

REQUESTOR NAME: Water Utility Regulation Section, Water Management Branch
Ministry of Forests, Lands, Natural Resource Operations and
Rural Development

INFORMATION REQUEST NO: 1

TO: Corix Multi-Utility Services Inc. (CMUS), Columbia Ridge

DATE: March 31, 2022

REFERENCE NO: 7832

APPLICATION NAME: Application to acquire the water utility and approval of
Rate Base (RB) regulation

1.0 Reference: Application, pg. 6, New Reservoir

Explanation: CMUS states: “CRWL has indicated to Corix that all the money from the DCFT and the RRTF will have been used for the new reservoir by the time Corix acquires the assets of the Water Utility.”

Request:

- 1.1 Please update the status of the new reservoir construction and the expected cost from the budget of \$480,212 in October 2021.

Corix Response:

Corix contacted the current owners of CRWL and the following is the response:

The Deputy Comptroller has approved an amended total project budget amount of \$512,000.00 and associated project financing strategy. The amended project budget reflects the concrete reservoir structure increasing to a storage capacity of 100,000 imperial gallons, and replacement and upgrades to the fire and distribution pumping system.

As of December 31, 2021, the actual project costs are \$413,714.46. The estimated costs to complete of \$98,500 will be funded from the \$67,576 in the Replacement Reserve Trust Fund (RRTF) and the 2022 contribution to the RRTF of \$35,000.

At the completion of the project the Deferred Capacity Trust Fund (DCTF) is expected to be \$0 and the RRTF will be approximately \$4,076.

2.0 Reference: Application, pgs. 7 & 8, Untreated Irrigation service

Explanation: Corix states that “In proposed Schedule I, Corix proposes to grandfather this existing customer receiving untreated water. The proposed rate is based on 70% of the Schedule C Residential Service Flat Rates per Single Family Residential Equivalent effective April 1, 2022 for applicable seasonal service customer. For Schedule I: Untreated Irrigation Service Flat Rates, Corix proposes a rate of \$33.37 per month per Single Family Residential Equivalent

effective April 1, 2022 applicable for all months in the year. The Schedule I proposed rate is based on 70% of the Schedule C Residential Service charges used for 4 months as seasonal service and the off season rates are charged at 80% of the residential service user rate while disconnected.”

Request:

2.1 Explain the derivation of each of the rate parameters shown in footnote 2 on page 8.

Corix Response:

Footnote 2 states: “The Proposed Schedule I rate of \$33.37 is based on the following seasonal residential rates at 70%: $[(4 \text{ months} \times \$55 \text{ per month connected} + 8 \text{ months} \times \$55 \times 80\%) \times 70\% / 12 \text{ months}] = \$572 \times 70\% / 12 \text{ months} = \$400.40 / 12 \text{ months} = \$33.37 \text{ per month for all months in the year.}”$

The derivation is explained below:

1. The Proposed Schedule I rate is \$33.37 per month for each of the 12 months in a year.
2. The \$33.37 is based on 70% of what a summer seasonal customer would pay in a year receiving potable treated water.
 - a. 4 months summer charge: This summer seasonal customer would pay for 4 months at the fully connected fee of \$55 per month. This would be \$220 ($\55×4) for four months when using water.
 - b. 8 months off-season charge: During the non-summer season the customer would pay the standby charge for 8 months. The off-season charge according to Schedule C is 80% of the connected charge of \$55 per month. The standby charge is thus \$44 per month ($\$55 \times 80\%$). This would be \$352 for the 8 months for the off-season.
 - c. The total for 12 months of service is \$572 for a customer that is a summer seasonal customer (\$220 for 4 summer months plus \$352 for 8 off-season months).
3. The proposed rate for Scheduled I Untreated Irrigation Service is 70% of what an equivalent customer would pay in a year using treated potable water. 70% of \$572 is \$400.40 per year.
 - a. The proposed rate for Schedule I is \$33.37 per month based on the above calculated \$400.40 annual charge divided by 12 months.

2.2 Is the affected customer in agreement with the proposed rate? If not, why?

Corix Response:

The affected customer that would be grandfathered in Schedule I has not expressly agreed or opposed to the proposed rate on the raw water line. The customer is considering its options to remain connected or disconnect from the utility system and has indicated it may be amenable to the proposed rate.

3.0 Reference: Application, pg. 25, Upgrades in 2022

Explanation: “Upgrades scheduled for 2022 will be the VT SCADA, Pumphouse Generator and Automatic Transfer Switch, all of which are explained above.”

Request:

3.1 Provide an update of the status of work on these projects and if there has been any change to cost or completion.

Corix Response:

No work has commenced on these upgrades pending completion of the regulatory review process and Corix assuming ownership of the utility.

4.0 Reference: Application, pg. 30, Acquisition Cost Allocations

Explanation: “Table 3 shows the proposed allocation percentages.”

