Information Request

Re: Corix Panorama Water Rate Application for 2020 Rates

Requestor Name: Grant C. Gillies
on behalf of Trappers Way Residential Group

September 26, 2020

REQUESTOR NAME:	Trappers Way Residential Group
INFORMATION REQUEST NO:	1
TO:	Corix Multi-Utility Services Inc. (CMUS), Panorama Water
DATE:	September 25, 2020
REFERENCE NO:	7677
APPLICATION NAME:	2020-2022 Water Revenue Requirements Application

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1.0 Reference: Evidentiary Update, pg. 13, section 3, Tables 1 and 1A

Explanation: Annual Operating and Maintenance (O&M) expenses are decreasing by 18% from 2018 to 2020, yet rates are substantially increasing due to the cost recovery methodology for the Groundwater Source Development Program (GSDP) and not due to increasing O&M costs. There is a wide range in variability in O&M expenses seemingly driven by changes in Allocations from Panorama and Kootenay Ops, Corporate and Regional Services, Utilities and Regulatory Costs.

Request:

1.1 Please provide a detailed explanation of why there is so much variability in these costs from year to year, particularly with respect to the allocations, corporate services and regulatory services and whether we will see such variability beyond 2022.

2.0 Reference: Evidentiary Update, pg. 13 section 3, Tables 1 and 1A

Explanation: Chlorine costs are forecast to increase by 91% between 2019 and 2020, yet testing costs are forecasted to decline. Furthermore, a new UV system was installed which should reduce chlorine demand.

Request:

2.1 Please explain why chlorine costs are expected to increase as indicated.

2.2 Please provide a forecast for the relative proportion of surface water relative to ground water that is to be used on a monthly/seasonal basis over a calendar year.

3.0 Reference: Evidentiary Update, pg. 17, section 3.2-6, Utilities

Explanation: Utilities costs are projected to increase by 154% from 2019 to 2020. Corix attributes this large increase to increased electricity usage driven by the pumping requirements of the GSDP and increased water demand due to distribution system leakage, apparently caused by the increased hardness of the water.

Request:

3.1 It is our understanding that Taynton Creek was going to continue to supply Panorama with water, as well as the GSDP. Please describe and explain any differences in pump operation

when surface water from Taynton Creek is used, when groundwater is used and when there is a mix, as well as the differences in electricity usage due to variation of water source.

3.2 Please identify the material (cast iron?, carbon steel?) used for the distribution system and why leakage is being attributed to the hardness of the water; also please provide the Langelier Saturation Index for the groundwater and the surface water from Taynton Creek.

3.3. Given that Corix identified in summer 2020 that Pressure Relief Valves on hot water tanks were being lifted at Panorama (including this intervener's) due to pressure transients during GSDP operation, please explain why these pressure transients are not responsible for the system leakage.

3.4 Please explain whether or not the increased chlorine usage per 2.0 was a result of this distribution leakage. If so, the leakage would appear to be almost as great as the consumption by customers.

3.5 Please explain whether the distribution system leakage was occurring at joints, or through wall of the system conduit and if the latter, whether it is due to erosion or corrosion or both.

3.6 Given the large increase in electrical usage, please provide information on:

3.6.1 the wattage and power factor for all pump motors,
3.6.2 on pump operation (duration, stops and starts etc.) and
3.6.3 whether operation of the GSDP to date is representative of future operation.

4.0 Reference: Evidentiary Update, pg. 18, Section 3.2.1, Wages - Operators and Administration

Explanation: "Corix provides fair market-based compensation for those personnel in the Kootenay and Panorama areas. Historically Corix has struggled to find and keep qualified operators at our Panorama location. In 2014 Corix completed a salary survey to benchmark operator compensation. The benchmark results indicated that upwards adjustments were required for Corix to be at a competitive market compensation level."
Table 2 identifies that the annual wage and salary for an operator is $100,494 for 2020, which is 15% more than the Sun Peaks utility and is to be escalated at 3% per year.

Request:

4.1 Please provide further information as to :

4.1.1 why the wage and salary for a Panorama operator is so much higher than Sun Peaks,
4.1.2 what the range of salaries for other water operators is in BC,
4.1.3 whether a new benchmarking of salaries has been performed and
4.1.4 why Corix Panorama salaries and their escalation rates are so high, when the av erage 2019 salary for a BC water plant operator is $61,250 with an escalation of 2.5% according to the Statistics BC database.

Given the impact of Covid-19, escalation rates are likely to become lower, resulting in lower salaries and raises, and the available labour force expanded resulting in less competition for the company.

5.0 Reference: Evidentiary Update, pg. 20, Section 3.3-4, Insurance

Explanation: "Corix has one insurance policy that covers the assets and operations for all of its utilities. The total insurance cost is then allocated to each utility based on the underlying cost drivers (i.e. Replacement cost of the assets for Property Insurance, Revenue for liability insurance, etc.). .....Insurance costs for the Utility have increased due to a combination of the following factors:

• An increase in the total insurance premium for all Corix utilities
- This is due to worsening insurance market conditions worldwide, resulting in higher insurance premiums across the market.
• An increase in the Utility's allocated portion of the total insurance premium due to:
- An increase in budgeted revenue for the Utility with this Amended Application for an increase in customer rates;
- An increase in fixed assets with the completion of the GSDP project."

Request:

5.1 Please provide the percentage of all utility revenue and fixed asset that Corix Panorama represents relative to all Corix insured utilities and a further explanation on how the increased revenues and fixed assets for Corix Panorama has resulted in a 382% increase in insurance rates from 2018.

