PROVINCE OF BRITISH COLUMBIA

OFFICE OF THE COMPTROLLER OF WATER RIGHTS

IN THE MATTER OF

the *Water Utility Act*, R.S.B.C. 1996, Chapter 485

and

the *Utilities Commission Act*, R.S.B.C. 1996, Chapter 473

and

Corix Multi-Utility Services Inc. – Panorama Water

Application for Revenue Requirement and Rates

For 2020 through to 2022

Corix Multi-Utility Services Inc. – Panorama Water

FINAL SUBMISSION

Submitted 9th November 2020

Table of Contents

I. INTRODUCTION

1. This submission summarizes the position of Corix Multi-Utility Services Inc. ("Corix") on the Application for Revenue Requirement and Rates For 2020 through to 2022.

2. This submission briefly reviews the main aspects of the Application and, in light of the information requests, clarifies and provides justification for the approvals sought by Corix.

II. OVERVIEW

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

4. Customer rates for the Utility were last approved in Decision and Order No. 2551 issued by the Office of the Comptroller of Water Rights ("Comptroller"), on August 23, 2019. Decision and Order No. 2551 approved a revenue requirement and a water rate and tariff structure effective January 1, 2019.

5. On February 28, 2020 Corix filed its original Application for Revenue Requirement and Rates For 2020 through to 2022 ("February 28 Application") for rates effective March 1, 2020. Corix subsequently filed a Supplementary Information Filing on April 17, 2020 which provided scenarios for a delayed rate increase due to COVID-19 and a proposed Evidentiary Update. On May 19, 2020 the Comptroller issued Order No. 2565 setting out a filing date of June 30, 2020 for the Evidentiary Update.

6. On June 30, 2020, Corix submitted its Evidentiary Update ("June 30, 2020 Evidentiary Update" or "Evidentiary Update") along with an Amended Application ("Amended Application") for a rate increase effective August 1, 2020. The Comptroller issued Order No. 2570 making the then-existing tariff interim as of March 1, 2020, and approving an interim and refundable rate increase effective August 1, 2020. Order No. 2570 also set the Regulatory Timetable for the hearing.

7. Three Interveners registered in the hearing: Trappers Way Residential Group ("Trappers Way"), Panorama Subdivision Owners Association ("PSOA"), and Panorama Mountain Resort ("PMR"). Information Requests ("IR") No. 1 were received from the Comptroller, Trappers Way, and PSOA. PMR did not file any information requests but instead noted the questions and concerns from the other parties for which PMR would be interested in receiving a response. On October 9, 2020 Corix requested an extension to the Regulatory Timetable. The Comptroller issued Order No. 2573 with a Revised Regulatory Timetable.

8. On October 30, 2020 Corix filed its responses to Information Requests No. 1 received from the Comptroller, Trappers Way, and PSOA. In that October 30, 2020 filing, Corix submitted an amendment to its application resulting from the additional investigations undertaken in responding to the requests. The amendments impact the application found in Section 1.2 Regulatory Approvals Sought in the Amended Application (contained in the June 30, 2020 Evidentiary Update) plus the request to amend Water Tariff Schedule B for the Contribution in Aid of Future Construction (altogether, the "Revised Application"). Corix's justification for the final approvals sought based on the Revised Application are discussed in the Justification section below.

III. APPROVALS SOUGHT

9. Based on the Revised Application, Corix requests the following, pursuant to Sections 59 to 61 and Sections 89 and 90 of the *Utilities Commission Act* ("UCA"):

1) Approval of the proposed revenue requirements for the Test Years 2020, 2021 and 2022 as described in the June 30, 2020 Evidentiary Update. These are based on:
    a. The operating and maintenance costs presented in section 3 of the Evidentiary Update, as amended in the Corix Response to Comptroller IR No. 1 Question 6.1 for electricity costs;
    b. The rate base as presented in section 6 of the Evidentiary Update, as amended by the Response to Comptroller IR No. 1 Q. 15.1 for the Groundwater Source Development Program ("GSDP") Final Cost Estimate October 2020 Update;
    c. The revenue requirement as provided in section 7 of the Evidentiary Update, as amended for any consequential adjustments to revenue, expenses, plant, and depreciation;
    d. A deemed capital structure of 57.5% debt and 42.5% equity;
    e. Long term debt financing costs estimated at 3.64% per annum;
    f. A return on equity (ROE) of 9.5%, discussed in section 5.1.3 of the Evidentiary Update;
    g. Forecast Operating and Maintenance costs as provided in section 3 of the Evidentiary Update and as amended for the Corix Response to Comptroller IR No. 1 Question 6.1 for electricity costs;
    h. The depreciation rates outlined in section 5.2 of the Evidentiary Update.
    i. Amended Other Income/Connection Fees as revised in the Corix Response to Comptroller IR No. 1 Questions 25.2 and 25.3.

2) Approval of the:
    a. Corporate and Regional Services Cost allocation methodology presented in section 3.4 of the Evidentiary Update.
    b. Corporate and Regional Services Cost allocations to the Utility for 2020, 2021 and 2022, as presented in section 3.4 of the Evidentiary Update and as amended from any other

consequential adjustments to allocation composite values arising from the Comptroller Decision.

3) Approval of the projected GSDP project costs, inclusive of an Allowance for Funds Used During Construction ("AFUDC") and other additional costs, as explained in section 4 of the Evidentiary Update and as revised in the Response to Comptroller IR No. 1 Question 15.1. Specifically, approval of the GSDP Final Cost estimate, October 2020 Update in Table 11: Total GSDP Project Costs (before reserve fund withdrawals and excluding AFUDC) in the amount of $7,630,017.[1] Also, approval of the AFUDC for the GSDP project in the amount of $299,051.[2]

4) Approval of Customer rates:
   a. Effective March 1, 2020 (unchanged from prior approved rates by Order No. 2551)
      i. Residential Consumption Charge of $1.88 per cubic meter
      ii. Residential Fixed Charge of $3.09 per bed unit per month
      iii. Commercial Consumption Charge of $1.97 per cubic meter
      iv. Commercial Fixed Charge of $3.43 per bed unit per month
      v. Consumption Deferral Account Rate Rider 1 of $1.21 per cubic meter.

