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BCUC File 63707

June 5, 2020

Via email

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, British Columbia V6Z 2N3

Attention: Marija Tresoglavic, Acting Commission Secretary

Dear Ms. Tresoglavic:

**Re: Corix Multi-Utility Services Inc.
Application for Approval of a Corporate Cost Allocation Methodology**

Corix Multi-Utility Services Inc. ("**Corix**") hereby submits an application seeking approval of a methodology for allocating corporate costs to its utilities regulated by the British Columbia Utilities Commission. Corix has included a public version of this application, which excludes confidential material located in several appendices. Corix hereby submits the following files along with this cover letter:

1. Corix Corporate Cost Allocation Methodology Application (Public)
2. Corix Corporate Cost Allocation Methodology Application (Confidential)
3. Corix Corporate Cost Allocation Model (Confidential)

A description of the confidential material and Corix's request for confidentiality is located on page 2 of the application.

Please contact RegulatoryAffairs.Canada@corix.com, or Errol South at (604) 928-9933, if you have any questions.

All of which is respectfully submitted,

Corix Multi-Utility Services Inc.

Per:

Errol South
Senior Regulatory & Financial Analyst, Energy Services Canada



Corix Multi-Utility Services Inc.

Corporate Cost Allocation Methodology

Submitted To:

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, B.C. V6Z 2N3

Attention:

Patrick Wruck
Commission Secretary

Submitted By:

Corix Multi-Utility Services Inc.
1990 84th Avenue
Langley, B.C. V2Y 3C2

Contact: RegulatoryAffairs.Canada@corix.com

Date Submitted: June 5, 2020

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1. INTRODUCTION

1.1 APPLICATION

Corix-Multi Utility Services Inc. (“**Corix**”) seeks approval from the British Columbia Utilities Commission (“**BCUC**”) of a methodology for allocating corporate costs (“**Cost Allocation Methodology**”) to its utility operations (“**Application**”). Corix requests approval under sections 59 and 60 of the *Utilities Commission Act* (“**UCA**”) since the corporate cost allocations that result from the Cost Allocation Methodology form part of each utility’s revenue requirements and in certain cases is used to set utility rates. However, Corix is not requesting approval of the allocated corporate cost amounts in this Application. Approval of the allocated corporate costs would be requested in subsequent applications by each of Corix’s utilities regulated by the BCUC. These subsequent applications would be informed by the outcome of the review process for this Application. A draft Order is included in Appendix D.

1.2 APPLICATION OVERVIEW

The application consists of the following sections:

Section 1 provides an introduction to the Application, the regulatory approvals sought, the proposed regulatory review process and relevant contact information.

Section 2 provides an overview of Corix’s ownership structure, key events impacting Corix’s parent company throughout the last decade, and the utility operations of the parent company.

Section 3 provides a description of the corporate cost allocation methodology including a subsection on the use of the Massachusetts Formula in the industry.

Section 4 provides indicative corporate cost allocations to Corix’s utilities regulated by the BCUC.

Section 5 includes a discussion on the capitalization of corporate cost allocations.

Section 6 provides a description of the rate regulation of the utilities and its relationship with the corporate allocation costs.

Section 7 includes Corix’s proposals regarding costs associated with the regulatory review of this Application.

Section 8 provides a conclusion for the Application.

1.3 REGULATORY APPROVALS SOUGHT

In this Application, Corix is seeking approval of the Cost Allocation Methodology used to allocate corporate costs to Corix utilities regulated by the BCUC. By submitting this Application, Corix is applying to the BCUC for approval under sections 59 and 60 of the UCA of:

- 1) a methodology for allocating corporate costs to its utility operations;
- 2) the creation of a deferral account for Corix to capture the costs associated with the regulatory review of this Application; and
- 3) the subsequent allocation of the final balance in the regulatory cost deferral account, as per request number 2, to individual deferral accounts created for each of the utilities regulated by the BCUC, by using the Composite Allocator.

Confidentiality

Corix submits the following confidential documents as part of this Application:

- Confidential Tables (Appendix A);
- The Corporate Cost Allocation Model (Appendix B); and the Corporate Cost Allocation Manual (Appendix C), both used by Corix's ultimate parent company, Corix Infrastructure Inc.

