ORDER NUMBER 2578

PROVINCE OF BRITISH COLUMBIA

OFFICE OF THE DEPUTY COMPTROLLER OF WATER RIGHTS

IN THE MATTER OF

the *Water Utility Act* and the *Utilities Commission Act*

and

Corix Multi-Utility Services Inc. – Panorama Water

For Approval of
2020 to 2022
Revenue Requirements & Rate Application

BEFORE:

Jesal Shah, Deputy Comptroller of Water Rights
PO Box 9340 STN PROV GOVT
Victoria, BC V8W 9M1

ORDER 2578

Dated this 16th day of February 2021

File No: 0321243

WHEREAS:

1. On June 30, 2020 Corix Multi-Utility Services Inc. ("Corix" or "the Utility") filed its Evidentiary Update to the Deputy Comptroller of Water Rights ("Deputy Comptroller") pursuant to Order 2565 issued on May 19, 2020. The filing of the Evidentiary Update provided 2019 actual consumption, operating costs, capital expenditures, interest and other items. These changes resulted in a new set of financial information which was contained in the Amended Application. In the Amended Application, Corix requested that the proposed rate changes be approved on an interim, refundable basis effective August 1, 2020.

2. On July 31, 2020 by Order 2570, the Deputy Comptroller approved the Utility's request for an interim, refundable rate increase effective August 1, 2020. Appendix A to Order 2570 established a regulatory timetable for the written hearing process.

3. On August 14, 2020 Corix advertised its Amended Application by mailing Notices to all its customers. Persons wishing to actively participate in the hearing were given until September 18, 2020 to register as an intervener. Customers wishing to submit comments on the Amended Application were required to do so by September 28, 2020.

4. Three parties representing Panorama Mountain Resort, Panorama Subdivision Owners Association and Trappers Way Residential Group registered as interveners. No customer submissions were received.

5. The relevant evidence submitted by the Utility and the interveners in the written public hearing process has been reviewed and considered.

NOW THEREFORE, the Deputy Comptroller orders that:

1. Corix is to refile the Amended Application updated to comply with all determinations and directives in the attached Reasons for Decision and Order.

2. The refiled Amended Application is expected to be approved provided that it is complete and complies with those determinations and directives.

3. The Amended Application is to be refiled within four weeks from the date of this Order.

4. Until then, the proposed rates and Water Tariff No. 5 effective August 1, 2020 are to continue on an interim refundable basis as approved on July 31, 2020 by Order 2570.

Dated at the City of Victoria, in the Province of British Columbia, this 16th day of February 2021.

____
Jesal Shah, P.Eng., MBA
Deputy Comptroller of Water Rights

File No. 0321243

Appendix A
to Order 2578

IN THE MATTER OF

An Application by

Corix Multi-Utility Services Inc.

For Approval of

2020-2022
Revenue Requirements and
Rate Application

BEFORE:

Jesal Shah, Deputy Comptroller of Water Rights
PO Box 9340 STN PROV GOVT
Victoria, BC V8W 9M1

REASONS FOR DECISION AND ORDER

February 16, 2021

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1.0 Background

Corix Multi-Utility Services Inc. ("Corix") owns and operates the water utility providing service to Panorama Mountain Village ("the Utility" or "Panorama"). Corix also owns and operates the propane and wastewater utilities at Panorama. Corix is a subsidiary of Corix Utilities Inc., which is a subsidiary of a privately held Vancouver-based corporation, Corix Infrastructure Inc. ("CII"), owned by the British Columbia Investment Management Corporation.

CMUS is regulated under the *Water Utility Act*, the *Utilities Commission Act* and the *Water Sustainability Act* by the Comptroller of Water Rights ("the Comptroller"). The Comptroller is an independent, quasi-judicial regulator responsible for the regulation of private water utilities in British Columbia. Under the *Water Sustainability Act*, the Deputy Comptroller of Water Rights ("Deputy Comptroller") is authorized to exercise the powers and perform the duties of the Comptroller.

As part of the approval granted for the Groundwater Source Development Program (GSDP) project, the Comptroller approved the financing of the GSDP project costs through rate base/rate of return regulation due to the size of the utility and significant capital investment needed to complete the project. The GSDP project secured a new source of drinking water for the Panorama community and involved the installation of ground wells and the replacement of aging utility infrastructure. After receiving the necessary operating permits the new Panorama water source and treatment system commenced water service to customers on February 11, 2020. This is the Utility's first application using rate base/rate of return regulation.

Rate base regulation allows the Utility to earn a fair return on investment and smooth rates via gradual increases to customers given the large upfront capital costs of the project. In its Amended Application Corix proposed a three year test period from 2020 to 2022 with a Revenue Deficiency Deferral Account (RDDA) to smooth rates for customers. The RDDA is intended to mitigate the rate impact of the GSDP project coming in to rate base in 2020 by smoothing rates over a number of years. Even with rate smoothing, the large capital cost of the GSDP will result in very significant rate increases for several years.

2.0 Introduction

On February 28, 2020 Corix made its original revenue requirement and rates application with a proposed rate change effective March 1, 2020. On April 9, 2020 the Comptroller issued a directive to all regulated private water utilities in response to COVID-19 to suspend any customer disconnections, for matters other than safety, for a minimum of 90 days from the date of the directive. Given the extent of the COVID-19 pandemic and the Comptroller's directive, Corix did not consider a rate increase prior to July to be in the best interest of customers. Subsequently, Corix provided a Supplemental Information filing on April 17, 2020 requesting to amend the application by proposing a rate increase effective August 1, 2020.

On May 19, 2020 the Deputy Comptroller issued Order No. 2565 directing Corix to provide its full Evidentiary Update by June 30, 2020. The June 30th filing of the Evidentiary Update provided updated figures including 2019 actual consumption, operating costs, capital expenditures, interest, and other items. These changes resulted in a new set of financial information contained in the Amended Application. In the Amended Application, Corix requested that the proposed rate changes be approved on an interim, refundable basis effective August 1, 2020 pursuant to Section 89 of the Utilities Commission Act.