   b. Effective August 1, 2020 (consistent with the interim rates currently in effect)
      i. Residential Consumption Charge of $3.22 per cubic meter
      ii. Residential Fixed Charge of $5.30 per bed unit per month
      iii. Commercial Consumption Charge of $3.38 per cubic meter
      iv. Commercial Fixed Charge of $5.88 per bed unit per month
      v. Consumption Deferral Account Rate Rider 1 of $1.21 per cubic meter.

   c. Effective January 1, 2021
      i. Residential Consumption Charge of $4.01 per cubic meter
      ii. Residential Fixed Charge of $6.59 per bed unit per month
      iii. Commercial Consumption Charge of $4.20 per cubic meter
      iv. Commercial Fixed Charge of $7.32 per bed unit per month
      v. Consumption Deferral Account Rate Rider 1 of $1.21 per cubic meter.

   d. Effective January 1, 2022
      i. Residential Consumption Charge of $5.21 per cubic meter
      ii. Residential Fixed Charge of $8.57 per bed unit per month
      iii. Commercial Consumption Charge of $5.46 per cubic meter
      iv. Commercial Fixed Charge of $9.51 per bed unit per month
      v. Consumption Deferral Account Rate Rider 1 of $1.46 per cubic meter.

5) Corix requests that the interim rate increase effective August 1, 2020 be subsequently adjusted if and as required based on the Comptrollers' final decision when rendered on this application, with any refund or additional charges to be accounted for with interest, retroactive to August 1, 2020.

---

[1] Corix Response to Comptroller IR1, Q. 15.1
[2] June 30, 2020 Evidentiary Update, pp. 37-38

6) In accordance with the final decision, if permanent rates differ from the period from March 1, 2020 to July 31, 2020 any refund or additional charges are to be accounted for with interest, retroactive to March 1, 2020.

7) Approval to establish a Revenue Deficiency Deferral Account ("RDDA") to capture the difference between the calculated revenue requirement and the actual revenue requirement due to the multi-year phase-in approach used to reduce the impact of rate increases. Also, approval for an RDDA compliance filing for actual year end results. The RDDA proposals are discussed in section 7.3 of the Evidentiary Update.

    a. Corix in response to Comptroller Information Request No. 1 Question 16.1 provided a clarification to the Deemed Interest Rate that would be used in the calculation to true-up the proposed Revenue Deficiency Deferral Account. Corix proposed for the RDDA true-up to be based on 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 average deemed interest rate for the year would then be used to true up the RDDA.[3]

    b. RDDA Compliance Filing for Actual Year-End Results: In the interest of accountability, Corix proposes to calculate the test year's true-up and the RDDA balances when it files its Annual Report to the Comptroller on April 30 of the following year. For example, in the 2020 test year ending December 31, 2020, Corix will file the actual results for 2020 and calculate the actual December 31, 2020 RDDA adjusted balance. The actual year-end RDDA balance is filed with the Comptroller for acceptance. In the interest of transparency, Corix proposes that if the capital expenditures and/or Operating and Maintenance ("O&M") expenses in each given test year are 10% above the approved amounts, the Comptroller automatically initiates a brief special review process to ensure that that costs incurred are prudent and reasonable. If there are minor variances below the 10% threshold, the Comptroller would conduct its compliance review in the normal manner. For clarity, the proposed 10% threshold is for the aggregate capital expenditures or O&M in each respective year. The Comptroller at its discretion for any significant over-spending on capital expenditures and/or O&M may wish to conduct a detailed review.[4] Corix notes the timing of the Decision on the Revised Application may be issued in early 2021, and therefore additional time from April 30, 2021 may be required to file the Annual Report to incorporate the Decision's approvals and adjustments, if any.

8) Approval to discontinue any future additions to the Consumption Deferral Account with the approval of the RDDA, as discussed in section 10 of the Evidentiary Update.

---

[3] Cover Letter to Corix Response to Comptroller IR No. 1, Clarification to Application, p. 3.
[4] June 30, 2020 Evidentiary Update, p 49

9) Approval of a decommissioning cost deferral account, as discussed in section 7.1 of the Evidentiary Update.

10) Corix proposes to revise its Amended Application (dated June 30, 2020) by also updating its Schedule “B” - Contribution in Aid of Future Construction from the existing $1,300 per bed unit to $1,585 per bed unit to be effective on January 1, 2021.[5]

11) That all confidential information submitted in the hearing remain confidential as the release of this information could adversely affect Corix’s business and by extension, its customers. Confidential materials were filed in the February 28 Application and in the June 30, 2020 Evidentiary Update pertaining to Corporate and Regional Service Allocations contained in Financial Schedules: Schedule 3 and Appendix 3. Corix also filed in the response to Information Request No. 1 three confidential attachments: Trappers Way Question 3.6.3 (Confidential Attachment 1) and Question 5.1 (Confidential Attachment 2) and PSOA Questions 2.1 and 2.2 (Confidential Attachment 3).

12) That existing Water Tariff No. 4 for water service at Panorama, effective January 1, 2019 be updated to Water Tariff No. 5, effective March 1, 2020, on a final basis, based on the approvals regarding the proposals within the Revised Application. In this Revised Application, the rate change in 2020 is proposed to be effective August 1, 2020. The rates prior to August 1, 2020 are proposed to remain unchanged from Water Tariff No. 4. The proposed rate changes for 2021 and 2022 are proposed to be effective on January 1st in those years.

IV. JUSTIFICATION

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

A. Operating and Maintenance expenses

11. Rate increases at water utilities are necessitated by the increasing revenue requirements of the utility. Revenue requirements for the Panorama Water Utility comprise operating and maintenance (O&M) expenses, administrative and general expenses. Areas of interest included contracting, chlorine costs, wages and salaries, electricity expense, insurance, allocation from Panorama and Kootenay Ops, and Corporate and Regional costs.