6.0 Reference: Evidentiary Update, pg. 21, Section 3.3-6, Hydrant Maintenance

Explanation: "Costs associated with semi-annual maintenance of the fire hydrants."

Request:

6.1 Please explain why the costs of hydrant maintenance are being borne by the Corix ratepayers and not by RDEK, given that 40% of our RDEK taxes are allotted to fire protection.

7.0 Reference: Evidentiary Update, pg. 22, Section 3.3.11, Regulatory Services

Explanation: Corix's statement "internal staff time on regulatory filings will now be allocated to each utility as part of the corporate or regional services cost allocation. In addition, Corix has retained a consultant to assist with the regulatory review of this application. Therefore, the Regulatory Costs expense item now excludes Corix's staff time and represents an estimate of the costs associated with any consultant costs and administrative expenses. For 2020, Corix has forecasted costs of:

• $8,000 in consulting costs for any consultant the Comptroller's office hires for the review of this application; plus
• $18,000 in consulting costs for Corix's consultant who will assist in preparing this application and the financial model that informs this application, responding to information requests, preparing final arguments and performing any additional tasks that may arise from the regulatory review of this application.

From 2021 onwards, Corix has reduced the regulatory costs forecast to reflect an increase in efficiency related to regulatory filings and a reduced level of use of external consultants by both the Comptroller's office and Corix."

Request:

7.1 Given that Corporate and Regional services include legal costs and corporate regional expertise is to be leveraged to decrease costs vice a stand alone utility (pg. 34), please explain why these additional costs are allocated to the ratepayer.

7.2 Please explain why the ratepayer is paying for costs of consultants to the water comptroller.

7.3 How much more consultant cost will be incurred by providing information to the interveners and will it be charged to the ratepayer? Utilities in other provinces, typically pay the interveners for the time and research done to review and intervene on their application for rate increases, e.g. Ontario Hydro.

8.0 Reference: Evidentiary Update, pgs. 25-28, Section 3.4.2, Corporate Functions Costs

Explanation: "Corporate Functions refers to services provided at the corporate level that benefit all CII subsidiaries across Canada and the United States. They are allocated across all business units, regardless of geographic location." "These include, but are not limited to:

- strategic management;
- corporate governance;
- management of accounting functions including utility accounting, tax, internal audit;
- treasury services;
- information technology systems and governance, including online security;
- human resource management and payroll services;
- health, safety and environment services;
- legal services;
- communications and public relations; and
- oversight of administrative and support services to CII's subsidiaries and their business units."

"Pooling these functions and providing these services across multiple business units results in multiple benefits, including:

1. increased efficiencies through economies of scale. Shared resource initiatives are a more efficient and cost-effective approach than having each business unit procure these services on a standalone basis; and

2. functionality and cost effectiveness. Certain capabilities, including some relating to customer interface options, cannot be cost effectively provided by small utilities operating on a standalone basis."

Table 5 shows that Corporate Functions costs are increasing by 54% from 2020 to 2022. The methodology used to allocate these costs is the Massachusetts Model Composite Allocator. This allocator assigns a weighting of 33.33% to each of Gross Revenue, Headcount and Gross Property, Plant & Equipment per Table 3. The requirement for substantially increased revenue and increase in plant and equipment due to the GSDP, with no change in headcount is apparently resulting in a significant increase in Corporate functions costs. Given that the GSDP is

the main driver for the requested rate increases for water by Corix Panorama, this appears to be double jeopardy. Corix makes the statement (pg. 27):

"As there are a virtual endless number of potential combinations of allocators and weightings, a deviation from the standard formula would require a specific and unique rationale and justification that is not present for Corix. As a result, the standard formula was deemed to best suit Corix's requirements."

Request:

8.1 Please explain the increase in Corporate Functions that are being provided to Corix Panorama due to the GSDP, that warrant a 54% increase in their costs from 2020 to 2022.

8.2 Other than application of the standard formula being best suited to Corix's requirements, please explain why the GSDP and its large impact on water costs to the customer is not considered a specific and unique rationale and justification for a deviation from the standard formula in allocating Corporate Services Costs.

9.0 Reference: Evidentiary Update, pgs. 28-31, Section 3.4.2, Shared Services Canada Functions Costs

Explanation: "Shared Services Canada Functions are provided primarily for the benefit of CII's Canadian business units, and are therefore allocated primarily to CII's Canadian business units" (pg. 26). The same methodology used for allocation of Corporate Functions costs is used for Shared Services Canada Functions, so the comments in 8.0 apply. Table 7 indicates that these costs will increase by 41% from 2020 to 2022.

Request:

9.1 Please explain the difference in percentage increases between the Shared Services Canada Function costs and that for the Corporate Services Functions costs, given that the same allocation methodology is used.

9.2 Please explain why it is reasonable that total cost of Corporate and Regional Services will represent 30% of O&M costs and exceed the wages and salaries of the workforce by 25% in 2022 and how these percentages compare to other water utilities in Canada.

10.0 Reference: Evidentiary Update, pgs. 31-32, Section 3.4.3, Regional Services Costs

Explanation: "Regional Services Costs are shared costs incurred at the regional business unit level in order to provide operational services specifically for utilities within that region and business unit. In the case of the Utility, the region is BC and Alberta and the Business Unit is Canadian Utilities (excluding District Energy systems, which are under the purview of the Energy Services Canada business unit). These costs consist of:

- salaries and benefits for senior management and support staff responsible for that region (including executive and operations management, financial planning & analysis and governance and compliance);

• the associated building and vehicle expenses; and office expenses, travel, training and external consulting costs."