Request:

4.1 Has there been any change to the proposed allocation percentages?

Corix Response:

There has not been any change to the proposed allocation percentages.

4.2 Further explain why 70% of Engineering and Compliance would be allocated to the water utility?

Corix Response:

The 70% allocation for water was based on the work effort expended for the Engineering and Compliance cost category. The majority of Engineering and Compliance work effort required was for the water utility, for the reason listed below.

- i. The relative size of the two utilities.
The water utility services the entire development whereas the wastewater utility services Strata NES 3268 only.
- ii. Capital upgrades required.
- iii. The time allocation to the water utility was directly influenced by the capital upgrades required to be compliant with Interior Health Authority guidelines.

5.0 Reference: Application, pg. 31, Water Utility due diligence costs

Explanation: “Table 4 details these costs.”

Request:

5.1 Are these costs related to the Water Utility only or are they related to the Wastewater Utility as well?

Corix Response:

All costs in Table 4 of the application are related to the acquisition of the Water Utility only. Costs related to the acquisition of the Wastewater Utility have been excluded from this Application.

5.2 Please break out the Project Management costs into “the project management of the overall utility acquisition; coordinating with internal and external subject matter experts (SMEs) that perform due diligence activities; conducting negotiations with the seller; preparing material for and leading public consultation sessions and stakeholder meetings with Home Owner Associations; responding to stakeholder correspondence following the meetings; and drafting and reviewing sections in the acquisition application.”

Corix Response:

Please note that Corix does not track costs at the subtask level and cannot provide specific costs for each subtask within Project Management. The benefits realized by tracking time and costs to that degree of specificity are not considered to be sufficient to justify the incremental costs. Below Corix provides the breakdown of Project Management costs using an estimated portion of work effort for each category:

- Coordinating with internal and external subject matter experts that perform due diligence activities – 60% of overall cost
- Conducting negotiations with the seller – 5% of overall cost
- Preparing material for and leading public consultation sessions and stakeholder meetings with Homeowner Associations – 20% of overall cost
- Responding to stakeholder correspondence following the meetings – 10% of overall cost
- Drafting and reviewing sections in the acquisition application – 5% of overall costs

5.3 Please explain why “external legal costs incurred to address the statutory right-of-ways (ROWs), easements and the title transfer” are necessary before determining to purchase the Water Utility? What costs were incurred for the Wastewater Utility?

Corix Response:

Operating a water or wastewater utility requires various land rights, across several parcels of land, in order to ensure the owner can legally access the network of

infrastructure and conduct the work required, either through ownership of the land, or access rights granted by the owner of each particular parcel. As a prospective buyer, Corix also needs to uncover risk, such as environmental contamination or obstacles to expansion, in order to avoid large, unexpected expenses, which could negatively impact ratepayers. Much of the analysis required to conduct due diligence on real property requires resources (e.g. specialized knowledge) which Corix does not have in-house.

Total external legal costs incurred for the due diligence was \$20,127. As this due diligence impacts both the water and wastewater utilities, and the cost cannot be cleanly delineated between them, the cost was attributed evenly, with each of the utilities being deemed to have incurred external legal costs of \$10,063.50 (plus internal staff time costs). As noted in the response to Question 4.2 above, the water system has a significantly larger footprint and customer base than the wastewater utility. As such a rationale argument could have been made to allocate a higher percentage of these costs to the water utility; however, Corix recognizes that the composition of such a formula could have been contentious, and as a result elected to adopt the proposed 50/50 split.

6.0 Reference: Application, pg. 34, Acquisition Cost Recovery in Other Jurisdictions

Explanation: “Corix discusses this issue in section 9.4 and Appendix E.”

Request:

6.1 Please identify what acquisition costs are approved by the BCUC for the acquisition of energy utilities in BC and what acquisition costs were approved for Corix’s Thermal Utilities in BC?

Corix Response:

The vast majority of utilities regulated by BCUC are rate base utilities which started out as greenfield utilities after obtaining a Certificate of Public Convenience and Necessity (CPCN) from the BCUC.

In the last decade Corix has developed small standalone greenfield utilities, in which the BCUC has approved the capitalization of project development costs into rate base. Corix considers project development costs analogous to due diligence and public consultation costs as discussed in Section 9 of the Columbia Ridge Water Utility Acquisition Application.