Contracting

12. Contracting costs are primarily for electrical contractors that are occasionally needed. Corix does not have certified electricians on staff.[6]

[5] Corix Response to Comptroller IR1, Q. 18.2
[6] Corix Response to Comptroller IR1, Q. 4.1

Chlorine Costs

13. Corix has forecast chlorine costs for 2021 based on the average of the previous 5 years. An average has been historically used since the chlorine costs show no predicable trend. For 2022 and onwards, the chlorine costs are increased by 2.0% CPI. The GSDP project includes a UV system which may reduce the chlorine demand. However, chlorine demand is dependent on many factors (e.g. source water quality, community water demand). Corix submits it will require time and experience operating the GSDP system to quantify changes in chlorine demand.[7]

Wages and Salaries

14. The 3% labour escalator was used to attract and retain qualitied staff. Corix submits an escalator of 2% or lower would be inconsistent with this objective. Although the pandemic and the resulting economic fallout has negatively impacted many industries, the utility industry is an essential service and demand for qualified Operators remains strong. In fact, Corix has lost Operators to other entities during the pandemic, but fortunately none have been lost from the Kootenay region. If Corix's compensation levels are deemed to be less attractive than its competitors (including Municipalities and Regional Districts), Corix's ability to attract new staff and retain existing staff will be compromised, which could have a material adverse impact on the quality and reliability of the services provided.[8]

15. Corix provided a range of salaries for other water operators or equivalent in BC. The information shows that Corix's labour rate is within market norms, and the demand for skilled trades still appears to be robust as the employers are either utilities or municipal governments with a continued requirement for skilled trades operators.[9]

16. Table 2: Gross Wages and Salaries in Panorama in the Evidentiary Update on page 18 shows the cost of $100,494 per FTE. The cost per FTE is compared to EPCOR Water (West) Inc. and Sun Peaks. Comparative information was provided as directed by the Comptroller in Appendix A to Order No. 2548, Reasons for Decision, p. 9. The directive from the Order suggested EPCOR and Sun Peaks be used as comparators.

17. The comparison in Table 2 shows that Gross Wages and Salaries for Panorama Water is higher than Sun Peaks ($87,608) and lower than EPCOR ($112,000). Corix notes that Sun Peaks Water has changed ownership to Sun Peaks Mountain Resort Municipality.[10] Since that acquisition by the Municipality, it is likely (though not confirmed) that the wages for operators have been adjusted to the municipality's wage scale. Corix provided an overview of water operators or equivalent salaries in BC.[11] The analysis found that Corix's salary levels are reasonable. A recent job posting had a Regional District of Kootenay Boundary ("RDKB") seeking a Wastewater Treatment Plant Operator 2 at $35.49 per hour. Corix calculated a direct salary of $73,819 per year. The loaded salary with benefits to the employer is $95,965 without any overtime, incentive payments, and emergency call

[7] Corix Response to Trappers Way IR1, Q. 2.1
[8] Corix Response to Comptroller IR1, Q. 3.1
[9] Corix Response to Trappers Way IR1 Q. 4.1.
[10] Corix Response to Trappers Way IR1, Q. 4.1.1
[11] Corix Response to Trappers Way IR1, Q. 4.1.2

outs. Corix's $100,494 compares very favourably the RDKB salary since the Corix salary includes additional costs for overtime, incentive payments, and emergency call outs. Note that Corix is also subject to the 1.95% Employer Health Tax that was imposed by the Government of British Columbia to offset the elimination of Medical Services Plan premiums, which is reflected in these loaded labour costs.

18. When compared to EPCOR Water, Panorama Water is very favourable in wages and salary. The evidence shows that for labour the Utility, is paying a reasonable salary that would support a 3% labour escalator to attract and retain qualified staff. Corix submits that an ongoing salary escalator of only 2% per year may negative impact its ability to maintain competitiveness in the labour market.

<u>Electricity Expense</u>

19. With the GSDP project operational, Panorama Water receives three electric bills (two from BC Hydro) and one from Toby Creek Electrical. This spring and summer Panorama Water experienced higher electricity consumption due to both the higher level of pumping required for the ground source water, and leaks in the distribution system. In the Amended Application, based on the latest monthly bills and consumption at that time Corix estimated that the 2021 electricity cost would total $92,470. In retrospect a significant portion of the higher electricity consumption was a result of the distribution leaks. As the leaks were repaired the electricity consumption declined and the 2021 electricity cost is now estimated at $55,000.[12]

20. All leaks were located on the service line between the watermain and the customer's curbstop (isolation valve located at the property line). In the case of all Greywolf Drive leaks, the 25mm copper service line was deficiently backfilled by the developer's contractor with 19mm minus aggregate (crush) mixed with cobble. The fractured aggregate and cobble damaged the copper service lines resulting in punctures. It is premature to draw a final conclusion, but all evidence gathered to date indicates that the recent leaks are a result of installation deficiencies and not erosion or corrosion related to water quality. [13]

<u>Insurance</u>

21. Corix presently has one insurance policy that includes Panorama Water and its affiliates. The total insurance premium is based on replacement value of assets for property insurance, and revenues for liability insurance. Insurance costs have been increasing.[14] The three most significant reasons for the insurance increase over the years are the loss of Corix Water Products when it was sold in 2018, rising global insurance premiums resulting largely from significant payouts for catastrophic events (weather, fire, etc.), and the significant increase in insured asset values associated with the GSDP project, which increased both gross plant and revenues. The GSDP project added $7.6 million of direct costs to the assets which caused most of the increase in 2019 and 2020.[15]

---

[12] Corix Response to Comptroller IR1, Q. 6.1
[13] Corix Response to Trappers Way IR1, Q. 3.5
[14] June 30, 2020 Evidentiary Update, Table 1: Operating and Maintenance Expenses, line 13, p 13,
[15] For details see: Corix Response to PSOA IR1, Q. 3.1 and Corix Response to Trappers Way IR1, Q. 5.1

Allocations from Panorama and Kootenay Ops

22. Allocations from Panorama and Kootenay Ops encompass cost allocations from the cost centre shared between Corix's three utilities based in Panorama and Corix's Kootenay Operations.[16] Allocations include offices expenses, shop supplies, training, and common assets allocation. [17] Corix further explained, the common assets are from Panorama and Kootenay Admin. These assets are used to provide support for the operations in Panorama Water, Panorama Wastewater, Panorama Propane, and Kootenay Ops. The assets include computers, telephone system, office, VT SCADA, and furniture. Panorama Water is allocated 13.75% for the depreciation of these assets.[18]

23. The allocations from Panorama and Kootenay Ops are utilized for the benefit of local personnel to carry out day to day operations for the customers in the local business units. Since Panorama Water uses these shared labour resources it is reasonable and fair to share in the costs that support the local operations.