Table 9 shows that these costs are increasing by 23% and regional allocation from 2.0% to 2.7%. "Regional Services Costs are allocated from the regional cost centre to each utility based on the pro-rated allocations developed for the Corporate Services Costs." Since the GSDP has increased Corporate services allocation, Regional Services Costs are being increased by this methodology.

Request:

10.1 Given that the GSDP has increased Corporate Services costs primarily due to the GSDP and increases in physical plant and forecast revenues, please provide information on how the actual Regional Services to Corix Panorama are being increased to warrant the increase in their charges to Corix Panorama.

11.0 Reference: Evidentiary Update, pgs. 32-34, Section 3.4.4, Total Corporate and Regional Service Cost Allocations

Explanation: Total Corporate and Regional Service costs are increasing by a total of 44% from 2020 to 2022 with a 24% increase in 2021, an additional 16% increase in 2022 per Table 10. This is to be followed by projected increases of 3% per year through 2024 per Schedule 2. Furthermore, these costs are being allocated to support a workforce of 1.1 FTEs (Table 2), which has not changed.

"Corix requests approval of these allocations supported by the allocation methodology described above. This approach is a just, reasonable and non-discriminatory method of systematically allocating shared costs to the relevant business units in a consistent manner (pg.33) ... Fortunately, as part of the Corix Group of Companies Panorama Water is able to leverage the expertise of substantial corporate resources at reasonable cost, to the benefit of ratepayers (pg.44)."

Request:

11.1 Please provide information as to the extent that use of these services have been increased by the GSDP which is the driver of the request for increased water rates. In addition, to what extent was the Corporate and Regional expertise leveraged to mitigate cost overruns of $638k above the budgeted $346k as a contingency.

12.0 Reference: Evidentiary Update, pgs. 32-34, Section 4, Capital Costs

Explanation: "Forecasted non-GSDP capital costs are:
• 2020: $0 (due to COVID-19, meter replacements are deferred by one year to 2021 and 2022)
• 2021: $20,000 for meter replacements and $15,000 to replace a snowmobile.
• 2022: $20,000 for meter replacements and $30,000 for distribution mains replacement.
The current snowmobile is 13 years old and approaching end of life. Costly repairs have been needed to keep it operational. Daily access for operators to the reservoir is required which is 1 km uphill. During winter season a snowmobile is required for operators to efficiently and safely access the reservoir. The utility plans a preventative maintenance review of its distribution

mains with leak detection and investigation. Presently the utility has higher than normal system water losses. The utility has forecast capital expenditures in 2022 for anticipated mains improvements to the system."

Request:

12.1 Please provide information as to why meter replacements are required, the average age of the replacements and how many meters are to be replaced. Table 15 indicates that they should have a service life of 25 years.

12.2 Please explain why $15k is required to replace a snowmobile when their price range is between $10k and 16k$. If $15k is to be spent, please consider an electric snowmobile e.g. from Tiaga for approximately that cost.

12.3 Will the distribution mains displacement be with materials in kind or a different material?

12.4 Please provide information on the age of the distribution mains and explain why they did not last their expected service life of 75 years (Table 15).

13.0 Reference: Evidentiary Update, pg. 35, Section 4.1, GSDP Project Costs

Explanation: "Comptroller Order No. 2531 accepted a final cost estimate of $6,934,974 and the physical design for the GSDP Project and granted approval to proceed with the construction of the project. The approved project cost included a contingency amount of $345,973 (representing approximately 5% of the total project budget). Based on project costs to May 2020, Corix is currently anticipating a final total project cost of $7,572,618. This variance amount of $637,644 is approximately 9.19% over the approved project budget."

Request:

13.1 Given the cost of the project and cost overruns that were incurred, was the project request for proposal bid out as a fixed project cost or cost plus basis? How many companies bid on the project and was the selected contractor the low bid? If not the low bid, why not?

14.0 Reference: Evidentiary Update, pg. 39, Section 5.1.1, Capital Structure

Explanation: "The capital structure consists of and 57.5% debt and 42.5% equity. This capital structure is equal to the minimum default capital structure approved in the BCUC's Generic Cost of Capital ("GCOC") Proceeding Stage 2 decision which, according to the BCUC, "represents a reasonable balance". In a 2016 rate base decision, Fortis BC was allowed an ROE of 8.75% and an equity ratio of 38.5% (Ref. Fortis BC "Cision" news release August, 2016), both of which, if applied to Corix, would result in a lower revenue requirement and hence, proposed rate increase. It is to Corix's advantage to have a higher equity ratio as the requested ROE percentage is more than twice the deemed interest rate on debt (pg. 39). Given that the substantial increase in rates being proposed by Corix is due to a capital project, the proposed capital structure may not be a reasonable balance.

Request:

14.1 Please provide justification why Corix is using a higher equity ratio than Fortis, given that almost 50% of required revenue (per Table 19) is due to capital expenses.

15.0 Reference: Evidentiary Update, pg. 39, Section 5.1.2, 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 bond yield, consistent with the approach outlined for calculating a default debt component for small Thermal Energy System ("TES") utilities ...The 10-Year bond yield was calculated based on a 12 month rolling average as of December 2019." Table 14 identifies this GCOC bond yield to be 1.55%. The rolling average Government of Canada 10 year bond yield from October 2019 to August 2020 is now 0.97%. In addition, a premium of 1.84% for BBB credit is applied to determine the deemed interest rate, which seems high in the current Bank of Canada interest rate environment.

Request:

15.1 Please explain why Corix is considered similar to a small TES utility, when it is a water utility.

15.2 Please explain why Corix assigns itself a BBB or BBB(low) credit rating when it has no competition and is placing the risk of the GSDP project on the ratepayer, with the proposed rate increases.

