2584	**$1.21**	**$1.21**	**$1.46**	$0.00			
3								
4	**Consumption Deferral Account**							
5	Beginning Balance	$383,272	$276,355	$179,488	$0	$0	$0	$0
6	Additions/Deductions*	0	0	(53,821)	0	0	0	0
7	Amortization	(106,917)	(96,867)	(125,666)	0	0	0	0
8	Ending Balance	$276,355	$179,488	$0	$0	$0	$0	$0
9								
10	* Note: The Consumption Deferral Account is discontinued after December 31, 2022.							
11	Any remaining balance in the CDA at the end of 2022 is transferred to the RDDA as per Order No. 2584.							

Corix Multi-Utility Services Inc. WC IR#1, Q. 13.1 - Update for 2022 Actuals
Panorama Water Utility
Estimated Bill Impact - Residential and Commercial
Schedule 13

Line No.	Typical Residential Customer	2022	Forecast 2023	Forecast 2024	Forecast 2025	Forecast 2026
1	Average No. of Bed Units per month	7.0	7.0	7.0	7.0	7.0
2	Average Consumption per year (cu. m)	83.7	83.7	83.7	83.7	83.7
3	Basic Service Charge ($ per bu per month)	$8.57	$13.69	$14.48	$15.18	$15.56
4	Metered Usage Charge ($ per cu. m)	$5.21	$8.32	$8.80	$9.23	$9.46
5	CDA Rate Rider ($ per cu. m)	$1.46	$0.00	$0.00	$0.00	$0.00
6						
7	Annual Bill					
8	Fixed Charge	$720	$1,150	$1,217	$1,275	$1,307
9	Variable Charge	436	697	737	772	792
10	CDA Rate Rider	122	0	0	0	0
11	**Typical Annual Bill (Incl. Rate Rider)**	**$1,278**	**$1,847**	**$1,954**	**$2,047**	**$2,099**
12	**Typical Monthly Bill (Incl. Rate Rider)**	**$107**	**$154**	**$163**	**$171**	**$175**
13						
14	**Annual bill increase *(incl. rate rider)* ($)**		**$568**	**$107**	**$94**	**$51**
15	**Annual bill increase *(incl. rate rider)* (%)**		**44%**	**6%**	**5%**	**3%**
16						
17						
18			Forecast	Forecast	Forecast	Forecast
19	**Typical Commercial Customer**	**2022**	**2023**	**2024**	**2025**	**2026**
20	Average No. of Bed Units per month	65.9	65.9	65.9	65.9	65.9
21	Average Consumption per year (cu. m)	1,915.1	1,915.1	1,915.1	1,915.1	1,915.1
22	Basic Service Charge ($ per bu per month)	$9.51	$15.19	$16.07	$16.84	$17.27
23	Metered Usage Charge ($ per cu. m)	$5.46	$8.72	$9.23	$9.67	$9.91
24	CDA Rate Rider ($ per cu. m)	$1.46	$0.00	$0.00	$0.00	$0.00
25						
26	Annual Bill					
27	Fixed Charge	$7,521	$12,013	$12,709	$13,320	$13,653
28	Variable Charge	10,456	16,703	17,671	18,520	18,984
29	CDA Rate Rider	2,796	0	0	0	0
30	**Typical Annual Bill (Incl. Rate Rider)**	**$20,773**	**$28,717**	**$30,380**	**$31,841**	**$32,637**
31	**Typical Monthly Bill (Incl. Rate Rider)**	**$1,731**	**$2,393**	**$2,532**	**$2,653**	**$2,720**
32						
33	**Annual bill increase *(incl. rate rider)* ($)**		**$7,944**	**$1,663**	**$1,460**	**$797**
34	**Annual bill increase *(incl. rate rider)* (%)**		**38%**	**6%**	**5%**	**3%**
35						