The Confidential Tables include a breakdown of the corporate costs allocated to Corix's utilities regulated by the BCUC expressed as a percentage of Corix Infrastructure Inc.'s total corporate costs. The Corporate Cost Allocation Model is the financial model used by Corix Infrastructure Inc. to calculate the corporate cost allocations for each subsidiary. The Corporate Cost Allocation Manual is an internal document used by Corix Infrastructure Inc. to inform staff and manage the use of the Corporate Cost Allocation Model.

The information contained in Appendices A, B and C is strictly confidential and privileged and has been submitted exclusively for use by the BCUC and its representatives/designees in connection with the evaluation of this Application. The release, use, or distribution of the confidential information to any organization outside of the British Columbia Utilities Commission could subject Corix to substantial harm and loss of competitive advantage resulting in agreements that are unfavorable for existing or future customers. Corix respectfully requests that the BCUC keep this information confidential due to its commercially sensitive nature.

1.4 PROPOSED REGULATORY REVIEW PROCESS

Corix requests that the BCUC review this Application using a written process that results in a decision by the BCUC by no later than November 30, 2020. A BCUC decision by this date could be used to inform the 2021 annual budgeting process at Corix. Table 1 below outlines Corix’s proposed regulatory timetable for the review of this Application. Since this Application has no direct impact to customer rates, Corix proposes that one round of information requests from the BCUC and interveners should be sufficient to provide the necessary information for the Panel to make determinations on Corix’s approvals.

Table 1: Proposed Regulatory Timetable

Item	Action	Date (2020)
1	Corix to publish Notice of Application and Regulatory Timetable	Wednesday, June 24
2	Intervener Registration	Wednesday, July 8
3	BCUC Issues Information Request (“IR”) No. 1	Wednesday, July 15
4	Intervenors Issue IR No. 1	Wednesday, July 22
5	Corix Response to IR No. 1	Wednesday, August 19
6	Corix Final Argument	Wednesday, August 26
7	Intervenors Final Argument	Wednesday, September 9
8	Corix Reply Argument	Wednesday, September 23
9	BCUC Decision	Monday, November 30

Regulatory review processes often require the coordination of utility staff from multiple departments. A regulatory timetable scheduled from the publication of the Notice of Application through to the Reply Argument allows Corix to prioritize and manage limited internal resources reducing overall costs for the utility while ensuring its ability to meet BCUC deadlines. The BCUC has the ability to revise the regulatory timetable at any time if needed and therefore Corix proposes the dates in Table 1 above.

1.5 CONTACT INFORMATION

All communications with respect to this application should be addressed to Corix's Regulatory Affairs email Address: RegulatoryAffairs.Canada@corix.com. For more urgent matters, the following individuals may be contacted.

Primary Contact:

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2. CORIX MULTI-UTILITY SERVICES INC.

2.1 CORIX MULTI-UTILITY SERVICES INC.

Corix owns and operates energy, water and wastewater utilities in British Columbia. Corix’s portfolio comprises rate-regulated utilities, utilities governed by contracts and unregulated utilities. Table 2 provides the list of energy utilities, owned and operated by Corix, that are regulated by the BCUC. As shown in Table 2, Corix owns and operates small standalone utilities in communities throughout British Columbia. Each utility in Table 2 has its own utility assets with its own rate structure. These utilities are relatively very small when compared to the much larger electric and natural gas utilities in BC, each with more than one million customers. In order to increase regulatory efficiency and keep regulatory costs manageable for each of these small utilities Corix has made this combined Application for the approval of a methodology for allocating corporate costs.