B. Corporate and Regional Services Costs

Nature of Corporate and Regional Costs

24. Corporate and Regional Services Costs are expenses that include costs related to support functions that are incurred at both a corporate level and a regional level and subsequently allocated to the relevant utilities, including Panorama Water.

25. 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.[19]

26. 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, regulatory support, and governance and compliance); the associated building and vehicle expenses; and office expenses, travel, training and external consulting costs. 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.[20]

---

[16] June 30, 2020 Evidentiary Update, Table 1: Operating and Maintenance Expenses, line 25, p 13,
[17] June 30, 2020 Evidentiary Update, pp. 21-22
[18] Corix Response to Comptroller IR1, Q. 7.1
[19] June 30, 2020 Evidentiary Update, p. 25
[20] June 30, 2020 Evidentiary Update, p. 31

Corporate Services Allocation Methodology

27. A Corporate Services Cost Allocation Methodology is used. Costs are grouped into homogenous categories/services and then are identified as directly assignable costs or indirect costs. For Indirect Costs functional allocators used include employee headcount, number of customers, and call volume by business unit. Most of the indirect Corporate Services Costs do not have a direct correlation with any one particular cost causation driver. A Composite Allocator based on the standard Massachusetts Formula is used with equal weightings based on the three factors: Gross Revenue, Headcount, and Gross Property, Plant & Equipment.[21]

28. The Massachusetts Formula is an equally weighted three factor model used in various jurisdictions across North America, including (but not limited to) those regulated by the U.S. Federal Energy Regulatory Commission, Alberta Utilities Commission, and British Columbia Utilities Commission ("BCUC"). In BC, the BCUC has previously approved the use of the Massachusetts Formula for FortisBC and Creative Energy.[22]

29. The corporate allocation methodology proposed with Panorama Water is consistent with the BCUC Corporate Cost Allocation ("CAM") Application. The BCUC CAM hearing was scheduled to complete its arguments phase at the end of 2020. .[23] However, on November 2, 2020 the BCUC issued Order No. G-276-20 which extended the Regulatory Timetable. The last item on the timetable has the Corix Supplemental Reply Argument scheduled for November 19, 2020. It appears that the BCUC may issue its decision sometime in early 2021

30. Corix is utilizing a standard industry corporate allocation methodology to allocate its costs. Corix is not aware of any alternate methodology that would more accurately and fairly allocate its costs, and the outcome of an independently performed study commissioned by Corix supported the use of the proposed methodology. Panorama Water with its large recent investment in the GSDP project has experienced large increases in gross assets and revenues, two of the three composite indicators utilized in the Massachusetts model.[24]

Standalone Utility

31. The Corporate Services Costs and Regional Services Costs provide specialized services that include accounting, accounts payable, tax, treasury, human resources, information technology, health, safety and environment, legal, communications, finance, and corporate administration. As a standalone utility, the costs to obtain these specialized services through contractors or third-party consultants would be significantly higher. Corix notes that the costs allocated to Panorama Water are without mark-up.[25] Obtaining these services from a third-party supplier would entail paying for a

[21] June 30, 2020 Evidentiary Update, pp. 26-27
[22] Corix Response to Trappers Way IR1, Q. 8.1
[23] Corix Response to Comptroller IR1, Q. 9.1
[24] Corix Response to Trappers Way IR1, Q. 8.2
[25] June 30, 2020 Evidentiary Update, p. 34

profit margin to the supplier. Corix provided examples of Corporate and Regional Services Costs in information technology services, compliance services, and legal services.[26]

32. Corix submits a small utility operation owned by a larger company has many benefits when compared to a standalone utility. A small standalone water system may have inefficiencies resulting from not having the operating expertise, financial and technological capability or economies of scale to provide service or raise capital as efficiently as larger utilities. Smaller utilities are likely to have higher costs of debt, assuming that debt financing is even available. Larger utilities have greater access to capital and as such are generally more capable of making mandated and other necessary infrastructure upgrades to water systems in a timely manner in order to provide safe and reliable service. Larger utilities generally are able to spread support services over a larger customer base, thereby reducing the costs to serve each customer. Since many administrative and support activities can be efficiently centralized to gain economies of scale, a larger utility sharing resources can improve operating efficiencies, lower costs per unit, and improve service at the same time.

33. Corix submits that a small standalone utility may also lack the technological capability to operate at the same level of service, safety, and reliability as Corix.

Reasonableness of Corporate and Regional Services Allocation Amounts

34. A number of information requests examined the quantum of the allocated amounts for Corporate and Regional Services costs that arise from the Massachusetts Formula.

35. The GSDP project and its completion has a direct impact to Panorama Water's assets and revenues. The GSDP project has added over $7.6 million of assets. This capital asset investment has also impacted the revenue requirements of the Utility increasing the revenues charged to customers. These substantial increases in assets and revenues has a direct impact on the resulting allocated corporate costs since the Massachusetts Formula composite allocators are based on assets, revenues, and headcount.

36. A corporate cost allocation is inherently a "best efforts" attempt to fairly and objectively allocate 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 weighted. The three factors for the composite allocator are Gross Revenue, Headcount, and Gross Property, Plant & Equipment ("PP&E") (Amended Application, Table 3, p. 27). Regulators in North America including the BCUC and Alberta Utilities Commission have approved the use of 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.[27]

[26] Corix Response to Comptroller IR1, Q. 13.1
[27] Corix Response to Comptroller IR1, Q. 8.1

37. Corix compared its Corporate and Regional Services Costs to EPCOR Water (West) Inc.'s Inter-Corporate Service Charges.[28] EPCOR Water West is the only other rate base utility regulated by the Comptroller. EPCOR's 2020 Inter-Corporate Service Charges are $192,000 while Panorama Water's is $102,000. EPCOR has gross plant at $13.4 million and revenues at $1.711 million which are higher than Panorama's. The overall figures indicate that relative to size of assets and revenues Panorama Water's allocated costs are comparable to EPCOR's.