Examples of project development cost approvals for Corix’s thermal energy utilities include:

- i. **Burnaby mountain District Energy Utility (BMDEU)**
CPCN approval was granted through BCUC Order and Decision C-5-17, dated September 15, 2017. The approved CPCN included the capitalization of all project development costs incurred up to the time of filing plus the associated forecast costs as part of the overall capital project cost. Project Development

costs included, but was not limited to, external costs and internal Corix costs associated with:

- Feasibility studies and implementation scenarios;
- Conceptual and preliminary designs;
- Environmental assessment, site/geotechnical evaluation;
- Site preparation and site plan assessments of the preferred location;
- Discussions and negotiations with third parties including, but not limited to, BC Hydro, Fortis BC, and the City of Burnaby;
- Legal costs;
- Consultant costs;
- Regulatory costs;
- Public consultation costs; and
- Permitting costs.^{1, 2, 3}

ii. **Neighbourhood District Energy System at the University of British Columbia (UBC NDES)**

CPCN approval was granted through BCUC Order and Decision C-2-15, following the issuance of C-11-14A. The Decision for Order C-11-14A approved in principle “CMUS’ request to capitalize both CMUS’ and UBC’s project development costs for recovery in rates.”⁴ The amount of project development costs to be recovered in rates would be addressed in a subsequent rate application. Project development cost included, external costs and internal Corix costs associated with:

- Pre-feasibility studies and Feasibility Studies;
- Engineering;
- Financial;
- Legal;
- Public consultation;
- Regulatory;
- Negotiations; and
- Offices supplies, equipment; travel and mileage and meals.^{5, 6}

Example from Another Utility for BCUC Approved Acquisition Costs Recovery

Through BCUC Decision and Order C-1-22, the BCUC approved FortisBC Energy Inc.’s (FEI) acquisition of Stargas Utilities Ltd.’s (Stargas) assets at their net book value via an asset purchase agreement.⁷

The BCUC also approved for FEI when acquiring the assets of Stargas Utilities Ltd., a “Stargas Assets Acquisition Deferral Account to record certain costs associated with the

¹ BMDEU 2017 CPCN Application, Section 8.3.2, pp. 33-34

² BMDEU 2017 CPCN Application Proceeding, Exhibit B-2, Corix Resp. to BCUC IR No. 1, Questions 24.1 and 24.3, pp. 48-49; Attachment V.

³ BCUC Decision for Order C-5-17, dated September 15, 2017, Section 5.2, p. 42; Section 6.0, p. 47.

⁴ Decision for BCUC Order C-11-14A, Section 5.2.6, p. 44.

⁵ UBC NDES 2014 CPCN Revised Application, Section 2.6.1.2, p. 24.

⁶ UBC NDES 2014 CPCN Application Proceeding, Exhibit B-6, Corix Resp. to BCUC IR No. 1, Question 15.1, p. 49; Attachment H.

⁷ BCUC Decision for Order C-1-22, dated January 27, 2022.

preparation of the Application and execution of the APA [Asset Purchase Agreement], and specific components of the purchase price. With respect to the Assets transferred from Stargas to FEI...⁸ The FEI recovery of costs from customers for its Stargas Assets Acquisition Deferral Account is very similar to the acquisition costs proposed by Corix for Columbia Ridge.

The FEI/Stargas Application describes the proposed creation of a deferral account to capture the transaction cost of the acquisition plus the regulatory proceeding costs. The FEI Application states: “FEI is also requesting approval of a rate base deferral account, named the Stargas Assets Acquisition Deferral Account, pursuant to Sections 59 to 61 of the UCA. This new deferral account is required to capture **all of the costs related to this transaction and all of the costs related to this proceeding, as well as the purchase price of the Assets**, with the exception of the capital assets themselves that will be recorded in the relevant asset account, and the Gas Cost Variance Account as described below.”⁹ [bold emphasis added]

FEI elaborated that it conducted due diligence and public consultation for the acquisition prior to its application to the BCUC:

“As part of its due diligence, FEI undertook an evaluation of the Stargas’ distribution assets in August 2020 and determined the current assets are overall in good condition. Given the familiarity that FEI already has with the natural gas distribution system in Silver Star along with the recent evaluation of the assets conducted by FEI and FEI’s plan for post-transaction activities, FEI considers the risk related to the pipe condition is small and acceptable.”¹⁰

“GIS and Data Transfer to FEI - As part of its due diligence efforts, and its existing services contract with Stargas, FEI has all the meter information required to create new customer premise information. Prior to close, FEI will input this information into its GIS to create new premises for all existing Stargas customers.”¹¹

“Public consultation began during the pre-submission stage, and consisted primarily of information-sharing with customers, businesses and key stakeholders to seek feedback on the Stargas Assets Acquisition, its potential impacts and benefits, and to encourage comments throughout the process as more details became available.”¹²

In the Decision, the Panel approved the establishment of a deferral account, attracting

⁸ BCUC Order C-1-22, Executive Summary, p. ii, regarding FortisBC Energy Inc. and Stargas Utilities Ltd. Joint Application for Approval of an Asset Disposition and a Certificate of Public Convenience and Necessity to Facilitate the Transfer of Natural Gas Utility Assets from Stargas Utilities Ltd. to FortisBC Energy Inc., https://docs.bcuc.com/Documents/Other/2022/DOC_65447_C-1-22-FEI-Stargas-CPCN-Decision.pdf