On July 31, 2020 the Deputy Comptroller issued Order No. 2570 which approved the water rates shown in the table below on interim, refundable basis effective August 1, 2020 and established a regulatory timetable for the written hearing process.

	Existing **Since January 1, 2019**	**Proposed** **August 1, 2020**	**Proposed** **January 1, 2021**	**Proposed** **January 1, 2022**
Fixed Charge *(per bed unit per month)*				
• Residential	\$3.09	\$5.30	\$6.59	\$8.57
• Commercial	\$3.43	\$5.88	\$7.32	\$9.51
Metered Consumption Charge *(per m^3)*				
• Residential	\$1.88	\$3.22	\$4.01	\$5.21
• Commercial	\$1.97	\$3.38	\$4.20	\$5.46
Rate Rider 1 (Consumption Deferral) *(per m^3)*	\$ 1.21	\$1.21	\$1.21	\$1.46

Corix advertised its Amended Application by mailing Notices to all its customers. Persons wishing to actively participate in the hearing were given until September 18, 2020 to register as an intervener. Customers wishing to submit comments on the Amended Application were required to do so by September 28, 2020. Three parties representing Panorama Mountain Resort, Panorama Subdivision Owners Association and Trappers Way Residential Group registered as interveners. No customer submissions were received.

On October 21, 2020 Order No. 2573 was issued with a Revised Regulatory Timetable approving an extension for each remaining item on the timetable by two weeks. Corix provided its response to all Information Requests on October 30, 2020 with its Final Submission provided on November 9, 2020. On November 23, 2020 the Interveners provided their Final Submissions as per the Revised Regulatory Timetable. The Final Submissions included further detailed information requests even though the original review process had provided for only one round of information requests.

On November 26, 2020 Corix requested a delay to its Reply Submission scheduled for November 30, 2020 in order to prepare a response. In the request Corix provided two options for the Deputy Comptroller's consideration. Option 1 would allow Corix an extension until December 14, 2020 to file its Reply Submission. Option 2 would amend the Revised Regulatory Timetable and continue the hearing process with further information requests and submissions from the Utility and Interveners. As most of the additional questions sought to expand on issues raised in the original information requests, the Deputy Comptroller determined that a limited expansion of the hearing process was warranted. Order No. 2577 was issued granting Corix until December 14, 2020 to provide limited responses to the additional questions raised by the Interveners and to provide its Reply Submission. The filing of Corix's Reply Submission concluded the evidentiary portion of the written hearing process.

Several significant issues were raised during the course of Information Requests and Responses and in the Interveners' Final Submissions. They are addressed and determined in the following sections.

3.0 Revenue Requirements

3.1 Groundwater Source Development Program (GSDP) cost

Prior to the GSDP, the Utility obtained its water supply through a Provincial license to divert water from Taynton Creek. The capacity of the raw water intake pipeline was sufficient to meet customer consumption requirements; however, the water source was subject to seasonal turbidity events that resulted in frequent boil water notices and advisories due to an inability to meet the Interior Health Authority's (IHA) drinking water treatment objectives. The intake at Taynton Creek was also at risk of damage from potential debris torrents during high mountain stream events.

In 2014, Corix began the process of identifying an alternative water supply and in November 2016, submitted the GSDP Project application to the Comptroller's office for approval. After a written hearing process, the Comptroller determined that the GSDP project was in the public interest and issued Order No. 2498 on October 5, 2017. Order 2498 approved Corix to proceed with the detailed design and final cost estimate of the GSDP project and to finance the project cost through rate base/rate of return regulation.

On July 10, 2018, the Utility submitted the final cost estimate and physical design to the Comptroller and requested approval to proceed with construction of the project with an estimated completion date of July 2019. Order No. 2531 dated July 30, 2018 determined that the:

"...final cost estimate of $6,934,974 and the physical design for the GSDP Project are accepted and approval to proceed with the construction of the project is granted. Corix is to file a Revenue Requirements and Rate Application by December 31, 2019."

The Evidentiary Update estimates a Final Cost of $7,572,618 based on the final cost estimate, dated February 14, 2020 of $7,539,293 plus an additional amount of $33,325 in its financial model. The additional $33,325 is for an invoice from the Engineering contractor who performed work in 2019. This invoice was inadvertently excluded from the February 14, 2020 final cost estimate. Corix requests that the Comptroller approve the projected cost estimate, including the costs in excess of the amount approved through Order No. 2531. The Utility identifies six reasons why it believes the added costs are justified. (Amended Application pgs. 9-10 & 35-37)

The justifications for the cost escalations were further explored in the Information Requests (IRs) and in the Final Submissions of the Interveners. Corix responded to the IRs and included a confidential response to Trappers Way Residential Group's (TWRG) queries on the operation and electrical requirements of the GSDP project.

In its Final Submission TWRG thanked Corix for providing year round potable water that meets BC Interior Health requirements for drinking water. However, TWRG expressed concern for the rate impact on the current ratepayers.