Table 2: Corix utilities regulated by the BCUC

No.	Utility	No. of Customers at Dec 31, 2019
1	Dockside Green Energy Utility (“DGE”)	7 customers (<i>servicing 341 units</i>)
2	Burnaby Mountain District Energy Utility (“BMDEU”)	11 customers (<i>servicing 1,053 units</i>)
3	Neighbourhood District Energy System (“NDES”) at the University of British Columbia (“UBC”)	8 customers (<i>servicing 1,176 units</i>)
4	Sun Rivers (“SR”) Gas	640 customers
5	Sun Rivers Electric	935 customers
6	Sonoma Pines (“SP”) Gas	496 customers
7	Sonoma Pines Electric	498 customers
8	Panorama Propane	240 customers

DGE, BMDEU and UBC NDES are regulated as Stream B thermal energy systems as determined by the BCUC Thermal Energy System Regulatory Framework Guidelines. The BMDEU is a biomass-fueled district energy system designed to serve two distinct customer groups each with its own rate base and revenue requirements: (i) the customers of the UniverCity residential neighbourhood (“UniverCity”); and (ii) the Simon Fraser University (“SFU”). Corix has been providing district energy service to UniverCity customers since 2011 through temporary energy centres. Both SFU and UniverCity will connect to the biomass central energy plant upon its completion.

In addition, the BCUC regulates the natural gas utilities at Sun Rivers and Sonoma Pines, the electric utilities at Sun Rivers and Sonoma Pines, and the propane utility at Panorama Mountain Resort (“Panorama Propane”).

2.2 CORIX OWNERSHIP STRUCTURE

Corix is a wholly-owned subsidiary of Corix Utilities Inc, which itself is a wholly-owned subsidiary of a privately held corporation, Corix Infrastructure Inc., owned by the British Columbia Investment Management Corporation. The ownership structure of Corix is depicted in Figure 1 below.

Corix Infrastructure Inc.

Corix Infrastructure Inc. (“CII”) is a fully integrated, leading provider of utility infrastructure solutions, including energy, water, and wastewater utilities for small to medium-sized communities across North America. As a leading North American utility organization that delivers safe, cost-effective, and sustainable utility infrastructure solutions systems across the US and Canada, Corix’s history is rooted in developing, financing, constructing, operating and maintaining a wide range of multi-utility infrastructure for its customers. With approximately \$2 billion in assets and 1,370 utility systems in operation across 20 U.S. states and 3 Canadian provinces, CII has the financial capacity to fund utility systems, and the experience required to operate systems under a variety of delivery and governance models. Combined, CII’s utility systems provide service to over one million end users across North America. CII and its subsidiaries are responsible for the operation and maintenance of over 25 in-service energy systems, ranging in size, scope and technology from large-scale combined heat and power and chilled water plants to low temperature geo-exchange based systems. Figure 1 shows the relationship between CII and each of the Corix utilities regulated by the BCUC.

Figure 1: Ownership Structure for Corix Multi-Utility Services Inc. and utilities regulated by the BCUC