15.3 Has Corix ever received a bond rating and if so, what is it?

15.4 Given that the 12 month rolling average GCOC 10 year bond rating is now 0.97%, which is 0.58% or 37% relatively less than the rate used for the rate basis, why did this evidentiary update not amend the proposed deemed interest rate?

15.5 Please provide the change in required revenues if the deemed interest rate uses a 0.97% for the Government of Canada 10 year bond yield and what impact this would have on proposed rate increases.

15.6 Please provide the basis for a 1.84% BBB premium with today's current Bank of Canada prime interest rate.

16.0 Reference: Evidentiary Update, pg. 39-40, Section 5.1.3, Return on Equity

Explanation: "Corix proposes a return on equity ("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 proposes a minimum default equity risk premium of 75 basis points, equal to the equity risk premium approved by the BCUC for small TES utilities."

In 2008, National Economic Research Associates (NERA) Inc. published a paper titled "Allowed Return on Equity in Canada and US-An Economic Financial and Institutional Analysis". Table 2 on page 17 of this analysis suggests that if GCOC 10 year bond yields are less than 3%, ROEs should be less than 8.25%. According to this analysis, BC was the first province in Canada to apply a formula that related the regulated ROE to the GCOC 10 year bond yields in 1994.

Request:

16.1 Given that the risk of the GSDP project is being placed primarily on the ratepayer, with the proposed rate increases, and as a water utility, the risk for Corix, with no competition for its product, should be less than that of a TES, please explain what warrants a 0.75% default equity risk premium for ROE?

16. Can both Corix and the Water Comptroller please identify whether a formula based on GCOC 10 year bond yields per the NERA analysis is still being used by BC to determine a regulated ROE?

17.0 Reference: Evidentiary Update, pg. 45, Section 7, Revenue Requirements

Explanation: In Table 18, Corix is identifying a revenue increase of 111% from 2020 to 2022, assuming their proposed rate increases are implemented, yet the proposed rate increase is 145% over this period. In addition, the identified revenue increase by 2024 is 194%, yet the proposed rate increase will be 204% over this time.

Request:

17.1 Please explain why the percentage proposed rate increases are greater than the percentage increased revenue generated by these rate increases, per Table 18.

18.0 Reference: Evidentiary Update, pg. 47, Section 7.2, Income Tax

Explanation: In Table 19, Corix is forecasting a taxable income of $534,598 by 2024 and using past losses as a tax write-off in previous years. After tax income. i.e. net income, in 2024 is calculated to be $390,256. Given that the value of the Panorama physical plant (asset) in 2024 is assessed at $7,844,230 per Table 16, the Return on Asset (ROA) becomes $390,256/$7,844,230 or 4.98%. The average ROA for water utilities in North America is 2.84% per **CSIMarket.com**.

Request:

18.1 Given the substantial return that the proposed rate increase will generate in 2024 and beyond, please explain the continuation of the the increased rates through 2024 and thereafter, when the ROA will be already much higher than the average in North America.

18.2 Please explain why it is reasonable, given the requested rate increases, for Corix to obtain a well above average Return on Asset.

19.0 Reference: Evidentiary Update, pg. 47, Section 7.3, Revenue Deficiency Deferral Account (RDDA)

Explanation: "due to the size of the GSDP capital project, current customer rates, and the current number of customers, Corix is proposing the use of a RDDA to phase-in and smooth the GSDP related rate increase over several years. This leads to a revenue requirement shortfall in the initial years of operation, followed by surplus revenue in later years to reduce the balance of the RDDA. This complies with Order No. 2548, in which the Comptroller directed Corix to: "recommend phase-in options to smooth the GSDP related rate increases over several years."" Corix has proposed an RDDA and resulting rate increases that would completely pay off the RDDA in 2026, likely with a surplus that year. A profit to commence this pay off will start in 2023. The impact of rate increases due to the RDDA is compounded by pay off of the rate rider by the end of 2022.

Request:

19.1 Please explain what would be the impact on rates and the result/disadvantage to the ratepayers of smoothing out the GSDP related costs beyond 2026, e.g. to 2030.

20.0 Reference: Evidentiary Update, pg. 50, Section 8, Customer Count and Consumption

Explanation: "For residential customers, Corix has forecasted growth in customer count by 1 customer in each of 2020, 2021 and 2022." In 2020 alone, there have been 3 new residences completed on Trappers Way and 2 more that will be completed in 2021. There are also 4 residences to be completed in 2021 in the Greywolf subdivision. This will increase the number of residential customers and subsequently, revenues more than forecast.

Request:

20.1 Please identify the impact on the requested rates if these additional customers are added to the revenue base, commencing in 2021.

21.0 Reference: Evidentiary Update, pg. 50, Section 8, Customer Count and Consumption

Explanation: "In the Utility's Application for 2019 Rates, the monthly consumption per bed unit was forecast based on a three-year rolling average. This allowed the Utility to ensure the forecast reflected more recent consumption patterns. In this Amended Application, the Utility has continued the three-year rolling average as it reflects recent usage while also smoothing variability caused by weather and economic conditions. 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". Given the number of residences occupied throughout the past summer due to families relocating here during Covid-19, it is likely that water consumption, on average, is greater than forecast.

Request:

21.1 Please provide the average residential consumption of water per bed unit in 2020 to date and how it compares to forecast.