⁹ FortisBC Energy Inc. and Stargas Utilities Ltd. – FEI and Stargas Asset Transfer and CPCN Application, p. 1, https://docs.bcuc.com/Documents/Proceedings/2021/DOC_61351_B-1-FEI-Stargas-AssetTransfer-CPCN-App.pdf

¹⁰ FortisBC Energy Inc. and Stargas Utilities Ltd. – FEI and Stargas Asset Transfer and CPCN Application, p. 10

¹¹ FortisBC Energy Inc. and Stargas Utilities Ltd. – FEI and Stargas Asset Transfer and CPCN Application, p. 23

¹² FortisBC Energy Inc. and Stargas Utilities Ltd. – FEI and Stargas Asset Transfer and CPCN Application, p. 18

interest at FEI's weighted average cost of capital to record:

- Costs to prepare the application, which include legal expenses, BCUC costs, intervener costs and public notification;
- Legal expenses incurred for the preparation of the executed asset purchase agreement; and
- Other costs including Stargas deferral account balances.¹³

The BCUC approved the transfer of the balance in the deferral account to rate base on January 1, 2023 for amortization over one (1) year.¹⁴

FEI's post-transaction due diligence work, including but not limited to leak surveys and as-built/record documentation creation, will be addressed through FEI's existing capital and O&M framework under FEI's 2020-2024 Multi-Year Rate Plan, approved with BCUC Order G-165-20.¹⁵

The above information should be considered within the context that FortisBC Alternative Energy Services Inc. (FAES), an affiliate of FEI, provided services to Stargas for 10 years prior to FEI's acquisition. This included emergency standby and response, system maintenance, leak survey and remedial action, and meter servicing and replacement, as well as certain administrative functions.¹⁶ This prior knowledge of the system would have reduced the level of due diligence required by FEI when negotiating the asset purchase agreement.

6.2 What acquisition costs are approved by the AUC for energy or water utilities in Alberta?

Corix Response:

Corix is not aware of the AUC approving acquisition costs for energy or water utilities in the manner proposed by Corix.

However, Corix notes that Alberta does allow under certain circumstances into rate base an acquisition premium (a purchase price higher than the seller's net book value of plant assets) for electric utilities. Corix is not requesting an acquisition premium in this Application.

In Alberta there is a history of using replacement cost new less depreciation (RCN-D) methodology as an alternate valuation methodology for the pricing of electric utility assets. One of the first cases for the Alberta Energy and Utilities Board was in Decision 2004-070 with regard to City of Airdrie: Terms and Price of Purchase of the Electric Distribution System Within the Municipality from Fortis Alberta Inc. Part B:

¹³ BCUC Decision for Order C-1-22, dated January 27, 2022, Section 5.1.1, pp. 13-14.

¹⁴ BCUC Decision for Order C-1-22, dated January 27, 2022, Section 5.1.1, pp. 13-14.

¹⁵ FortisBC Energy Inc. and Stargas Utilities Ltd. Asset Transfer and CPCN Application, Section 6.3, pp. 24-25.

¹⁶ Stargas Application to Vary Delivery Rate, Amend Cost of Service Formula and Approve Replacement Term Financing/Redemption of Preferred Shares (2016 Delivery Rate Application), Exhibit B-1, p. 10.

Determination of Price dated August 24, 2004.¹⁷ The Alberta regulator has employed RCN-D as a valuation methodology a number of times since 2004 including Decision 23972-D01-2020 Fortis Alberta Inc. Purchase Price Consideration for Transfer and Sale of the Town of Fort Macleod Electric Distribution System to Fortis dated July 2, 2020¹⁸ and more recently in AUC Decision 26318-D01-2021 Determination of the Compensation Amount to be Paid by EPCOR to Battle River Cooperative REA Ltd”.¹⁹

AUC Decision 26318-D-01-2021 in paragraph 5 provides some historical legislative context to the use of RCN-D:

“The provisions in Section 29 of the Hydro and Electric Energy Act regarding the basis for any compensation payable for facilities transferred refers to reproduction cost new, rather than replacement cost new. Section 29(4) (c) of the act states:
29(4) ...

(c) the matters in respect of which any compensation is payable, which matters may include

(i) any facilities transferred, based on reproduction cost new, less depreciation,”

Decision 21768-D01-2017 Office of the Utilities Consumer Advocate Commission-Initiated Review and Variance of Decision 20552-D01-2015 and Decision 20733-D01-2015 dated October 3, 2017, also provide further clarification of the history and RCN-D valuation methodology.²⁰

6.3 Do the “closing costs” identified for approval in Illinois, Louisiana, and North Carolina include all the costs identified in Application Table 4?

Corix Response:

Table 4 Water Utility Due Diligence and Public Consultation Costs include project management; due diligence lead; finance; legal; regulatory; operations; engineering and compliance; environmental assessment; and public consultation.