The Panorama Subdivision Owners Association (PSOA) was more critical of the GSDP project cost escalations. In its Final Submission, PSOA stated that: *"All of the conditions listed above as reasons for these cost overruns were known, or should have been known by any competent contractor capable of completing a project such as this and Corix's answer in no way reasonably explains this huge cost overrun. Additionally, with respect to delays by the IHA in the permitting process…….the $100,000 included in Schedule A Contract Pricing 1.9 Schedule Impact – Delayed Start appears without further explanation to be a totally arbitrary number adding significantly to this cost overrun*." (PSOA Final Submission, Section 1)

PSOA also asked further questions in response to the Utility's response to information requests on the GSDP project cost overruns and to provide details of the contract issues resulting in additional charges of $109,000. Corix's initial IR response had been that: *"At the time of the Evidentiary Update Corix was anticipating additional charges due to contract issues. Corix was able to settle many of the issues favourably. Please see the response to Question 2.1 and confidential Attachment 1 that provides the full variances for the Acres portion of the project.*" (PSOA Final Submission, Section 2.2)

On December 14, 2020, Corix provided a further response in its Reply Submission: "*Corix explained the GSDP project cost over runs in (i) its June 30, 2020 Evidentiary Update, (ii) in its response to the Comptroller's Information Request, and (iii) in its response to PSOA's Information Request. In the response to PSOA IR No. Question 2.1, Corix provided a confidential response to that provides the full variances for the Acres Enterprises portion of the project.*"

"*Corix has explained the bidding process for the GSDP process and the rationale for the final awarded contracts to Acres Enterprises and Ralph Stewart Contracting which minimized costs. Once construction commenced a number of uncontrollable delays and events arose that increased the final cost of the project. Corix submits that, though* *unfortunate, the IHA delays were beyond its control. Given the varying geological formations in relatively short distances on the mountain, well development has been challenging. With respect to the delayed start, those costs were a negotiated amount to reflect the extra costs incurred by the contractor as a result of the later start date, including costs expended for resources on standby*." (Corix Reply Submission, p.10)

Corix also provided supplemental information on the GSDP in Section G of its Reply Submission, including an update that states: "*With regards to Well 20-03, preliminary well development demonstrated the sedimentation was decreasing with subsequent pumping cycles. Corix plans to pump this well, expel the water to the environment and monitor turbidity levels. This well has proven to run clean with a slower increase in flowrate and at lower flowrates. It is expected this well will clean up and operate as a back-up at lower flowrates. Due to long lead times on fabricated parts, limited contractor availability, and winter conditions, Corix anticipates, final commissioning of this well by the Spring of 2021. This will be the final component of the GSDP project to be completed*." (Corix Reply Submission, pg 15, para. 69)

Deputy Comptroller Determinations

The Utility was granted a Certificate of Public Convenience and Necessity for the GSDP project through Order No. 2498. The project was deemed necessary in order to meet IHA's requirements for clean drinking water and a year round supply of potable water for the community of Panorama.

At issue is whether the GSDP project was prudently completed. Although it is unfortunate that costs came in over budget, the courts have been clear that cost overruns are not of themselves a demonstration of imprudence. The Deputy Comptroller accepts the six reasons for the cost escalations provided in the Amended Application and the responses to IRs as evidence that the completion of the GSDP was not imprudently managed.

Therefore, the Total GSDP Project costs incurred by Corix are approved and are to be added to rate base.

3.2 Operations and Maintenance (O&M) Costs

Section 3 of the Amended Application provides information on the O&M expenses for the Utility. Table 1A shows the changes in O&M expenses between the original Application and the Evidentiary Update:

Table 1A: Operating and Maintenance Expenses – Change between February 28 Application and Evidentiary Update

Panorama Water Utility
Schedule of Operating and Maintenance Expenses
Schedule 2A: Changes between February 28 Application and Evidentiary Update

Line No.		Feb 28 Projected 2019	Ev Update Actual 2019	Change EvUp-Feb28	Feb 28 Forecast 2020	Ev Update Forecast 2020	Change EvUp-Feb28
1	Cost of Goods Sold						
2	Chlorine and Supplies	$2,548	$3,524	$976	$4,926	$6,751	$1,825
3	Contracting	$0	$120	$120	$838	$838	$0
4	Billing & Customer Care	$12,224	$12,406	$182	$13,860	$13,860	$0
5	Water testing	$5,970	$6,511	$541	$6,096	$6,096	$0
6	Wages and Salaries (prev. "Wages - Operators")	$108,845	$117,948	$9,103	$103,590	$110,543	$6,953
7	Utilities	$31,098	$32,913	$1,815	$33,869	$83,536	$49,667
8	**Total Cost of Goods Sold**	**$160,685**	**$173,422**	**$12,737**	**$163,178**	**$221,624**	**$58,445**
9							
10	Selling, General and Administration Expenses						
11	Advertising	$123	$11	($112)	$0	$0	$0
12	Accounting	$8,500	$9,005	$505	$9,000	$9,000	$0
13	Vehicles/Travel	$21,314	$25,887	$4,573	$15,941	$18,882	$2,941
14	Freight	$1,196	$779	($417)	$1,221	$2,500	$1,279
15	Insurance	$22,716	$23,924	$1,208	$26,691	$29,387	$2,696
16	Wages - Administration	$31,589	$31,559	($30)	$0	$0	$0
17	Licenses and Permits	$890	$890	$0	$1,300	$1,300	$0
18	Hydrant maintenance	$5,907	$4,184	($1,723)	$6,031	$4,500	($1,531)
19	Repairs and maintenance (see notes)	$2,557	$3,304	$747	$2,611	$4,142	$1,531
20	Office expenses	$16,546	$18,314	$1,768	$0	$4,154	$4,154
21	Shop supplies	$6,122	$4,714	($1,408)	$0	$0	$0
22	Training	$1,198	$1,481	$283	$0	$0	$0
23	Bad Debt	$0	$175	$175	$0	$0	$0
24	Corporate and Regional Services	$64,039	$61,938	($2,101)	$111,960	$102,097	($9,863)
25	Allocations from Panorama & Kootenay Ops	$0	$0	$0	$17,875	$24,970	$7,095
26	Regulatory Costs	$5,275	$5,275	$0	$26,000	$26,000	$0
27	**Total selling, general and administration**	**$187,971**	**$191,440**	**$3,469**	**$218,630**	**$226,932**	**$8,302**
28							
29	**Total Operating and Maintenance Expenses**	**$348,656**	**$364,862**	**$16,206**	**$381,808**	**$448,555**	**$66,747**

During the IR process, several cost categories were highlighted that require the Deputy Comptroller's consideration. They are:

3.2.1 Electrical costs

In response to IRs from the Comptroller's staff and TWRG, Corix undertook a further review of its electrical costs. Corix was able to track the increased consumption to water system leaks. Repairs to the distribution system have been made and Corix has seen a decrease in its electric consumption. Since the water leaks appear to be addressed, Corix forecasts that the revised electrical bill for 2021 will be $55,000.