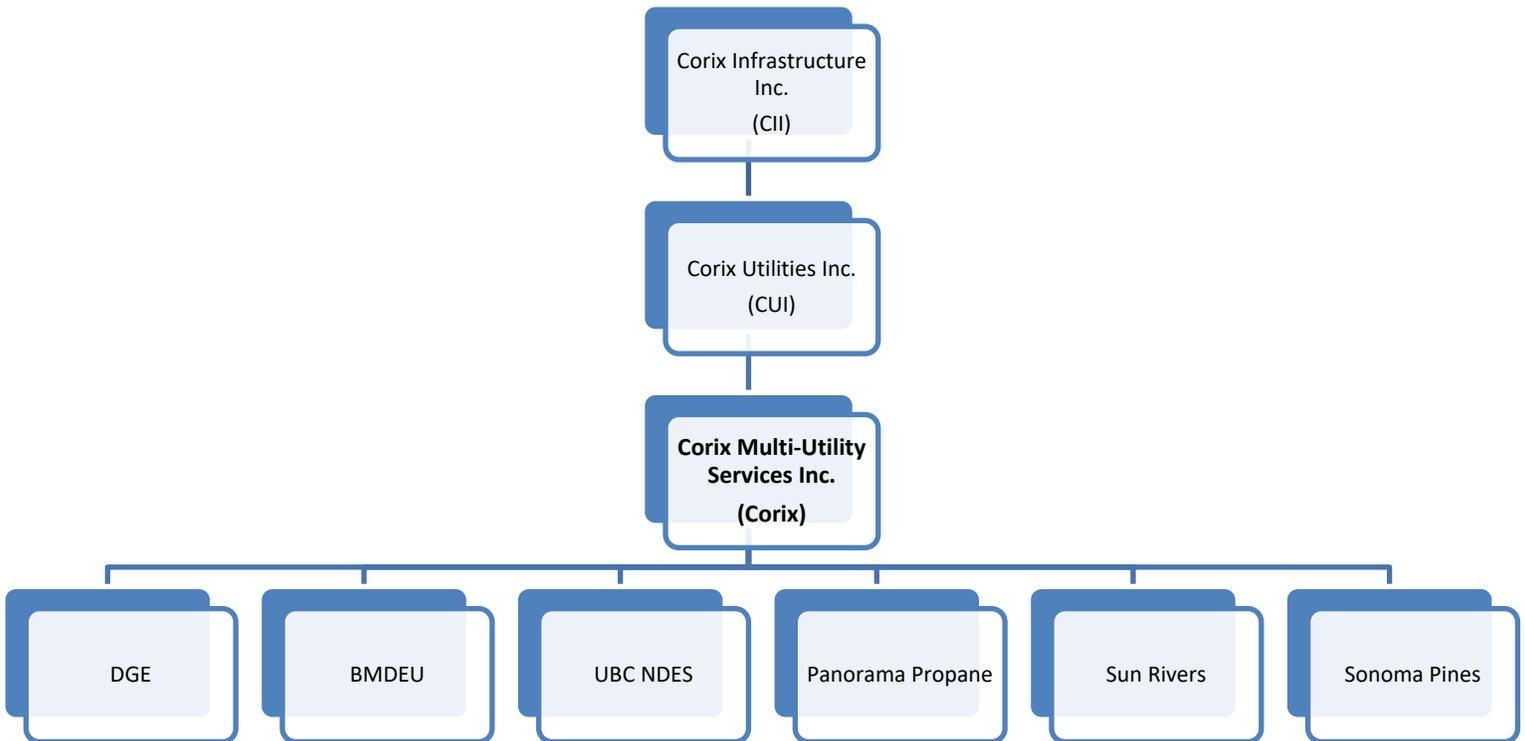


Figure 1 is meant to depict only the ownership structure of Corix and its utilities regulated by the BCUC for the purpose of providing information in this Application. Other utilities under the Corix, CUI and CII portfolios are outside the scope of this proceeding and have been omitted from this chart.

2.3 CII'S GROWTH OVER THE PAST DECADE

In just over a decade, CII has grown by building or acquiring new utilities, which include district energy systems, water and wastewater utilities. In British Columbia alone, utilities added to CII's portfolio through its Corix subsidiary include:

- district energy utilities such as UniverCity Neighbourhood Utility Service, UBC NDES, and DGE; and
- water and wastewater utilities such as Cultus Lake, Canadian Lakeview Estates, and Okanagan Landing Utilities Water.

In addition to growth within British Columbia, there were three key events that have had a significant impact on CII's overall portfolio during this time.

- The first was the acquisition of Utilities Inc., announced in 2012 and completed in 2013. At that time, Utilities Inc. was one of the largest privately owned water and wastewater companies in the United States, providing utility service to over 290,000 customers through 75 subsidiaries across 15 states.¹
- The second key event was the sale of Corix Water Products ("**CWP**") in January 2018. CWP was a distributor of products and equipment for waterworks, sewer and irrigation systems in competitive markets from 36 locations in Canada and 12 locations in the United States.² CWP was a significant part of CII's portfolio, accounting for approximately 52% of revenue and 56% of salaries in 2017, the last full year prior to the sale.
- The third event was the restructuring of Corix's meter services divisions into a separate company ("**Tribus Services**"), with its own management team and reporting hierarchy. Tribus Services provides end-to-end smart metering and utility services for gas, water, and electric utilities. These include Smart Meter/Advanced Meter Infrastructure (AMI)/Automated Meter Reading (AMR) implementations and meter replacements, deploying all types of meter models and smart meter technology.