38. Concerns were raised that Panorama Water will be allocated higher costs but with no increased work provided from those services. 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. [29]

39. Most regulated public utilities have all three factors: Revenues, Headcount, and PP&E (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. [30]

40. 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. [31]

41. In summary, Corix submits that the Corporate Services and Regional Costs have been allocated using an industry standard equally weighted three factor model, the Massachusetts Formula. The Massachusetts Formula uses Gross Property, Plant & Equipment, Gross Revenues, and Headcount which are common factors that have been approved by other regulators in North America. The GSDP project is a major capital investment that particularly impacts the Gross PP&E and revenues of the Utility. This is the reason Panorama Water has been allocated higher costs relative to previous years. The allocated cost when compared to EPCOR Water West is relatively comparable. Over the course of the life of the assets Corix will provide the asset stewardship and safeguarding functions to ensure the assets over the long-term provide service at an adequate and reasonable level. In the event of an emergency or natural disaster the Corporate and Regional Services will facilitate timely and responsive management attention utilizing specialized expertise and resources. In contrast, in the event of an emergency a small standalone utility may have difficulty obtaining the specialized resources it requires in a timely manner.

---

[28] Corix Response to Trappers Way IR1, Q. 9.2
[29] Corix Response to Comptroller IR1, Q. 8.1
[30] Corix Response to Comptroller IR1, Q. 8.1
[31] Corix Response to Comptroller IR1, Q. 8.1

C. Revenue Deficiency Deferral Account

Rate Smoothing

42. Corix is proposing the use of a Revenue Deficiency Deferral Account 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."[32]

RDDA True-up to Actual

43. Corix proposes that the RDDA be trued-up to actual costs for the three test years (2020 to 2022). The RDDA would capture actual revenue and costs incurred in the test years, rather than the forecast reflected herein. The RDDA would capture the true-up to actual (or in the case of taxes imputed actual) for the following: revenues, operating and maintenance expenses, depreciation/amortization, taxes, interest, and rate base. Revenue variances occur because of differences in forecast consumption due to customer count and customer use. Corix proposes that the RDDA true-up be for the three test years 2020, 2021, and 2022. [33]

RDDA Compliance Filing for Actual Year-End Results

44. In the interest of accountability, 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. For example for the 2020 test year ending December 31, 2020, Corix will file the actual results for 2020 and calculate the actual December 31, 2020 RDDA adjusted balance. The actual year-end RDDA balance is filed with the Comptroller for acceptance. Section III: Approval Sought Item 7b above discusses the proposed procedures in dealing with discrepancies between budgeted and actual revenue surpluses and shortfalls.

45. In the absence of the proposed RDDA, Corix would be required to file proposed forecast Test Year expenses to set rates. However, as described above, Corix has not stabilized its operations with the new wells and reservoir thus any estimate is subject to actual differences. Hypothetically, if test year expenses were approved there is uncertainty in either direction on whether the actual costs would be higher or lower than the approved test year amounts. If the test year amounts were overstated, Corix would over-earn. If the test year amounts were understated, Corix would under-earn. This uncertainty would likely lead to the need for annual rate filings for the next two to three years, resulting in higher regulatory costs that would flow through to the rate payers. Given the uncertainty of operations, Corix submits that earning its approved allowed rate of return without variances would be in the best interests of both the ratepayers and the Utility. Corix also submits that the proposed RDDA and review process provides an incentive for Corix to operate efficiently and effectively while still being at risk for cost over-runs.[34]

[32] June 30, 2020 Evidentiary Update, p. 47
[33] June 30, 2020 Evidentiary Update, p. 48
[34] Corix Response to Comptroller IR1, Q. 17.4

46. Corix submits that the proposed RDDA, true-up to actual, and the RDDA Compliance Filing for Actual Year-End Results provides a balanced approach that achieves rate smoothing while it incents Corix to operate efficiently and effectively. Corix remains at-risk for the actual spend until it can satisfactorily support the reasonableness of costs incurred.

D. Deemed Interest

47. 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.[35] In the Amended Application the 10-Year bond yield was calculated based on a 12 month rolling average as of December 2019. The proposal was consistent with that presented in the GSDP Application approved through Comptroller Order No. 2498. Table 14 in the Amended Application calculated a deemed interest rate of 3.64%.[36]

48. A number of questions concerned updating the deemed interest rate.[37, 38] 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.

49. 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.[39]

E. Return on Equity (ROE) and Capital Structure

50. 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

[35] BCUC Generic Cost of Capital Proceeding Stage 2 Decision associated with Order G-47-17, p. 123.
[36] June 30, 2020 Evidentiary Update, p. 39
[37] Corix Response to Comptroller IR1, Q. 16.1
[38] Corix Response to Trappers Way IR1, Q. 15.4
[39] Corix Response to Comptroller IR1, Q. 16.1

Thermal Energy Service ("TES") utilities. These proposals result in an after-tax ROE of 9.5% for the Utility, consistent with that presented in the GSDP Application.[40]

51. Corix proposes a deemed capital structure consistent with that presented in the GSDP Application approved through Comptroller Order No. 2498, which comprises 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". [41]

52. Questions were raised whether Panorama Water had less risk than its TES utilities.[42, 43] 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.

53. Corix also compared the risk of Panorama Water relative to Shannon Estates Utility Ltd. ("Shannon Estates") regulated by the BCUC as a TES utility. Both Panorama Water and Shannon Estates have the same proposed ROE and capital structure for setting 2020 rates. Panorama Water and Shannon Estates share many similarities such as the total value of rate base, deferral account treatment, captive customers with no or limited utility alternatives, and the same requested ROE and capital structure. They differ in that Shannon Estates has more customers than Panorama Water. Also, Shannon Estates is located in an urban center while Panorama is located in non-urban area at Panorama Mountain Resort. [44]

54. It appears that the deferral accounts for Shannon Estates are not materially different from what is being proposed for Panorama. However, Shannon Estates has a higher customer count and is located in an urban centre (in the westside of Vancouver), resulting in relatively lower risk than Panorama Water. The information suggests the business and financial risk between Panorama and

---

[40] June 30, 2020 Evidentiary Update, pp. 39-40
[41] June 30, 2020 Evidentiary Update, p. 39
[42] Corix Response to Comptroller IR1, Q. 17.3
[43] Corix Response to Trappers Way IR1, Q. 15.1
[44] Corix Response to Trappers Way IR1, Q. 15.1

Shannon Estates are very similar. Overall, Corix submits the two utilities are relatively similar in risk and are comparable in most key respects. [45]