22.0 Reference: Evidentiary Update, pg. 52, Section 9.1, Rate Design Analysis

Explanation: "Over 85% of the Utility's costs associated with providing water service are fixed costs that do not vary with the amount of water consumed. While this is an important factor in designing an equitable rate that apportions the actual costs of service appropriately to all groups of customers, it must be considered in the context of designing rates that also incorporate a charge per volume of water consumed to encourage customers to use the water resource wisely." These fixed costs result in a service that is available at any time, including the provision of firewater to protect property, whether residents are using water or not. According to section 9.1.3, "approximately 48% of the annual revenues from the fixed basic charge and the remainder 52% from the variable metered rates. Instead of recovering all the fixed costs (at minimum 85% of the total revenue requirement) through the Fixed Charge, the Utility recovers some of the fixed costs through the Metered Charge, thereby incentivizing customers to conserve water." In a 2016 document published by the UBC Water Planning Lab, it was noted that the average daily usage of water in BC is 0.312 cubic metres per capita.

"A Bed unit is a unit of measurement used to determine the relative number of occupants and is based on the floor area typically required to provide overnight accommodation for one person." Using the above water use study, the average per capita annual water usage in 2016 was 113.9 cubic metres. This compares to the actual usage of 11.9 cubic metres per bed unit for Panorama residential customers in 2019 or almost 90% less than the average across BC in 2016, per Table 21. Table 21 also indicates consumption is increasing and not decreasing between 2019 and 2020 for both residential and commercial customers. Furthermore, future consumption rates are forecast to be reduced by only 1% in spite of the substantial increase in proposed Metered Charge rates.

Request:

22.1 Please explain why it is fair and "equitable" that only 48% of the required annual revenues are being proposed to come from the Fixed Charge when fixed costs with providing water service are 85%, and there is likely very little reduction in usage to be achieved by weighting the majority of required revenues to be generated from the Metered Charge.

23.0 Reference: Evidentiary Update, pg. 52-53, Section 9.1.1, Customer Demand Characteristics

Explanation: "Residential customers have a load factor of approximately 57%. Commercial customers have a load factor of approximately 47%. The results show that residential customers have a marginally better capacity utilization. This indicates that residential customers given their favourable capacity utilization impose a lower cost to the water system than commercial customers." In addition, the disappearance of drinking water advisories resulting from the GSDP stands to benefit commercial customers more than residential customers, through removal of the negative perceptions of guests brought on by non-potable water unfit to drink at the resort. Commercial customers also use 300% more water than residential customers (per

Table 21) and have the advantage that any water rate increases can be passed on to their clients, unlike residential customers.

Request:

23.1 Please explain why Commercial ratepayers do not bear a greater proportion of the proposed rate increases related to the GSDP project than Residential ratepayers (the percentage increase in rates from 2021 to 2024 for both residential and commercial ratepayers is essentially the same per Tables 27 and 28), especially when the annual commercial consumption is projected to be 153% more per bed unit than annual residential consumption per Table 21.

24.0 Reference: Evidentiary Update, pg. 61, Section 11.2, Customer Bill Impact Comparison

Explanation: Table 29 indicates that Annual Residential Bills from neighbouring utilities such as Invermere, Windermere, Radium Hot Springs, Canal Flats and Edgewater range between 46% to 75% lower for 2021 than the annual bill for Panorama residents, after the proposed rate increase and when including the rate rider. This gap will undoubtedly be widened in 2024 when annual bills for Panorama are proposed to increase another 63%.

Corix states "the utility rate comparison should also take into consideration the factors listed below.

- Number of customers at that utility – Utilities benefit from increased economies of scale so large capital costs can be spread over a larger customer base; thus reducing costs to each customer.
- Owner of the utility (Municipality/Private) – A municipality that owns and operates a water utility may spread some of its costs across all the municipal services provided. Municipal staff would not work exclusively for the water utility and therefore could have their costs recovered through taxation. In addition, the taxation system of the municipality may result in revenue being collected from taxes being used to supplement revenue from water utility rates in order to operate and maintain the utility.
- Water Source – The source of the water may have an impact on the costs required to treat and distribute the water to customers. For example, facilities for water utilities that have a surface water supply are typically less expensive to construct and operate than facilities for a water utility with a groundwater supply.
- Service Area Terrain – Hilly or mountainous service areas require higher electrical consumption to pump water throughout the system, as opposed to services areas located on flatlands.
- Compliance with Drinking Water Quality program requirements – Water utilities that are in compliance with the applicable provincial/regional drinking water quality program requirements typically cost more to construct and operate than a system that is not designed to comply.
- Access to Grants – Municipal systems sometimes receive grants from the provincial/federal governments to undertake large capital projects. These grants would reduce the capital costs required for municipal water utilities, when compared to the capital costs required for privately-owned utilities undertaking the same capital project.

- Fire protection – Systems that do not include the cost for the provision of fire protection are typically cheaper to operate and maintain than systems that provide fire protection"

Request:

24.1 With regard to customer base, please indicate how the Panorama customer base compares to Edgewater and Canal Flats.

24.2 With regard to staffing of municipalities being able to be shared among other responsibilities, please identify to what extent Corix staffing for sewage disposal, propane distribution and meter reading is used to support the water utility.

24.3 With regard to water source from surface water being less costly than from groundwater, what proportion of water annually will now be sourced from our surface water in Taynton Creek, which has served Corix well to date, given the availability of the GSDP?

24.4 With regard to service area terrain requiring higher pumping electricity consumption due to mountainous nature, to what extent has this contributed to increased electricity consumption and to the proposed rate increase, given that utility costs with the GSDP in service are less than 20% of total O&M costs per Table 1 and previous operation required pumping/

24.5 With regard to water utilities having to be in compliance with applicable provincial/regional drinking water quality program requirements costing more to construct and operate, please identify which of the water utilities identified in Table 29 do not have to comply.