The sale of CWP and formation of Tribus Services transformed CII into a pure play utility business focused on energy, water, wastewater, and other complementary utility services. Following the disposition of CWP, CII initiated a review of the operations and services within and between all of CII's subsidiaries and their respective business units. The primary objectives of this review, which included external consultants, were to: (i) identify corporate support and shared services across the various business units; and (ii) develop a common methodology for fairly and equitably allocating the costs of those services to each utility business.

The locations of CII's operations and CII's revenue breakdown are shown in Figures 2 and 3 respectively.

¹ Corix News Webpage, December 2012: [Corix Utilities Acquires Utilities, Inc. from Highstar Capital](#)

² Corix News Webpage, January 2018: [Deschênes Group Inc. acquires Corix Water Products](#)

Figure 2: CII Utility Operations Locations across North America³

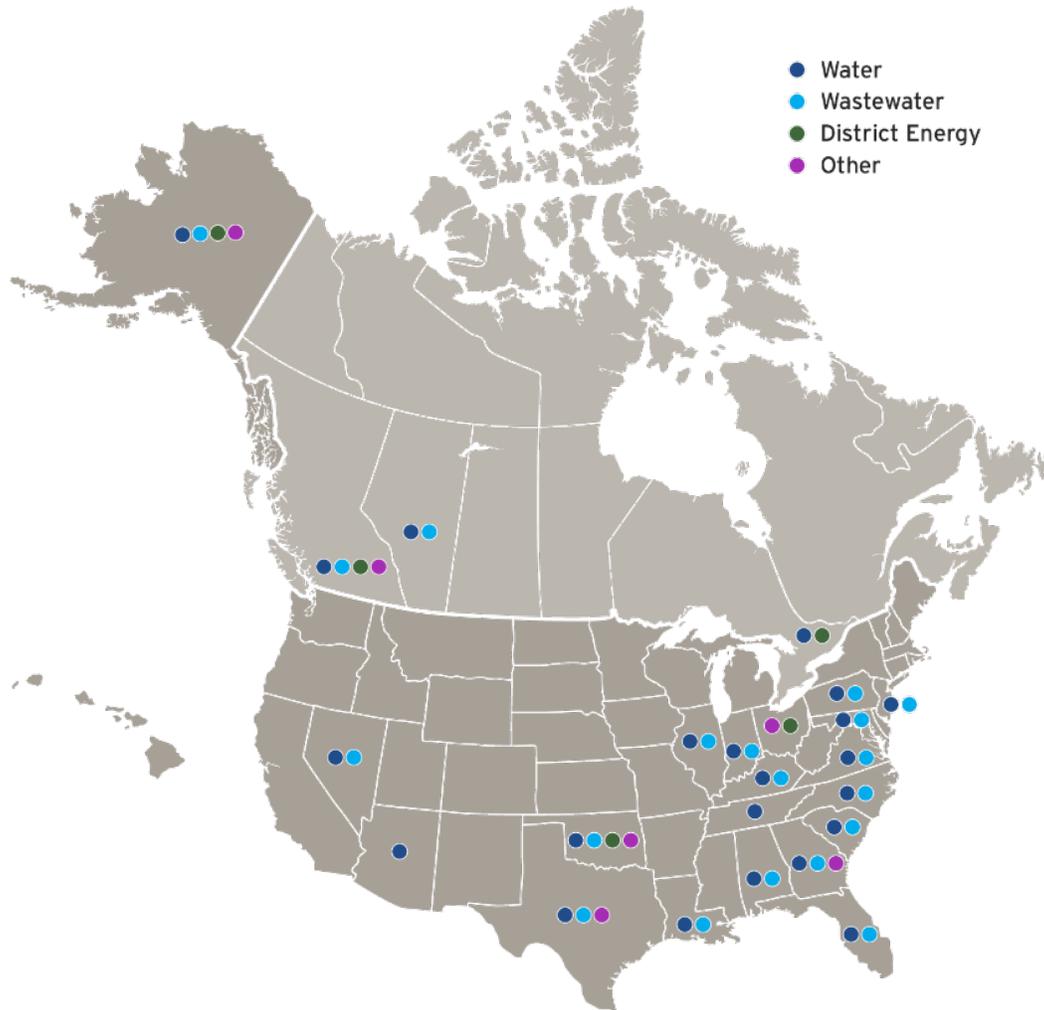
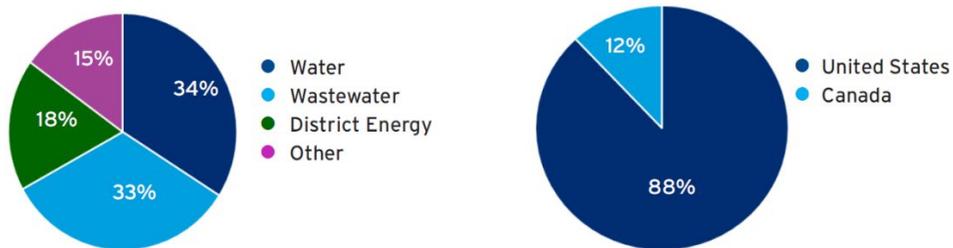