55. The Corix proposal for its RDDA does not eliminate risk to the shareholder since the utility has proposed a regulatory review process for the actuals. If the proposed RDDA for Panorama Water is approved, Corix does not agree that the risk to Panorama is less than its TES utilities. Corix in the Amended Application proposed safeguards for customers so that Corix would face risks in applying its actual costs to the RDDA for the differences. Corix proposed to file in its Annual Report to the Comptroller, the variances from budgeted costs, and for the Comptroller to review and accept the actuals with differences going into the RDDA. If some costs to were found to be inappropriate in that review, the Comptroller would be able to disallow all or a portion of the variance. This proposal provides an appropriate incentive for Corix to spend reasonably and prudently and if costs are not prudent then the utility will be at risk for the disallowance. Corix believes this review mechanism provides a reasonable balance and incentive for Corix to operate the water system safely and effectively.[46]

56. It should also be noted that the resort nature of Panorama represents a risk to the Utility. If tourism slows and seasonal residents visit less frequently consumption would be negatively impacted, resulting in higher RDDA balances that must be funded by the Utility. If the consumption impact is significant the RDDA balance would compound at a rate that could place the timing and extent of its recoverability in doubt.

57. 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.[47]

F. <u>Groundwater Source Development Program (GSDP)</u>

58. In 2014, Corix began the process of identifying an alternative water supply in order to address the water source being subject to seasonal turbidity events and risk of damage from potential debris torrents during high mountain stream events. Corix focused on addressing these issues for two years from initial water source assessments to the submission of the final Groundwater Source Development Program Project application to the Comptroller's office in November 2016. The

[45] Corix Response to Trappers Way IR1, Q. 15.1
[46] Corix Response to Comptroller IR1, Q. 17.4
[47] Corix Response to Comptroller IR1, Q. 17.1

Comptroller determined the GSDP Project to be in the public interest and approved the GSDP project and the use of rate base/rate of return regulation for the Utility through Order No. 2498, dated October 5, 2017.[48]

59. On July 10, 2018, the Utility submitted the final cost estimates and physical design to the Comptroller and requested approval to proceed with construction of the project with an estimated completion date of July 2019. Through Order No. 2531, dated July 30, 2018, the Comptroller ordered 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 was granted. [49]

60. In Decision and Order No. 2531 it stated: “The Comptroller considers the state of the current water system and the seasonal boil water notices no longer acceptable for a community the size of Panorama Mountain Resort. In considering the water source options, the GSDP Project is the most viable alternative that will ensure the delivery of a long-term secure and safe drinking water source that meets the objectives of the Interior Health Authority.”[50]

61. The new water source, treatment and storage systems went into production on February 11th, 2020 without Well #1 which failed to produce potable, non-turbid water.

62. The February 28 Application outlined some of the challenges that were experienced with this project.[51] IHA took almost one year to provide a construction permit for the project. Geotechnical and drainage issues arose that were not anticipated based on the geotechnical assessment completed during the design phase of the project. Unsuitable groundwater conditions were discovered at both the booster station and reservoir sites. The groundwater discovered at these sites required additional excavation, drainage, ditching, concrete and other works that were not anticipated. Also, a new well was to be developed in July/August 2020. However, the COVID-19 pandemic delayed the start. Corix provide a full update on the GSDP in its October 30, 2020 response to Information Request No. 1.[52] In that update notable developments included the need to drill three wells to replace Well #1. The successful Well 20-03 is producing sediment upon start up and at higher flow rates. It is expected that this well will clean up over time and operating controls will prevent sedimentation of the water system.

63. The June 30, 2020 Evidentiary Update estimated a Final Cost of $7,572,618 based on the final cost estimate to develop a second well in the summer of 2020.[53]

---

[48] June 30, 2020 Evidentiary Update, p. 9
[49] June 30, 2020 Evidentiary Update, p. 9
[50] Comptroller Decision and Order No. 2531, dated July 30, 2018, p. 3, recital 9
[51] February 28 Application, p. 30
[52] Corix Response to Comptroller IR1, Q. 15.1
[53] June 30, 2020 Evidentiary Update, p. 36

64. The GSDP Final Cost estimate, October 2020 Update (before reserve fund withdrawals and excluding AFUDC) is $7,630,017. This October 2020 Update is $57,399 more than the Final Cost estimate on June 30, 2020 in the Evidentiary Update.[54]

65. A number of questions concerned the GSDP bid process[55] and excess spend beyond that approved in Order No. 2531[56]. Corix sought a fixed price contract in its bid process. Bids were received from two contractors for the full scope of work. Additionally, one bid was received for waterline and bulk excavation and one bid was received for decommissioning and site rehabilitation work. Corix completed follow-up calls with contractors that had indicated that they would bid the work, but then did not. Corix found the reasons for not submitting to be primarily a result of the busy work environment, remote location or having been awarded other large contracts prior to the tender close date.

66. The quotes received for the project were all significantly over the project budget established by the project engineer. As such, Corix engaged in direct negotiation with the low bidder (Acres Enterprises) to arrive at a project cost and schedule that was suitable to both the contractor and Corix Utilities. As part of this negotiation Corix also worked with the contractor and project engineer to value engineer the project. Value engineering resulted in certain elements of the project being redesigned to be more efficient, and the use of alternate products that were more readily available or preferable for the selected contractor; therefore reducing the overall project cost.

67. The final contract with Acres Enterprises awarded them Parts 1, 2 and 3 of the project. Part 4, decommissioning and site rehabilitation work, was awarded to a local contractor (Ralph Stewart Contracting) to avoid additional mobilization requirements as decommissioning would occur at least six months after project commissioning. Ralph Stewart Contracting was the low bidder on this portion of the contract.

68. The GSDP Project has a number of factors that make it more challenging than a straightforward construction project. The project site was on the side of a mountain at an elevation of approximately 1,300 meters above sea level. The location had difficult terrain and varying geological formations. Access to the construction site was limited by weather and the operations of the ski hill. There was no or limited access from November to April. Primary access was from May to October. There were also delays from the Interior Health Authority in the permitting process. The application filed with IHA required months to approve due to a backlog of applications from other water systems.[57]

69. Corix implemented value engineering for the project. Throughout the project many meetings were held with the construction team, project manager, and Corix team. The project manager for the

[54] Corix Response to Comptroller IR1, Q. 15.1
[55] Corix Response to Panorama Subdivision Owners Association IR1, Q. 1.2
[56] Corix Response to Panorama Subdivision Owners Association IR1, Q. 2.1
[57] Corix Response to Panorama Subdivision Owners Association IR1, Q. 1.1

GSDP was a well experienced professional as he completed a similar major water project in the region one year prior.[58]

70. Corix was asked about the details of the excess spend beyond the contingency. To be responsive to the question Corix provided the confidential Panorama Progress Sheet from Acres attached as Confidential Attachment 3: Corix Response to PSOA IR1 Questions 2.1 and 2.2 regarding the details of the excess spend for the Acres portion of the GSDP project.