Corix provided a further explanation in its Reply Submission:

"Trappers Way inquired about the electrical costs from Toby Creek Electrical and the form of bill credit.

Corix will receive a bill credit. Once the corrected bills are invoiced, Corix will process them through its financial system so that Panorama Water is correctly charged for its electrical usage. Corix at Panorama has three separate accounts with Toby Creek

Electrical; one for the former freshwater pump house (old water treatment plant) and two for the waste water treatment plant. The error was due to some contributing factors. The Toby Creek Electrical meter reader was inexperienced. When zero consumption was encountered, the reader assumed a faulty meter and applied an estimated read based on historical usage. The Toby Creek Electrical manager was new to the position during this period of estimated bills and missed it. The Corix Operations Manager did not catch it until closely auditing electricity bills for budgeting purposes in Sept/Oct. Since Corix has other accounts with Toby Creek Electrical, an electricity bill was expected."

Deputy Comptroller Determination

The Utility is to correct its forecast of electricity costs and include any refund in the RDDA.

3.2.2 Wages and Salaries

Corix has used an escalator specifically for increases in wages and salaries. This escalator is held constant at 3% throughout the forecast term and is the figure approved by executive management at CII. 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. (Amended Application, p. 15)

The Utility notes that its compensation package is well below EPCOR Water (West) Inc. and higher than the Sun Peaks Utilities Co., Ltd comparable (which is based on 5 year old data and therefore may not reflect the more recent tightening of the job market in BC). Corix further states that direct comparisons between the utilities are also complicated by local labour market conditions in differing locations. (Amended Application, p. 18)

The 3% escalator was pursued in IRs by TWRG and Comptroller's Staff. The Utility responded that demand for skilled operators remains strong even during the pandemic and the 3% escalator was used to attract and retain qualified staff.

Deputy Comptroller Determination

Although the Deputy Comptroller agrees that attracting and retaining qualified staff is necessary, the existing pay packages seem substantial and an escalator slightly above expected inflation is appropriate during this test period. **The wages and salaries escalator is to be adjusted to 2.5%.**

3.2.3 Corporate and Regional Cost Allocations

Corporate Services Costs are shared costs incurred at the corporate level in order to provide a wide variety of services for CII's business units. 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.

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

Most of CII's indirect Corporate Services Costs do not have a direct correlation with any one particular cost causation driver. All but one cost is allocated using a Composite Allocator based on the standard Massachusetts Formula.

Corix forecasts corporate service cost allocations to Panorama will increase substantially from $26,466 in 2020 to 40,850 in 2022. In its information responses discussing the proposed increase to corporate service cost allocations, Corix explained that:

"*A corporate cost allocation is inherently an estimate of a reasonable allocation of shared costs that are not directly assignable. Corix proposes to use an industry standard three factor model employing a Massachusetts Formula where the three factors are equally related. The three factors for the composite allocator are Gross Revenue, Headcount, and Gross Property, Plant & Equipment (Amended Application, Table 3, p. 27). Regulators in North America including the BCUC and Alberta Utilities Commission have used a three factor equally weighted formula that does not overweight each factor. As the allocation is a reasonable estimate of costs, fairness is the objective rather than preciseness. A review of the three factors shows that it includes labour measured by headcount, cash flow measured by revenues; and infrastructure investment as measured by Gross PP&E.*

Corix operates both regulated and unregulated utilities and services across North America. Where Corix provides a service through an O&M contract but does not own the infrastructure assets that utility would receive allocations primarily based on headcount and revenues plus any nominal assets (e.g. small equipment), reflecting the absence of responsibility for the management of the underlying assets.

Most regulated public utilities have all three factors: Revenues, Headcount, and PPE (assets). In fact, the utility industry is primarily an infrastructure asset management business, where the corporate entity provides asset stewardship and safe-guarding of assets through operating, maintaining, insuring, protecting (physical, cyber, and legal), and long term planning for upgrades, rehabilitation and/or replacement.

Panorama Water with its GSDP project has significant capital infrastructure assets with an average life of 51 years, where portions of it will last up to 75 years. This capital investment is reflected in the rate base of the utility. The asset stewardship and safeguarding function along with associated revenues is the primary driver on why Panorama Water faces an increase in corporate cost allocations." (IRR, Section 8.1)

The increase to corporate service charges was further explained in Comptroller's Staff IR 12.1:

"In summary the GSDP project with its $7.5 million assets and associated revenue requirements has a direct and significant impact on the Gross Property Plant & Equipment factor and the Gross Revenues factor used in the Massachusetts Formula. These two factors are the primary reason the indicative forecast allocated costs for Panorama go up in 2021 and 2022.

In the February 28 Application the forecast for 2021 and 2022 only reflected changes in the overall Total Corporate Services Cost to be allocated from CII. The Total Corporate Services Cost went down in 2021 and then up in 2022. This is reflected in Table 10A in the Amended Application where initially it was $81,370 for 2020, $77,659 for 2021, and $80,003 in 2022. The February 28 Application did provide indicative forecast years for 2021 and 2022 but it did not include Known and Measurable Changes (Bargain Acquisition Adjustment, Asset Impairment Adjustment, and Approved Major Capital Projects) as applied for in the BCUC CAM. The absence of Known and Measurable Changes results in indicative figures that are not reflective of utilities' unique circumstances and those with substantial capital investments in the forecast period. The prior methodology (without Known and Measurable Changes) was suitable for mature stable utilities but not utilities with significant capital build programs since the indicative forecast costs did not anticipate changes in assets, revenues, and headcount; thus providing an inappropriate outlook on what would be the future allocated costs. Because of this issue, Corix proposed Known and Measurable Changes in the BCUC CAM Application to better reflect the indicative allocated costs based on known information.