In Illinois (Galena) the \$61,000 of “closing costs were for:

- Legal services for regulatory approval process including application, testimony, and rebuttal
- External engineer to review the surveys, property records, maps to confirm the legal descriptions and property lots for the transaction
- Internal management travel costs
- Another lawyer to negotiate the asset purchase agreement and related Village ordinance

In Louisiana (Louisiana Land) the \$167,000 in “transaction costs” were for:

¹⁷ EUB Decision 2004-070, https://www2.auc.ab.ca/h005/Proceeding13214/ProceedingDocuments/2004-070%20A_0004.PDF#search=RCN%2DD [registration required for link]

¹⁸ AUC Decision 23972-D01-2020, <https://efiling-webapi.auc.ab.ca/Document/Get/672938>

¹⁹ AUC Decision 26318-D01-2021, <https://efiling-webapi.auc.ab.ca/Document/Get/702432>

²⁰ AUC Decision 21768-D01-2017 <https://efiling-webapi.auc.ab.ca/Document/Get/614478>

- Internal personnel for labour, meals, and travel costs to assess the system (due diligence). Included meeting with the environmental regulator and negotiating the agreement for the purchase
- Legal services to review permitting, property records, regulatory requirements, resolve title and deed issues, draft and negotiate asset purchase agreement, etc. Most of the transaction costs was for legal services due to the complicated transaction arising from inadequate seller records, the seller was in bankruptcy, and had multiple open lawsuits against it.
- An environmental assessment by a consultant
- Consultant and legal support for discovery in regulatory approval process
- Various parts and materials purchases and labour to assist seller in managing system until transfer

In North Carolina (Pace) the \$21,587 in “due diligence costs” were for:

- Legal services to handle the regulatory approval process, including the application to the regulator and support for testimony, rebuttal, etc.
- Lawyer to review permitting, property records, regulatory requirements, resolve title and deed issues, draft and negotiate asset purchase agreement
- Surveyor to confirm property records for system

The above explanation for Illinois, Louisiana, and North Carolina are examples of closing/transactions/due diligence costs approved by Regulators to allow these costs into rate base. The detailed mix and types of costs vary depending on the particular circumstances of each utility.

The costs can generally be grouped into:

- Phase A: negotiation and due diligence of the sale agreement; and
- Phase B: the regulatory process and buyer’s costs for assisting the seller to operate and manage the system until transfer.

In Phase A lawyers, consultants, and internal personnel are used for negotiation, property records, property asset assessment/condition and environmental assessments. In Phase B lawyers, consultants, and internal personnel are used for the regulatory review processes and any operational costs to assist the seller until acquisition. In the case of a distressed seller it may be important that the buyer provide its operational expertise to the seller so the small utility is able to maintain the system condition as examined in the due diligence process until the transfer date.

With regards to Columbia Ridge, the project management; due diligence lead; finance; legal; regulatory; operations; engineering and compliance; and environmental assessment costs were used to support Phases A and B. The public consultation process was related to the Phase B regulatory process.

Corix also notes that Fair Market Value (FMV) application and due diligence recovery are generally two separate situations and don’t always overlap. In Illinois, the Galena/Oakwood utility purchase occurred in 2014 well before the Illinois FMV of 2018. Louisiana does not have FMV legislation or rules in place. For North Carolina, the

FMV legislation only deals with acquisitions of municipal systems, so in the due diligence example provided in Q. 6.3 it was for other non-municipal regulated entities and the due diligence recovery was not affected by FMV.

In summary, though the wording may differ the types of costs approved in the closing/transactions/due diligence costs by the three states are equivalent in nature to the acquisition costs requested by Corix for Columbia Ridge.

6.4 Please explain the circumstances that lead Virginia to enact the Fair Value Legislation in March of 2020?

Corix Response:

Corix was not involved in the Virginia legislation, so Corix is not fully aware of the background in this state. The status of the approved legislation²¹ shows the progress of the bill and that the House and Senate votes were unanimous.

Virginia is one of many states that have adopted fair market value for water utilities. The National Regulatory Research Institute paper titled “A Review of State Fair Market Value Acquisitions Policies for Water and Wastewater Systems” with a recent publication date of September 2021 provides some background on the policy development of fair market value legislation in the United States.²²

The NRRI paper’s Executive Summary provides additional information. Some excerpts include:

- “Fair market value (FMV) acquisition is a rate mechanism used for encouraging the acquisition of distressed, municipal, and/or small water and wastewater systems by regulated water utilities.”
- “Using the FMV of a system instead of its original cost is designed to encourage well-operated water and wastewater utilities to acquire small, municipal, or distressed systems.”
- “Sixteen states have considered adopting FMV acquisition rate mechanisms and 12 have adopted these policies. There has been an uptick in FMV legislation in response to challenges faced by water and wastewater systems. These challenges are driven by increasingly stringent water quality standards, limited technical and managerial expertise in smaller companies, and the need for investment to replace aging infrastructure.”
- “Section V includes an overview of other mechanisms to support struggling systems. These suggestions include alternative financing options, rate mechanisms, promising technology, and recently introduced alternative acquisition methods.”