71. The evidentiary record shows that Corix has acted prudently in carrying out the GSDP project. When the fixed price bids that were received were significantly more the project budget, Corix used another approach to value engineer the project, and split the scope into two portions to lower the costs. The challenging and varying geological formations have made it difficult to develop a well acceptable for potable water production. Two wells have been successfully developed. Corix submits the GSDP Final Cost estimate, October 2020 Update (before reserve fund withdrawals and excluding AFUDC) should be approved as Corix has prudently developed the project leading to successful production and distribution of potable water for customers.

G. <u>Contribution in Aid of Future Construction</u>

72. Panorama Water Tariff No. 4 effective January 1, 2019 includes Schedule "B" Contribution in Aid of Future Construction (CIAC). The charge "For each domestic service premises qualifying as authorized premises" is $1,300 per bed unit. The $1,300 per bed unit was last approved in Water Tariff No. 3 effective March 1, 2010. Corix proposes to escalate the $1,300 per bed unit at a compounding rate of 2% per year for 10 years. This yields a figure of $1,585 per bed unit.[59]

73. Corix also submits that a contribution of $2,100 per bed unit (~$21,000 per customer), similar to EPCOR Water (West) Inc., cannot be justified without performing a much more detailed cost analysis; however, a detailed cost analysis will require additional time and cost to prepare. Corix submits that an updated figure based on a 2% escalator provides a reasonable balance between the sometimes conflicting objectives of securing cost recovery from new customers while coincidentally keeping costs low enough to attract new customers onto the system to contribute to its ongoing viability. [60]

74. Corix has submitted the late request for regulatory efficiency. If Corix does not amend the CIAC rates in the current proceeding, then Corix would need to file a separate application and incur additional regulatory costs in order to affect a potential update to rates in 2021. Alternatively, Corix could address the CIAC in its next revenue requirement application, which is expected to be in 2023.; however, in that case any new customers would have CIAC rates applied based on the current $1,300 per bed unit for at least the next 3 years.

---

[58] Corix Response to Panorama Subdivision Owners Association IR1, Q. 1.4
[59] Corix Response to Comptroller IR1, Q. 18.2
[60] Corix Response to Comptroller IR1, Q. 18.2

H. Customer Additions

75. In the Amended Application, Corix has forecast residential growth in customer count by 1 customer in each of 2020, 2021 and 2022. Corix assumes that one residential customer represents 10 bed units and has forecasted the number of bed units for 2020, 2021 and 2022 accordingly.[61]

76. Interveners questioned the customer additions in the test years.[62, 63] 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.[64] 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.[65] The net incremental revenue impact of 2 residential customers in 2021 is $2,472.

77. 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.

I. Other Revenues

78. 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.[66]

79. Any new residential customer additions added in the three test years would have a corresponding impact for the items identified in the Corix response to PSOA IR No. 1 Question 4.1: residential basic charge, residential metered charge, consumption deferral account rider, connected customer charges, and offsetting standby revenue.

---

[61] June 30, 2020 Evidentiary Update, p. 50
[62] Trappers Way IR1, Q. 20.0
[63] Panorama Subdivision Owners Association IR1, Q. 4.1
[64] Corix Response to Trappers Way IR1, Q. 20.1
[65] Corix Response to Panorama Subdivision Owners Association IR1, Q. 4.1
[66] Corix Response to Comptroller IR1, Q. 25.3

J. Rate Design

80. In compliance with the Comptroller's directive in Order No. 2548, Corix performed an analysis of its rate design for customer rates. The rate design or structure determines how the costs for providing water service, as determined by the revenue requirement, 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.[67]

81. The existing rate structure recovers 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 addition, the lower commercial customer load factor is reflected through a higher fixed charge for commercial customers relative to residential customers. In the Amended Application, the Utility does not propose any changes to the existing customer classes or rate structures. [68]

82. Questions were asked in Information Request No. 1 regarding a potential rate design regarding changing the rate structure to collect more from the fixed charge[69] and timing of the rate design[70].

83. 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.

84. 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.

[67] June 30, 2020 Evidentiary Update, p. 53
[68] June 30, 2020 Evidentiary Update, p. 54
[69] Trappers Way IR1, Q. 22.1 and 25.1
[70] Comptroller IR1, Q. 21.1

K. Comparison to Other Water Utilities

85. Corix provided a Customer Bill Impact Comparison in the June 30, 2020 Evidentiary Update.[71] In Information Requests No. 1 several questions included comparison or information on other water utilities. Further information was provided for Windermere and Spur Valley[72], Edgewater and Canal Flats[73], and Sun Peaks[74]. In a number of responses Corix provided a comparison to EPCOR Water (West) Inc., the only other rate base utility regulated by the Comptroller.[75, 76, 77, 78, 79]

86. The comparisons to Panorama Water indicated that Spur Valley (with similar system type) and EPCOR Water West (for corporate allocations) provided useful comparisons. Spur Valley has a recently installed system and has a relatively high cost system at $1,084 annually per customer. Spur Valley shares many similarities with Panorama Water. Similarities in the system include groundwater source, pumped/gravity supply, chlorine disinfection, and a reservoir. Both upgrades were implemented to remove boil water notices. Notable differences are that Panorama Water has UV disinfection while Spur Valley does not and Panorama Water at 328 metered customers in 2019 has more customers than Spur Valley at 73.[80]

L. Proposed Rates

Test Years and Future Indicative Rates

87. The Revised Application proposes rates for three test years (2020, 2021, and 2022) with rate changes on August 1, 2020, January 1, 2021, and January 1, 2022, respectively. Corix has also provided indicative rates for the years from 2023 to 2027 by modelling the RDDA drawdown and its effects on the indicative rate changes.