24.6 With regard to municipal systems sometimes receiving grants from the provincial/federal governments to undertake large capital projects, did Corix apply for government grants and if not, why not? The federal government on many occasions has indicated that they are committed to providing all Canadians with drinkable water and has set up an Infrastructure Bank to enable such projects.

24.7 With regard to systems that do not include the cost for the provision of fire protection being typically cheaper to operate and maintain than systems that provide fire protection, to what extent has this contributed to the proposed rate increases, given that hydrant maintenance is less than 2% of Corix O&M costs per Table 1? Furthermore, does Corix receive any compensation for this maintenance from the RDEK, to whom Panorama customers pay taxes for fire protection, and if not, why not?

25.0 Reference: Evidentiary Update, pgs. FS-30 to FS-32, Schedule 15, Panorama Water Utility Comparison to other water utilities

Explanation: Per Schedule 15, in 2021 fixed charges for Corix Panorama water will represent 66% of the total bill, when including the rate rider and 62% when excluding the rate rider. Fixed charge rates for neighbouring utilities with metered charges, range between 68% to 89% of the total bill, and average 81% of the total bill. This suggests that the Corix requested required revenues ought to incorporate higher fixed charges and lower metered charges into the rate increase than proposed. Furthermore, this would reduce the sensitivity to variable water consumption in forecasting required revenues.

Request:

25.1 Please identify what the impact on the requested rate increases would be if the fixed charges were raised to 80% and metered charges reduced to 20% of the total bill, yet still deliver Corix's required revenue requirements and how that would impact the total average customer bill.

Addendum

To Information Request

Trappers Way Residential Group Comments and Concerns
Regarding Corix Water Rate Application

September 26, 2020

1.0 GENERAL:

The rate increases being requested by Corix seem to be exorbitant given that they will raise water rates 145% (1.57x1.21x1.29) from current rates by 2022 (i.e. more than doubling in 1.5 years) with a projection of them going up 204% by 2024 (i.e. more than tripling in the next 4 years). As an essential service with no competition, Corix appears to be taking advantage of their position. While Corix is entitled to recover the costs of the new Groundwater Source Development Program (GSDP) project, and past losses that they are claiming, this should occur over a longer period of time. It appears that they are trying to recover the costs of past deficits and projected deficits in the shortest time possible (e.g. Rate Rider and RDDA). Based on their submission and evidentiary update, their annual operating and maintenance (O&M) total expenses are projected to be exceeded by 8.4% with revenues in 2020 without a rate increase, in spite of a 23% increase in O&M.

2.0 QUESTIONS, COMMENTS AND CONCERNS:

2.1 In section 5.1.3, Corix is requesting a Return on Equity (ROE) of 9.5% based on the BCUC benchmark rate of 8.75% for large low risk utilities, e.g. Fortis, and a minimum default equity risk premium of 0.75% based on small Thermal Energy Storage (TES) utilities benchmarks. Given that there should be less risk for a water utility than a TES utility, why can this risk premium not be reduced by at least 0.25% to help reduce rates?

2.2 In section 3, Operations and Maintenance (O&M) expenses, insurance rates are being increased by 382% in 2020 from 2018. **Is this due to the increase in value of physical plant per the GSDP project? Does use of the groundwater supply not introduce less risk, e.g. liability?** In addition, the wages and salaries in Table 1A of more than $110,000 for 1.1 FTEs (approximately 15% more than the Sun Peaks utility) and an escalation rate of 3% appear to be high given Statistics BC database identifies the average 2019 salary of a Water Plant Operator to be $61,250 with an annual increase of 2.5%. Under current economic conditions, future salary increases are likely to be less.

2.3 In section 3, O&M expenses are decreasing by 18% from 2018 to 2020, yet rates are increasing substantially due to the cost recovery methodology for the GSDP project and not due to increasing O&M costs. There is a wide range in variability in O&M costs between 2018 and 2020 driven by changes in Allocations from Panorama and Kootenay Ops, Corporate and Regional Services, Utilities and Regulatory Costs. **Why is there so much variability in these costs from year to year?**

2.4 In section 3.4, Corporate and Regional services (147k$ in 2022 per Table 10) are greater than wages and salaries for the Corix Panorama employees (117k$ in 2022 per Schedule 2), which suggests a top heavy organization. Furthermore, these services are projected to increase by 46% in two years. **Given that part of the rationale for these expenses (section 3.4.4) is that "Panorama Water is able to leverage the expertise of substantial corporate resources at reasonable cost, to the benefit of ratepayers", why did this expertise not able to foresee the cost overruns of 638k$ (section 4.1) after a contingency of 346k$ had already been included in the original budget? Do 1.1 FTEs assigned to the water utility (section 3.4.1) warrant such costs? How can a 46% increase in these services be justified when number of employees are not changing?** The methodology used to allocate these costs applies 67% of the allocation to the value of Gross Property, Plant & Equipment and Gross Revenue, which results in increased cost due to the GSDP. Given that very large rate increases are being requested to pay for the GSDP, this is double jeopardy and excessive. The services being provided are largely employee related, e.g. human resources, IT, accounting etc. Furthermore, 2.7% of the regional services costs are being applied to the water utility. **Do 1.1. FTEs represent 2.7% of Corix regional employees?**