The primary reason for the allocated cost increases in 2021 and 2022 is the application of Known and Measurable Changes which provides a more reliable estimate of the indicative allocated forecast costs. For Panorama Water, the indicative figures reflected the forecast Gross PP&E, Gross Revenues and Headcount for the three years. The GSDP project has added significant assets, which is reflected in the 2021 and 2022 allocated forecast. The completion of the GSDP Project also has revenue impacts, which are included in Gross Revenues in determining the allocation of costs.

Note the actual 2022 allocation will be based on the actual Property Plant & Equipment as of June 30, 2021, actual Gross Revenues for the trailing 12 months as of June 30, 2021, and the actual Headcount as of June 30, 2021. The indicative allocation forecast with the application of Known and Measurable Adjustments for 2021 and 2022 is a better estimate of what may be the actual results. Actual results may vary from the indicative forecasts if Panorama's actual Gross PP&E, Gross Revenues, and/or Headcount is different; if the other utilities have differences in the those three factors; if new Utilities are added; and also if the Total Corporate Services Cost is different. As stated above, the indicative allocations provide an estimate based primarily from the impact of GSDP.

In its Final Submission, TWRG questioned both the total amount of allocated corporate service costs and the methodology. The Utility responded in its Reply Submission that:

"*The Corporate Services Costs are allocated based on three factors: Gross PP&E, Gross Revenue and Headcount. With regards to Gross PP&E, the allocation would not decrease since the factor is based on gross plant not net plant. With regards to the second factor Gross Revenue, the lower rate base will mean a lower revenue requirement in future years thus reducing Gross Revenue. As assets are depreciated this factor will be allocated less Corporate Services Costs. No Headcount change is anticipated due to depreciating assets.*

Gross PP&E was chosen over Net PP&E to ensure fairness amongst all utilities regardless of the amount of capital expended by Corix on the actual assets. For example, in the case of a water utility that is regulated through the O&M Mark-up regulatory model, the assets are typically financed by the developer rather than by Corix. Those assets would appear on Corix's balance sheet at their original cost, with a corresponding CIAC to reflect the Developer contribution, such that the Net Book Value is zero. If Net Book Value was the composite indicator, then an identical system to that utilized at Panorama Water that is regulated through an O&M Mark-up model would attract no Allocations from the PP&E composite indicator, while the Panorama system would attract full allocations for the PP&E indicator. Given that the two plants would typically require the same level of time and effort from the shared services, corporate and regional groups, such a discrepancy would lead to an unfair distribution of common costs. Hence, Gross PP&E is the more appropriate composite indicator to ensure a fair and equitable cost distribution." (Corix Reply Submission, para. 62 & 63)

Deputy Comptroller Determination

Allocating corporate service costs fairly is a difficult task since they are shared between several subsidiary entities. The Massachusetts Formula was developed decades ago and variations have been used by many regulators in North America, including this regulator. Although it is somewhat arbitrary, it has been found to be relatively fair to the affected entities.

A further test is generally applied to ensure that the cost allocations are less than a utility would face if it provided or acquired those services itself. The "stand alone" principle was tested through the IR process, and confirmed that Panorama receives value from the services provided by Corix corporate.

The Corporate Service Costs are approved.

3.3 Capital Structure, Return on Equity (ROE) and Interest expense

This is the Utility's first rate setting application under the traditional rate base/rate of return regulation. Therefore, the regulator must establish the risk profile of the Utility to establish a fair capital structure and after-tax ROE. Obtaining expert evidence on these matters is very expensive and cost prohibitive for a very small utility. Fortunately, the British Columbia Utilities Commission (BCUC) was a pioneer in developing a ROE mechanism and benchmarking of utility risk profiles.

3.3.1 Capital Structure

Corix proposes a deemed capital structure consistent with that approved by the Comptroller in Order 2498 when the GSDP project was approved. The capital structure consists of 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". (Amended Application, p. 39)

In its IR responses and Final Submission, Corix responded to questions on relative risk posed by TWRG and the Comptroller's staff:

"Questions were raised whether Panorama Water had less risk than its TES utilities. In response, Corix provided a table of 'Comparison of Utilities: Deferral, Return on Equity, and Equity Thickness' for Panorama Water, Corix owned utilities (Dockside Green, UniverCity Burnaby, UBC NDES) plus EPCOR Water (West) Inc. EPCOR is the Comptroller's only other rate base regulated utility. The response showed in a table a comparison of three Corix thermal energy utilities regulated by the BCUC and EPCOR Water, a rate base utility, regulated by the Water Comptroller. Panorama Water has the same RDDA and ROE as UniverCity Burnaby. Panorama Water has the same RDDA as Dockside Green but Dockside Green has a 0.25% higher ROE. Panorama Water has the same ROE as UBC NDES but UBC NDES has an RDDA that covers only uncontrollable

costs. For the two water utilities, Panorama Water has a lower ROE than EPCOR Water, 9.50% compared to 9.75%. However, Panorama Water has a higher equity thickness at 42.5% while EPCOR's is at 40.0%. Panorama Water has an RDDA while EPCOR does not. Instead EPCOR has 4 deferral accounts that cover revenue differences (consumption), tax differences (taxes), interest (cost of debt), and hearing cost. EPCOR's deferral accounts appear to be similar to UBC NDES where uncontrollable costs are included in the deferral. The key difference between Panorama Water and EPCOR is that labour cost differences are not included in EPCOR's deferral accounts." (Corix Final Submission, para. 52)

Deputy Comptroller Determination

The risk profile of Panorama is similar to the very small thermal utilities regulated by the BCUC. While the equity thickness of Panorama is slightly thicker than EPCOR Water (West) Inc (EWW), the proposed equity return is slightly less. The Weighted Average Cost of Capital (WACC) impact between the two small rate base rate of return regulated utilities regulated by the Comptroller is minimal.