August 1, 2020 Rates Compared to other years (2021 and 2022)

88. The inclusion of the tariff rate change on August 1, 2020 (shown as year 2020) cannot be simply compared with the other years (2021 to 2024) with a January 1st rate change.[81] The seven month delayed rate increase in 2020 makes bill comparisons to other years difficult. However, the rate changes from 2021 to 2024 can be compared since they all include a January 1st rate change.

Bill Increase Difference Between Residential and Commercial Customers

89. Corix has applied uniform rate increases to the bill components (fixed basic charge and metered consumption charge) for both residential and commercial customers. However, it was observed that

---

[71] June 30, 2020 Evidentiary Update, p. 61
[72] Corix Response to Comptroller IR1, Q. 23.1
[73] Corix Response to Trappers Way IR1, Q. 24.1
[74] Corix Response to Trappers Way IR1, Q. 4.1.1
[75] Corix Response to Comptroller IR1, Q. 17.3 & 17.4 (ECPOR ROE, Capital Structure, Deferral Accounts)
[76] Corix Response to Comptroller IR1, Q. 18.2 (ECPOR CIAC)
[77] Corix Response to Comptroller IR1, Q. 23.2 (EPCOR Annual Bill Comparison)
[78] Corix Response to Trappers Way IR1, Q. 9.2 (EPCOR inter-corporate service charges)
[79] Corix Response to Comptroller IR1, Q. 18.2 (EPCOR ROE and Capital Structure)
[80] Corix Response to Comptroller IR1, Q. 23.1
[81] Corix Response to Trappers Way IR1, Q. 17.1

the bill impacts to residential and commercial customers vary in the same year. The two primary reasons for the rate increase differences between residential and commercial customers are because of the 1% conservation water usage estimate for residential and commercial customers and higher average residential bed units per customer. The financial model when adding new residential customers assumes 10 bed units as per the tariff. This causes a slight increase in the system average residential bed units, given that the current system average is approximately 7.1 bed units. Existing customers would not have changes in bed units so for this factor the calculated average annual increase would be lower.[82]

Residential Bill Impact Comparison with the same bed units each year

90. Corix provided a Total Customer Bill Impact analysis in the Amended Application.[83] The Residential Bill Impact percentage increases vary from the Commercial Bill Impact percentage increases. [84] The difference arises from a number of factors including the 1% conservation savings, and the rising bed units for residential customers (from new customer additions at 10 bed units per customer). Corix provided an analysis with 10 bed units per customer for each year.[85] Corix also provided an analysis by holding the bed units at 7.0.[86]

M. Recovery Period for the Revenue Deficiency Deferral Account

91. In the Amended Application, Corix provided three scenarios for the recovery period of the RDDA:
    - Table 23: Scenario D: 100% Annual Revenue Requirement Recovery – June 2020 Evidentiary Update
    - Table 24: Scenario E: RDDA Recovery in 2025 – June 2020 Evidentiary Update
    - Table 25: Scenario F: RDDA Recovery in 2023 – June 2020 Evidentiary Update[87]

92. In the Amended Application, Corix proposed Scenario E with an RDDA recovery in 2026 that provides the optimal balance of smoothed rates, keeping the maximum RDDA balance at a reasonable level, and recovering the outstanding RDDA balance in a reasonable time period. Corix is proposing rates in this application for three years; the test years 2020, 2021 and 2022. The years 2023 and 2024 are indicative rates only.

93. Corix provided Scenario E (updated) with the additional years 2025 to 2027 to show the indicative RDDA balances and the indicative rate changes for 2025 to 2027.[88] The table shown below has the RDDA balance peaking in 2022 and then declining to $0 in 2026. From 2020 to 2022 the rates result in revenue that is less than the total revenue requirement. The table also shows large rate increases from 2020 to 2023 with a moderate rate change in 2024 at 8% and 0% in 2025. However, there are indicative rates decreases in 2026 at -7% and 2027 at -16%. The rate decreases reflect the fact that

---

[82] Corix Response to Trappers Way IR1, Q. 23.1
[83] June 30, 2020 Evidentiary Update, Tables 27 and 28, p. 60
[84] Corix Response to PSOA IR1, Q. 4.2
[85] Corix Response to PSOA IR1, Q. 4.3
[86] Corix Response to Trappers Way IR1, Q. 20.1
[87] June 30, 2020 Evidentiary Update, pp. 56-58
[88] Corix Response to Comptroller IR1, Q. 22.1

in 2025 and 2026 the rates are set to over-recover the Total Revenue Requirements to retire the balance of the RDDA (119.5% in 2025 and 113.5% in 2026). In 2027 the Target Revenue Requirements equals the Total Revenue Requirements at 100%.

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%

94. Corix provided an analysis of the impact on rates and the advantages and disadvantages to ratepayers of smoothing rates.[89] The challenges in the rate setting process include: 1) finding the right balance of rate increases in the early years while keeping the unrecovered deferral account at a level where it won't spiral out of control due to compounding; 2) choosing the appropriate target year to draw down the RDDA to a zero balance; and 3) managing the ramp down in rates after the RDDA has been fully recovered.

V. CONCLUSION

95. The rate increase requests in the Revised Application are necessary in order to recover the targeted revenue requirements while achieving relative rate smoothing and managing the RDDA at a reasonable level.

96. The GSDP project has successfully produced potable water since February 11, 2020. The GSDP project brings Panorama's water to a level that meets Interior Health's Water 4-3-2-1-0 Drinking Water Objective.[90] Corix has provided detailed justifications of the costs of the project and explained the cost over runs arising from a number of factors beyond Corix's control. Corix submits it has acted prudently in developing the project and the October 2020 updated costs should be approved.

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

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

"A public utility must not make, demand or receive

[89] Corix Response to Trappers Way IR1, Q. 19.1
[90] Corix Response to Comptroller IR1, Q. 11.2

(a) an unjust, unreasonable, unduly discriminatory or unduly preferential rate for a service provided by it in British Columbia, or
(b) a rate that otherwise contravenes this Act, the regulations, orders of the commission or any other law."

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

Langley, BC

November 9, 2020

ALL OF WHICH IS RESPECTFULLY SUBMITTED

Ron Zink
Director, Financial Planning & Analysis