2.5 In section 3, chlorine costs are forecast to increase by 91% between 2019 and 2020, yet testing costs are forecasting to decline. It is based on the previous 5 year average of chlorine costs per section 3.2.1. Furthermore, a new UV system was installed which should reduce chlorine demand, if effective. **How valid is this forecast if the 2020 water makeup is different, given now two sources? Is water consumption expected to double? Why the cost increase for chlorine?**

2.6 In section 3, Utilities costs are projected to increase by 154% from 2019 to 2020. Section 3.2.6 attributes this large increase to increased electricity usage driven by the pumping requirements of the GSDP. Part of this increase is being attributed to increase water demand due to distribution system leakage, apparently caused by the increased hardness of the water. **Is this water hardness increasing corrosion rates? If so, what is the Langelier Saturation Index? Could the leaks be caused by erosion of the system piping due to sand getting into the system, as identified causing system in service delay? Does the increase in chlorine usage in 2020 indicate the extent of leakage, which would indicate almost the same as the consumption by customers? Corix sent out a notice in July/August 2020 indicating that Pressure Relief Valves were lifting on residential hot water tanks (they did on our hot water tanks) due to GSDP related operating anomalies; could it be that the distribution system was overpressurized, causing these leaks?**

2.7 In section 3.3.6, **why are the costs of hydrant maintenance being borne by the Corix ratepayers and not RDEK, to whom we pay a good proportion of our taxes for fire protection? Should the RDEK not be paying Corix?**

2.8 In section 3.3.11 of the Evidentiary Update, **why are the regulatory costs that include 26k$ for consultant costs for the water comptroller and Corix being borne by the ratepayer? Why are they not part of Corporate and Regional services, for which considerable cost is expensed to the ratepayer?**

2.9 In section 4 Capital Costs, we would encourage Corix to purchase an electric snowmobile, e.g. Taiga. They may be able to get government subsidies to do this. **Given the 30k$ cost of repairing failed distribution system mains, we need to understand why this was required per 2.6 above.**

2.10 In section 5.1.2, the deemed interest rate is partly determined by the GCOC yield on 10 year bonds and is identified as 1.55% based on December 2019 rates. This is one of the higher rates in the past year. Furthermore, this results in the need for higher revenue to address debt, hence rate, than may be necessary. **What is the justification for not using the June 2020 yield of 0.6% or current rate which is similar?**

2.11 In section 5.1.3, the capital structure is set at 57.5% debt with a deemed interest rate of 3.64% and 42.5% as equity with an ROE of 9.5%. The rationale was a BCUC decision that identified this capital structure as "a reasonable balance" in a previous situation. Fortis BC in a 2016 rate base decision was allowed an ROE of 8.75% and an equity ratio of 38.5%, both of which result in lower rates than what Corix is proposing. Given the substantial increase in rates being proposed by Corix a capital structure of 42.5% may not be a "reasonable balance". **Why is Corix not using a lower equity ratio, given that almost 50% of required revenue (per Table 19) is due to capital expenses, other than to enhance their income? Furthermore, a risk premium is being applied to the ROE and given that it is the ratepayer taking on the risk, why is this premium being applied?**

2.12 In section 7, Table 18, Corix is forecastng a needed revenue increase of 110% by 2022 yet is requesting a rate increase of 145% to presumably make up for the shortfall, in 1.5 years. In addition, the identified required revenue increase by 2024 is 194%, yet the rate increase will be 204%. **Why is the proposed rate increase greater than the required revenue increase, which will already give them an ROA of 5.0%?**

2.13 In section 7.2 Table 19 of the Evidentiary Update, Corix is forecasting a taxable income of 535k$ by 2024 and using past losses as a tax write-off. This results in a net income of 390k$. This represents a Return on Asset (ROA) of 390k$/7844k$ or 5.0%. The average ROA for water utilities in North America is 2.84% per CSIMarket.com. **Given the substantial return that the proposed rate increase will provide in 2024**

and beyond, what justifies the continued increase in rates through 2024 as indicated when the ROA would become so much higher than the average in North America?

2.14 In section 7.3, Comptroller Order No. 2548, directed Corix to: "recommend phase-in options to smooth the GSDP related rate increases over several years". Corix has proposed a Revenue Deficiency Deferral Account (RDDA) that would be paid off in 5 years, by the end of 2026. The proposed rate increase has profit to pay off this RDDA starting in 2023. The proposed Scenario E in section 9.3 has the RDDA being paid off in 2026 likely with a surplus. This impact on rates is compounded by pay off of the rate rider by the end of 2022. **What would be the result/disadvantage to the customer of smoothing out the GSDP related rate increases past 2026?**

2.15 In section 8, Corix has forecasted growth in customer count by 1 residential customer in each of 2020, 2021 and 2022. In 2020 alone, there have been 3 new homes completed on Trappers Way and 2 more that will commence construction before year end. There are also a number of homes under construction in the Greywolf subdivision. This will increase the number of residential customers and subsequently revenues more than forecast. **What would be the impact on requested rates if these additional customers are added to the revenue base?**

2.16 In section 8, consumption of water is forecast to decrease from the previous three year rolling average. Given the number of residences occupied throughout this past summer due to families relocating here during Covid-19, it is likely that water consumption, on average, is considerably greater than forecast. **To date, what is the average residential consumption of water per bed unit in 2020?**

2.17 In section 9.1, it is identified that In 2017, the Fixed Charge revenues from residential and commercial customers represented 20% and 26% respectively, and the Metered Charge revenues from residential and commercial customers represented 12% and 39% respectively, of the total revenue. The reason for this large difference in metered charge revenues is that commercial customers use 154% more water per bed unit than residential customers per Table 21. The remaining percentage is comprised of residential Standby revenue. **What is Standby revenue and why is it the whole responsibility of residential customers? Given that the argument for placing a greater proportion of the rate increase on consumption is to promote conservation per section 9.1, how effective has that been in reducing consumption?**