The NRRI paper shows that certain states in the U.S. have legislatively mandated fair

²¹ VA HB835 | 2020 | Regular Session, <https://legiscan.com/VA/bill/HB835/2020>

²² Kathryn Kline, National Regulatory Research Institute, “A Review of State Fair Market Value Acquisitions Policies for Water and Wastewater Systems,” September 2021, <https://pubs.naruc.org/pub/ED8E5710-1866-DAAC-99FB-B70190F3D64A>

market valuation policies for the state regulators to follow to encourage municipal, disadvantaged/distressed, and/or small systems to be consolidated by larger water operators who have the financial resources to service customers safely and reliably that meets drinking water standards. To foster this encouragement of utility transfers, state legislatures have considered both the perspectives of the seller and the buyer. For the seller the price paid for the utility is for fair market value which can be above the net book value of the seller. In many cases the stated net book value of the seller may be incorrect due to poor bookkeeping practices. For the buyer of the utility, the legislatures have allowed the fair market value price paid to the seller to be included in rate base to be recovered from ratepayers. Also, to encourage the transaction, the legislatures have considered that the closing/transactions/due diligence costs incurred by the buyer are valid costs that can be included in the rate base of the utility and recovered from ratepayers. In summary, state legislators have recognized it is in the public interest to have small, struggling water systems who are not able to provide customers with safe and reliable drinking water to be purchased by financially stable companies that have the financial and technical capacity to operate and maintain the water systems as required.

On page 35 in Section V, the NRRI discusses ‘Reproduction Cost New Less Depreciation (RCNLD)’. “In March of 2020, West Virginia enacted Senate Bill 551, removing some of the disincentives to water and wastewater system consolidations without using the full FMV appraisal methodology.” “[T]he legislation directs the commission to permit the acquiring party to include the negotiated sale price of acquired utility assets in the post-acquisition rate base for rate-making purposes, provided that the negotiated sales price is in accordance with industry standard utility asset valuation methods, including “reproduction cost new less depreciation” (RCNLD).” “The RCNLD does not require estimation and consideration of a system’s market value or income-producing potential and focuses on only one market value valuation method.”

This West Virginia RCNLD methodology is the same as the RCN-D methodology used by the AUC as discussed above in response to Q. 6.2.

7.0 Reference: Application, pg. 37, Rate Impacts

Explanation: Table 5 provides an indication of rate increases and lump sum payments over a 3-year period.

Request:

7.1 Please discuss whether Corix believes that Rate Base regulation would be less or more expensive than Operating Margin regulation over the life of a typical utility? Please include a simplified spreadsheet to help explain your answer.

Corix Response:

Corix considers that Rate Base regulation and Operating Margin regulation would theoretically result in similar costs over the life of a utility. The fundamental difference

between the two methodologies is in regard to funding of capital expenditures, whether it is funded by:

- a) the utility (via Rate Base); or
- b) customers (via RRTF contributions and/or lump-sum assessment if there is a funding shortfall).

However, it can be argued that lifetime total costs to the customer using Operating Margin may be higher than Rate Base. In Rate Base with cost of service/revenue requirements there is no Operating Margin cost since the utility shareholder is compensated for its investment through the return on its utility equity investment.

Notwithstanding the above, Rate Base becomes fundamentally preferable to Operating Margin when the impact on certain individual rate payers is considered, due to the inherent intergenerational subsidy that exists with Operating Margin regulation. In Operating Margin regulation, the Developer is required to provide all of the initial capital. That capital in turn forms part of the cost base that must be recovered through the sale of the lots. Thus, although the facilities are financed by the Developer, they are ultimately paid for by the homeowners through a correspondingly higher purchase price for their serviced lots. When Operating Margin regulation is adopted, those same homeowners are then required to fund the eventual replacement of the utility infrastructure through capital reserve contributions; therefore, by the time the original utility infrastructure has reached the end of its useful life the homeowners have effectively paid for the utility infrastructure twice. The use of Rate Base regulation by a well capitalized utility eliminates the need for advance funding of capital reserves, and thus eliminates the need for initial homeowners to “double pay” for utility infrastructure. Although one could argue that the presence of the capital reserve should result in an increase in value of the homes, the reality is that utility regulation and financing is not well understood in the real estate marketplace, and therefore home buyers are unlikely to properly value (or even consider) the existence of these reserves when comparing homes in areas subject to different forms of regulation.

Since Rate Base includes the ongoing cost of capital for rate base (net book value of assets) the rates and bills charged to customers would be higher than Operating Margin. For Operating Margin, the cost of capital for assets is funded outside of the utility by the customers at the beginning of the capital investment.