The proposed capital structure is approved.

3.3.2 Return on Equity

Corix proposes a return on equity 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. These proposals result in an after-tax ROE of 9.5% for the Utility, consistent with that presented in the GSDP Application. (Amended Application, pp. 39-40)

The Utility responded to questions regarding its relative risk and possible changes to the BCUC benchmark utility ROE during the test period. Corix notes the shareholder risks related to weather and tourism and proposes the following mechanism if the BCUC changes the benchmark utility ROE.

"*With regard to the benchmark equity return of 8.75%, given the observed results from the recent corporate credit spreads, the business and financial risks at this time appear to be normalized and similar to prior to Covid19. As such, Corix submits that the BCUC benchmark utility after tax ROE of 8.75% remains appropriate in the Covid-19 era until it is changed by the BCUC. Notwithstanding this, Corix believes that it is in the best interest of utilities and rate payers to follow the standard benchmarks established by an independent third party regulator rather than incurring the significant costs and effort associated with establishing separate ROE's for each utility. To date the BCUC has not indicated any change to the benchmark rate, but if such a change were to be adopted Corix would modify its ROE accordingly from the first day of the month following such change, and any increase or decrease in ROE would flow through the RDDA to the* *benefit or detriment of the ratepayers.*" (Corix Submission, para. 57)

Deputy Comptroller Determination

The proposed ROE and mechanism for adjustment are approved.

3.3.3 Deemed Interest Rate

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 from the BCUC's GCOC Stage 2 proceeding decision. The 10-Year bond yield was calculated based on a 12 month rolling average as of December 2019. This proposal is consistent with that presented in the GSDP Application approved through Comptroller Order No. 2498. Table 14 below provides the calculation of the deemed interest rate on debt financing. (Amended Application, pg. 39)

Table 14: Debt Financing

	Rate
GCOC 10-Year Bond Yield *(Dec 2019)*	1.55%
BBB-BBB(low) Premium	1.84%
Issuance Fee	0.25%
Deemed Interest Rate	**3.64%**

"*A number of questions concerned updating the deemed interest rate. In response, Corix calculated the average deemed interest up to September 2020 which was 3.35%. Since the pandemic the Corporate Bond yield spread has been volatile and has settled back down to the levels in October 2019. The 10 year Government of Canada bond yield has fallen dramatically from 1.31% in January 2020 to 0.57% in September 2020. This means that when interest rates are trued up for 2020, customers should receive an interest rate below the 3.64% in the Amended Application. Note however that the stock markets in the last few weeks have remain unsettled due to a resurgence of the pandemic which may once again impact corporate bond spreads.*

Corix proposes for the RDDA to true-up its actual deemed interest costs. For clarity, Corix proposes to calculate the actual annual deemed interest rate by averaging the actual monthly deemed interest rates. The actual annual deemed interest rate will be calculated based on the actual rates for the 10 Year Benchmark Canada Yield and the actual 10 Year Corporate Credit Spreads for each month. The resulting actual average deemed interest rate for the year would then be used to true up the RDDA." (Corix Final Submission, para 48 & 49)

Deputy Comptroller Determination

The methodology used to calculate a deemed interest rate off of the GCOC 10-year bond yield plus a premium for a BBB_BBB(low)rated debt is approved. The proposed mechanism to true-up monthly deemed interest rates is also approved. However, the Deputy Comptroller finds that a base deemed interest rate of 3.35% may better reflect interest rates during this pandemic and post pandemic test period.

4.0 Customer Count and Consumption

"*From 2015 through 2019 the number of bed units for residential customers has grown from 1,814 to 2,048. For residential customers, Corix has forecast growth in customer count by 1 customer in each of 2020, 2021 and 2022. This is equal to the growth in customer count for 2019 and in the absence of more definitive information to suggest otherwise, this represents a reasonable customer forecast. Consistent with the approved tariff, Corix assumes that one residential customer represents 10 bed units and has forecasted the number of bed units for 2020, 2021 and 2022 accordingly. Corix has forecasted 8 residential customer additions for each of 2023 and 2024, based on information from developers and has forecasted the number of bed units for these years accordingly.*

For commercial customers the number of bed units has increased from 2,346 in 2015 to 2,438 in 2019. Commercial customer counts and number of bed units have remained constant since 2017 and Corix has no information to suggest that this will change between 2020 and 2024. Corix forecasts no changes to commercial customer count or the number of bed units during the forecast period.

Consumption for both residential and commercial customers is forecast on a monthly basis using the forecast number of bed units and the forecast monthly consumption per bed unit. 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." (Amended Application, p.50)

In response to the Interveners questions on the forecast customer additions in the test years, Corix responded:

"*In addition to the new residential customer already included in the Amended Application, Corix modelled a scenario by adding 2 additional customers in 2020, 1* *additional in 2021 and 3 additional in 2022, assuming they were previously standby customers. The results show a small marginal impact to rates and customer bills. Corix also provided the revenue impact of two additional residential customers in 2021. The net incremental revenue impact of 2 residential customers in 2021 is $2,472.*

On a forecast basis the incremental revenues can be modelled to either reduce the outstanding RDDA balance in 2021, or to offset the target revenue requirement for the year. Corix submits that any changes to customer additions in the final decision that increases the forecast revenue should be used to reduce the RDDA balance. Corix expects these incremental revenue changes to the revenue requirements to be nominal so maintaining the rates as proposed in the three test years is preferred. Flowing any revenue changes to the proposed rates would require recalculation of the rates and tariffs while the expected impact would be very small to the overall tariff rates." (Corix Final Submission, para. 76 & 77)