2.18 In section 9.1, it is identified that 85% of the costs of providing water to Panorama are fixed costs. This means that the service is available to all customers at any time including the provision of firewater to protect property whether residents are present or not; yet, approximately 48% of the annual revenues are from the fixed basic charge and the remainder 52% from the variable metered rates (section 9.1.3). This seems counter-intuitive and has the effect of having the most impact of the rate increase on those who are full time residents (some of whom are retirees on fixed incomes) or frequently at Panorama. For example, I am a full time resident at Panorama and with the proposed rate increase for an essential service, I will see my annual costs for water increase from $2790 per year (August 2019 to August 2020) to $4234 per year in 2022, based on my water usage (below average per capita for BC residents) and sewer charges. It should be noted that the residential average per capita water usage in BC is 312 litres per capita per day (2016 paper by UBC Water Planning Lab). Given that the rate increase has been prompted by the building of physical plant, a fixed cost, more of the rate increase ought to be attributed to the fixed charge rate, i.e. charge per bed unit. This is supported by the Corix statement on in section 9.1.1 "Residential customers have a load factor of approximately 57%. Commercial customers have a load factor of approximately 47%. The results show that residential customers have a marginally better capacity utilization. This indicates that residential customers given their favourable capacity utilization impose a lower cost to the water system than commercial customers." Furthermore, the disappearance of drinking water advisories resulting from the GSDP stands to benefit commercial customers more than residential customers, through removal of the negative perceptions of guests brought on by non-potable drinking water at the resort. In addition, any rate increases brought on by the GSDP can be passed on to their clients, unlike for residents. **Why do the projected percentage bill increases have to become greater for residential customers than commercial customers per section 11.1? Given the**

large percentage of the costs of providing water being fixed, why can more of the required revenue not come from the fixed rate charged for water?

2.19 In section 11.2, a comparison is made with local utilities. What is readily apparent is that the resulting costs of the rate increases for Panorama water will be more than double what nearby communities such as Edgewater, Canal Flats, Windermere and Invermere charge in 2020 and more than triple by 2022. Rationale for this difference is presented as follows:

2.19.1 Small customer base. Both Edgewater and Canal Flats would have arguably as low a customer base as Panorama, if not lower.

2.19.2 Staffing of municipalities being able to be shared among other responsibilities. **Is that not the same for Corix who also provides staffing for sewage disposal, propane distribution and meter reading?**

2.19.3 Water source from surface water less costly than from groundwater. **Is surface water still not a significant source for Panorama water?**

2.19.4 Service area terrain requiring higher pumping electricity consumption due to mountainous nature. Electricity costs with the GSDP in service are less than 20% of O&M costs per Table 1.

2.19.5 Water utilities that are in compliance with the applicable provincial/regional drinking water quality program requirements typically cost more to construct and operate. **Do the other local utilities not have to comply with applicable water quality program requirements?**

2.19.6 Municipal systems sometimes receive grants from the provincial/federal governments to undertake large capital projects. **Did Corix apply for government grants?** The federal government has on many occasions said that they are committed to provide all Canadians with drinkable water.

2.19.7 Systems that do not include the cost for the provision of fire protection are typically cheaper to operate and maintain than systems that provide fire protection. Hydrant maintenance is less than 2% of O&M costs per Table 1.

2.20 Per schedule 15, it is apparent that the fixed charge rates that Panorama is proposing are as much as 90% less than the other comparative utilities. Furthermore, the consumption charges by these utilities are typically 70% less than the rates proposed by Corix. Per the comment made in 2.18, this suggests that more of the rate increase ought to be applied to the fixed charge than to metered consumption. This would also reduce the uncertainty of forecasting required revenues as the sensitivity of this forecast to variable consumption is reduced.

2.21 In the mailings to customers regarding their application, Corix appears to have downplayed the actual impact of the rate increases. The answer to Frequently Asked Question (8) on how water bills will be affected suggests that monthly bill increases for the average residential customer will be approximately $11 in 2020 and a further $29 in 2021. The actual monthly increase commencing in August, 2020 will be $26 per section 11.1, Table 27 of the rate application, with a further $14 increase in 2021, $24 in 2022 and overall $64 from current rates. No mention is made of another 2022 increase of $24 per month which amounts to the monthly charges for the average residential customer increasing from $43 per month to $107 per month by 2022. Furthermore, there was no mention of rates likely to increase to $135 per month on average by 2024. This represents the annual cost of water for the average residential customer increasing from approximately $520 per year to $1286 per year in the next 1.5 years and to $1620 per year in the next 4 years. The demographics of Panorama Mountain Village are changing such that recently new residents are tending to to be families with young children, to the extent that we now have a school bus picking children up in the village. The actual cost impact of the rate increases will likely be greater than Corix portrays as the annual usage per bed unit and average residential bed units will likely increase.

3.0 CONCLUSION:

Based on the above:

3.1 It is concluded that there is opportunity for the water comptroller to reduce and restructure the proposed Corix rate increases to minimize the short and long term impact on the consumer of the costs of the GSDP project.

3.2 In addition, it is concluded that principles 2 (Fair apportionment of costs among customers) and 4 (Customer understanding and acceptance) of utilities rate design touted in section 9.1.2, were not necessarily satisfied, contrary to the conclusions of Corix.

This project was implemented in part, to finally provide us at Panorama with a domestic water supply that provides year round drinkable water, which our federal government regards to be a human right.