If the cost of customer funding for assets is added to the Operating Margin methodology, the two methods would be more comparable, and any differences would be relatively small. As each individual person is different some customers may have a personal discount rate (high borrowing costs and high required return) while others may have a low personal discount rate (low borrowing costs and low required return). Given this, a reasonable proxy for the overall social discount rate of all customers would be the utility’s cost of cost of capital.

Corix considers both Rate Base regulation and Operating Margins are valid methodologies given the particular circumstances of each utility.

Rate Base:

- The annual revenue requirement is based on O&M + Depreciation + Cost of Capital (Interest on Debt and ROE) + Income Tax.
- There are generally no (or very limited) customer contributions for funding of capital expenditures related to existing customers.
- Depreciation is based on in-service plant assets depreciated over the useful life of the assets. In a steady-state mature utility, the annual depreciation would be similar to the capital expenditures required; thus, rate base is unchanged.

Operating Margin:

- The annual revenue requirement is based on O&M + RRTF Contributions (from Depreciation Study) + Operating Margin + Income Tax.
- Capital expenditures are funded from the RRTF balance in the replacement account or other trust fund accounts. However, if the capital expenditure is higher than the amount in the trust funds a further customer assessment is required.
- The RRTF Contributions are based on the annual depreciation calculated from the Depreciation Study. However, if the depreciation study is not updated the RRTF contribution does not change and may lead later to a funding shortfall.

Corix has provided Attachment to Question 7.1 (see below) to explain the response with a spreadsheet example. The example attempts to simplify the analysis given the complexity of comparing lifetime costs when infrastructure is funded by the utility or by the customers. The Assumptions are shown in the first page.

In Scenario 1, Corix has modelled a hypothetical revenue requirement for a \$2 million gross plant distribution utility, with a 2.5% depreciation rate. The Operating Margin yields a Cost of Service at \$163,014 (line 8) which includes O&M, \$50,000 RRTF Contribution, Operating Margin \$, and Income Tax. As a comparison the equivalent, Rate Base cost of service is provided which mathematically yields a \$100,000 Cost of Service (only O&M) since the Rate Base is zero. Rate Base methodology would not be applicable in this Scenario 1 since with no rate base it does not provide a reasonable return for the shareholder and no incentive to operate the utility.

In Scenario 2, Corix has built upon Scenario 1 where an additional \$1 million is needed to build a reservoir for fire protection and a water treatment plant (WTP) to ensure safe drinking water for existing customers. In this scenario, for ease of comparison it is assumed that any RRTF balance saved for the distribution system remains in the trust fund and there has been no savings in a capital reserve fund for the reservoir and WTP.

In the Operating Margin Scenario 2, the annual Cost of Service is \$188,014 (line 26). Note that the Depreciation Study on \$2.0 million of plant assets would yield an RRTF contribution of \$75,000 per year. If there is a one-time customer funded assessment the total payment in a single year would be \$1,188,014 (line 29: Cost of Service + One-time Lump Sum Assessment). In order to make the lump sum comparable to rate base, in line 32 an estimated payment calculation was used to convert the \$1 million to \$60,665

annually for 40 years at a 5.3% customer discount rate. Line 33 shows Operating Margin at \$248,678 for Adjusted Revenue Requirement with the \$1 million converted to annual payments. On line 35 a further adjustment was made to remove the \$25,000 of additional RRTF contributions arising from the \$1 million capital expenditure. Line 36 at \$223,678 shows the Equivalent Adj. Revenue Requirement PMT annuity and without the \$25,000 of additional RRTF.

In Scenario 2, the Rate Base Cost of Service is \$197,558 (line 26) with a \$1 million Rate Base including \$12,500 depreciation, ROE, Interest, and Income Tax. The Total Revenue Requirement (line 36) is the same the Total Cost of Service (line 26).

The line 26 Total Cost of Service for Rate Base is \$197,558 and for Operating Margin it is \$188,014. Operating Margin is lower because it does not include the customer funded One-time Lump Sum Assessment. If the lump sum was included the Operating Margin method would be \$1,188,014 (line 29).

On line 32 Corix has computed a payment annuity for the \$1 million lump sum assessment which yields a figure of \$60,665. The Adjusted Revenue Requirement with \$1 million converted to annual payments is \$248,678 (line 33). This amount is more than the \$197,558 under Rate Base. The annuity payment calculation was performed to better compare Rate Base (infrastructure funded by the utility) to the Operating Margin (infrastructure funded by the customer). To make an equivalent comparison, the annuity assumes the customer would need to finance its lump sum contribution.

On line 35 Corix has removed the \$25,000 incremental RRTF pre-funding contribution on the \$1 million new plant. Line 36 compares the Operating Margin result of \$223,678 and the Rate Base amount of \$197,558. In this example, the Rate Base is lower because the utility is compensated for its utility investment by ROE. The equivalent Operating Margin is higher because the customer is paying for the infrastructure costs (PMT annuity) with a service Operating Margin (fee) to operate the utility. In Rate Base there is no Operating Margin cost of service component.