In response to TWRG's request for the average residential consumption of water per bed unit in 2020 compared it to forecast, Corix provided "*from January 2020 to September 2020 a comparison of residential use per bed unit compared to forecast. So far in 2020 overall residential consumption is about 12% higher than forecast. However, overall commercial consumption is lower by about 16% from forecast. Since total annual commercial consumption is higher than total annual residential consumption, the net overall system impact is a reduction of consumption by 9%.*

If rates are approved as proposed and the actual total 2020 consumption remains down by 9%, this would mean additions to the RDDA since actual revenues are less than forecast due to lower consumption. If approved rates are adjusted to reflect the lower year to date 2020 consumption, then the unit tariff rates would be higher than proposed tariff rates. Corix submits that the Comptroller should approve the Forecast consumption …. as proposed in the June 30, 2020 Evidentiary Update. Any differences in consumption would be trued up in the actuals and placed in the RDDA." (Corix Reply Submission, paras. 83 & 84)

Deputy Comptroller Determination

Recognizing that the positive impact on rates of varying the sales forecast as modelled above is very small and that actual sales are significantly below forecast in 2020, **the Deputy Comptroller accepts the Amended Application sales forecast with any differences being trued-up and added to the RDDA.**

5.0 Contribution in Aid of Future Construction (CIAC)

The Utility was asked in IRs if a CIAC charge similar to Epcor Water (West) Inc. (EWW) would be warranted as a result of the large increase in rate base from the GSDP project. Corix responded that a much higher CIAC charge similar to EWW's cannot be justified without performing a more detailed cost analysis. Corix proposes to escalate the previously approved CIAC charge in 2010 to 2020 dollars at a 2% escalator, resulting in a CIAC charge of $1,585 per bed unit. Alternatively, the Utility could address the matter in its next revenue requirement application, expected to be in 2023.

Deputy Comptroller Determination

The proposed inflationary increase to the CIAC is approved effective the date of this Decision. The CIAC charge is to be set at $1,585 per bed unit. In the next revenue requirement application, Corix is to complete a more detailed cost analysis to determine whether the $1,585 per bed unit is appropriate.

6.0 Rate Design

In compliance with the Comptroller's directive in Order No. 2548, the Utility performed an analysis of its rate design for customer rates. Panorama Mountain Village is a resort community with some people maintaining year-round residency and others maintaining only seasonal occupancy. In addition, the community attracts out of town visitors for the summer tourist season and the winter ski season. Given the resort nature of the community the Utility is a dual peaking water utility.

Rate design determines how the costs for providing water service are allocated among customer groups. The objectives in designing water rates are to allocate costs equitably among customers, encourage the wise use of the water resource, and achieve stable revenues to ensure adequate funding for the Utility's operations.

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. The existing rate structure recovers approximately 48% of the annual revenues from the fixed basic charge and the remaining 52% from the variable metered rates. Residential customers have a load factor of approximately 57%. Commercial customers have a load factor of approximately 47%.

The Utility does not propose any changes to the existing customer classes or rate structures. In response to TWRG and the Comptroller Staff Information Requests regarding changing the rate structure to collect more from the fixed charge and timing of the rate design, Corix provided the following response:

"*Corix submits changing the fixed recovery charge from 48% to 85%, will have a material financial disincentive to conserve water. As the fixed recovery charge in customer bills approaches 100% that is equivalent to not metering customers. Corix submits for the test period the proportion between fixed and variable recovery in rates provides a reasonable balance between conservation and the recognition that costs are primarily fixed though there are some short run variable costs that can be saved such as chlorine and electricity when consumption decreases. However, Corix notes that a strong* *conservation signal will have long term benefits to ratepayers by reducing future system capacity expansion costs that may arise from higher average unit consumption increases.*

Given the uncertainty of whether conservation measures will be adopted by customers, Corix submits it is premature to implement significant changes in the rate structure. The current rate structure continues to be reasonable and fair for customers. Corix also notes that rate design applications require significant modelling and data analysis which can have a material impact on the total application costs for a smaller utility such as Panorama Water." (Corix Final Submission, para. 83 & 84)

Deputy Comptroller Determination

The Deputy Comptroller accepts that it is premature to undertake a comprehensive rate design during this test period of very large rate increases. Through rate design one hopes to encourage conservation without jeopardizing the ability of a utility to recover its revenue requirements, and the very high rate increases will induce conservation by itself. Conservation rates can also forestall expensive capacity additions but Corix is not facing a capacity shortfall in the next few years. Since the proposed rates under-recover the actual fixed costs in the basic charge, it helps that the RDDA trues up actual consumption differences from those approved.

7.0 Revenue Deficiency Deferral Account (RDDA)

Normally a utility would recover its approved annual revenue requirement in the year the costs were approved for. However, 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*."

The Amended Application requests the approval of rates for 2020, 2021 and 2022 only. Corix will submit an application in 2022 to address rates beyond 2022. At that time, Corix will have updated information on the RDDA balance, O&M costs related to the GSDP project, customer consumption trends, and other relevant information. The Amended Application forecast of RDDA balances is based on a revenue target of:

- 52.5% of the total 2020 revenue requirement;
- 74.4% of the total 2021 revenue requirement;
- 93.2% of the total 2022 revenue requirement;
- 118.0% of the total 2023 revenue requirement; and
- 115.8% of the total 2024 revenue requirement.

Corix proposes that the RDDA be trued-up to actual costs for the three test years (2020 to 2022). The RDDA would capture the true-up to actual for the following: revenues, operating and maintenance expenses, depreciation/amortization, taxes, interest, and rate base. Corix proposes to calculate the test year's true-up and the RDDA balances when it files its Annual Report to the Comptroller in the following year on April 30th.

Both TWRG and Comptroller Staff questioned the timing of the phase in of the RDDA, recognizing that the rate impacts in the next several years are very large. In response to TWRG IR 19.1, Corix discussed the impacts on rates of a faster or slower recovery of the RDDA balances. In its Reply submission, the Utility provided this further explanation:

"*Rate smoothing has a number of constraints that limit the options for modifying the proposed rate increases in the first few years, although there are more rate smoothing options available after 2022. The table in Scenario E (updated) shows that the 2020 Revenue Requirement is $928,944. This compares to the Approved 2019 Revenue Requirement of $380,728 which set the existing rates. With no rate smoothing and assuming a full year increase, rates would need to increase by 1.44 times. Any lower rate increase means recoveries from rates are lower than the annual revenue requirements which adds to the RDDA balance. Due to the delayed increase in 2020 (proposed August 1, 2020 with a 71% rate increase) the anticipated recovery for 2020 is only 52.5% of the total 2020 Revenue Requirement. In 2021 with the proposed 25% rate increase the recovery is at 74.4% with an RDDA year-end balance at $715,391. In 2022 with the proposed 30% rate increase the recovery is at 93.2% with the year-end RDDA balance peaking at $789,844.*" (Corix Reply, para. 17)

In response to the Comptroller's IR, Corix provided a scenario showing that at the end of 2026 the RDDA balance would be forecast to be $0:

Scenario E (updated): RDDA Recovery in 2026	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**
June 2020 Evidentiary Update								
Total Revenue Requirements (excl. CDA Rider 1)	$928,944	$1,069,944	$1,102,213	$1,118,592	$1,239,197	$1,198,006	$1,175,566	$1,121,883
Rate Residential *(Fixed and Metered Charge)*	71%	25%	30%	28%	8%	0%	-7%	-16%
Rate Commercial *(Fixed and Metered Charge)*	71%	25%	30%	28%	8%	0%	-7%	-16%
Target % Recovery of Total Rev. Req. (excl CDA)	52.5%	74.4%	93.2%	118.0%	115.8%	119.5%	113.5%	100.0%
Target Revenue Requirement	$487,701	$795,795	$1,027,761	$1,319,938	$1,434,990	$1,431,618	$1,334,659	$1,121,883
RDDA Balance ($)	$441,242	$715,391	$789,844	$588,497	$392,704	$159,093	**$0**	**$0**
Residential Bill Impact	25%	54%	29%	16%	9%	0%	-7%	-16%
Commercial Bill Impact	26%	50%	28%	10%	7%	-1%	-7%	-16%

In its Final Submission, TWRG proposes that one way of smoothing out the impact of the rate increases would be to extend the recovery period of the RDDA. Corix provided the following comments to address TWRG's concerns:

"*Corix submits that the proposed 2020 (71%) and 2021 (25%) rate increases though relatively high are required to maintain the RDDA balance at a reasonable level. If these rate increases were lower it would have the undesirable result of higher RDDA balances to be recovered and higher future rate increases. The peak RRDA balance of $789,844 in 2022 is 72% of that year's revenue requirement. This is a relatively high deferral balance for a utility*. (Corix Reply, para. 19)

"*Corix concurs with Trappers Way that a longer recovery period is possible to smooth out future rates particularly from 2023 onwards. A longer recovery period means there is a lower ramp up and ramp down in rates. However, Corix submits that the proposed rate increases in 2020 and 2021 should not be reduced to a lower level since any reduction would compound the unfavourable impact on future rate increases and the unrecovered RDDA balance, particularly in light of the fact that the 2020 rate increase has already been delayed from March 1, 2020 to August 1, 2020.*" (Corix Reply, para. 22)

Deputy Comptroller Determinations

The Deputy Comptroller is sympathetic to the large rate impacts that the GSDP is having on the customers in Panorama Village. The conversion of the Utility to provide reliable year round clean potable water has been costly but was necessary to comply with IHA's clean water objectives and is timely for a community the size of Panorama.

Some phase in of the new rates is necessary. However, the downside of a phase in is that the negative balances of the RDDA in the early years attract financing charges at the WACC of the Utility. Fortunately, due to low interest rates, the Utility's WACC is as low as can be expected but it is still significant. Therefore, it is in the interests of customers to phase in the new rate impacts as soon as reasonable.

The Deputy Comptroller accepts Scenario E (updated) as a reasonable balance between rate increase phase in and a reasonable period of time to return the RDDA balance to zero. It is accepted that the proposed 2020 and 2021 rate increases are required to maintain the RDDA balance at a reasonable level. The RDDA will carry the revenue differences from the approved revenue requirement.

With the RDDA in place the Consumption Deferral Account is no longer required.

In its next Revenue Requirements filing in 2022 for rates commencing in 2023, the Utility is directed to consider further phase in options.

8.0 Other Revenue

In its Final Submission Corix recognized that:

"*The Amended Application did not have connection fee revenue in the test periods 2020, 2021, and 2022 arising from the new residential customer additions. The new connected customers (converted from standby customers) should have had additional revenue in each year for a $50 turn-on fee plus a $225 residential connection charge. The Test Years (2020 to 2022) in the Amended Application have one additional customer in the forecast for each year, therefore Line 37 Other Income should include additional revenue of $275 for each of the test years*." (Corix Final Submission, para. 78)

Deputy Comptroller Determination

Other Revenue is to be adjusted for new customer forecasts.

9.0 Refiling of Application

Based on the various determinations made in these Reasons for Decision, Corix will need to refile its forecast 2020-2022 Revenue Requirements and Rates, with supporting schedules, to comply with all directives of the Deputy Comptroller and other updates the Utility has noted in its information responses.

Deputy Comptroller Determination & Directive

Corix is to refile the Amended Application within four weeks from the date of this Order to comply with all determinations and directives in these Reasons for Decision. The Amended Application, with adjustments as identified in these Reasons for Decision, will be approved following review of the refiling by Corix of the 2020-2022 Revenue Requirements and Rates, with supporting schedules, to comply with those directives.

Dated at the City of Victoria, in the Province of British Columbia, this 16th day of February 2021.

Jesal Shah, P.Eng., MBA
Deputy Comptroller of Water Rights