When new plant is added under the Operating Margin methodology, the customer must fund the up-front capital cost and also start saving for its eventual replacement in the future via a higher RRTF contribution (line 22). Under the Rate Base methodology, the customer pays for the annual cost of service in that particular year of use and there is no customer pre-funding that impacts customer bills.

In summary, Corix concludes that the lifetime cost using the Rate Base Methodology and Operating Margin methodology are theoretically generally similar though an argument can be made that over a lifetime Rate Base may be lower since there is no Operating Margin (fee) paid. With Rate Base customers have a professionally managed utility and pay no Operating Margin fee. The utility shareholder with Rate Base is compensated through a return on equity of the shareholder equity investment in the utility; all other incurred costs are passed through to the customer without mark-up under the cost of service rate making process. Under the Rate Base methodology, the stream of payments occur relatively smoothly through the life of the assets. In contrast

under Operating Margin, the stream of payments (including infrastructure) are front loaded for the customer. With Operating Margin, the customer is paying the utility an Operating Service margin (fee) to operate the utility plus the other costs to operate the utility. Also, with Operating Margin customers pay much more in utility bills when the customer funded upgrade is installed but less annually thereafter. However, the customer must separately fund its lump sum assessment for infrastructure from other means.

8.0 Reference: Application, pg. 42 & 43, Customer Consultation

Explanation: There appears to be broad support for the Corix acquisition.

Request:

8.1 Is Corix aware of any customer opposition to the acquisition? If yes, please detail that opposition.

Corix Response:

Corix is not aware of any customer opposition to the Corix acquisition.

ATTACHMENT TO QUESTION 7.1

Attachment to Question 7.1

Assumptions

1	Gross Plant/Capital Expenditure	\$2,000,000	
2	CIAC	(\$2,000,000)	
3			
4	New Capital Expenditure	\$1,000,000	
5	Customer CIAC	(\$1,000,000)	
6			
7	Depreciation Rate	2.50%	40 years
8	Depreciation Study Rate	2.50%	40 years
9	Depreciation Study	\$50,000	
10			
11	Annual O&M	\$100,000	
12	Income Tax Rate	27.00%	
13			
14	ROE	9.50%	
15	Operating Margin	9.50%	
16	Interest Rate	3.00%	
17	WACC	5.3%	
18	Customer Discount Rate	5.3%	
19			
20	<u>Capital Structure</u>		
21	Debt	57.50%	
22	Equity	<u>42.50%</u>	
23	Total	100.00%	

Attachment to Question 7.1

1 Scenario 1: Existing Utility with only \$2 million Water Distribution System

	<u>Rate Base</u>	<u>Operating Margin</u>	
2			
3	\$100,000	\$100,000	
4		50,000	RRTF (Depreciation Study)
5		9,500	Operating Margin
6			Interest
7	0	3,514	Income Tax
8	<u>\$100,000</u>	<u>\$163,014</u>	Total Cost of Service
9			
10		0	Lump-Sum funding from Customer for Upgrades
11	<u>\$100,000</u>	<u>\$163,014</u>	Total Cost of Service after funding
12			
13			
14	\$2,000,000	\$2,000,000	Gross Plant (Distribution System Only)
15	(2,000,000)	(2,000,000)	CIAC
16	<u>\$0</u>	<u>\$0</u>	Net Book Value Assets

17

18

19 Scenario 2: Existing Customer Upgrade for Reservoir/Water treatment Plant for \$1 million

	<u>Rate Base</u>	<u>Operating Margin</u>	
20			
21	\$100,000	\$100,000	
22	25,000	75,000	RRTF (Depreciation Study on \$3.5 million)
23	40,375	9,500	Operating Margin
24	17,250	0	Interest
25	14,933	3,514	Income Tax
26	<u>\$197,558</u>	<u>\$188,014</u>	Total Cost of Service
27			
28		1,000,000	Lump-Sum funding from Customer for Upgrades
29	<u>\$197,558</u>	<u>\$1,188,014</u>	Cost of Service + One-time Lump Sum Assessment
30			
31	\$197,558	\$188,014	Total Cost of Service (line 26)
32		60,665	Estimated PMT annuity value (5.3%, 40 years, on \$1 million)
33	<u>\$197,558</u>	<u>\$248,678</u>	Adjusted Revenue Requirement with \$1 million converted to annual payments
34			
35		25,000	Remove the incremental RRTF contribution on the \$1 million new plant
36	<u>\$197,558</u>	<u>\$223,678</u>	Equivalent Adj. Revenue Requirement PMT annuity and without \$25,000 of additional RRTF
37			
38			
39	\$3,000,000	\$3,000,000	Gross Plant (Dist.System + Reservoir/WTP)
40	(2,000,000)	(3,000,000)	CIAC
41	<u>\$1,000,000</u>	<u>\$0</u>	Net Book Value