Figure 3: Breakdown of CII revenue by utility type and region⁴



³ "Other" refers to electricity generation, electricity distribution or natural gas distribution.

⁴ "Other" refers to electricity generation, electricity distribution or natural gas distribution.

3. CORPORATE COST ALLOCATION METHODOLOGY

Based on CII's corporate structure, corporate costs are broken down internally into three major cost groups:

1. Corporate Services;
2. Contract Shared Services; and
3. WSC Support Services.

In addition to the three major groups, corporate costs associated with Corix's Chief Operating Officers are shown as a separate line item and are also allocated to the relevant utilities during the corporate cost allocation process. This is further discussed in Sections 3.1 and 3.6.

CII operates 1,370 utilities across North America in 20 U.S. states and 3 Canadian provinces and has a dynamic and flexible corporate structure that responds to the portfolio of companies owned and operated by CII. The corporate structure reflects CII's geographically dispersed portfolio of utility operations. CII has optimized its structure where utilities are operated locally while support services are provided by service hubs. Corporate Services provides support services directly or indirectly to all utilities owned by CII. Contract Shared Services primarily provides services to utilities based in Canada. WSC Support Services provides services primarily to the utilities in the Lower 48 states of the US, though a small number of corporate support services such as corporate finance support are provided to all utilities from WSC Support Services.

Providing services across multiple business units results in benefits, which include:

1. **Increased efficiencies through economies of scale** – With 1,370 utility systems, shared resource initiatives are a more efficient and cost-effective approach than having each business unit procure these services on a standalone basis; and
2. **Functionality and cost effectiveness** – Certain capabilities, including some relating to customer interface options, cannot be cost effectively provided by small utilities operating on a standalone basis.

The following subsections provide an overview of the corporate costs, details of the major cost groups, the cost allocation methodology, a cost allocation example, updating inputs, known and measurable changes, and allocators for the major cost groups.

In Section 3.9 Corix presents a flow chart (Figure 5) which illustrates the key steps taken during the calculation of utility corporate cost allocations.

3.1 OVERVIEW OF CORPORATE COSTS

As discussed in Section 2.2 and shown in Figure 2, CII operates 1,370 utilities across North America. The customer count of Corix's utilities regulated by the BCUC, presented in Table 2 on page 5, provide an example of the small size of these utilities.

Corix's BCUC-regulated utilities are geographically dispersed across British Columbia from DGE in Victoria to Panorama Propane in the East Kootenay Region. These Corix utilities are operated as standalone utilities with each having its own rate base and tariff structure. While they are standalone utilities, they benefit from the economies of scale of a larger organization. The corporate affiliates of Corix are able to provide services at a wider breadth and greater depth than what would be possible at a small utility by itself. The Corix utilities benefit by providing safe and reliable services at a level comparable to a much larger utility.

The proposed cost allocation methodology in this Application follows the principle that cost allocation is to match cost causation as closely as possible. This is reflected in directly assigning costs where possible. When costs are not directly assignable, corporate costs are allocated based on a functional allocator where appropriate. In cases where costs are not directly assigned and not functionally allocated, a composite allocator is used. There is no mark-up on corporate costs allocated to Corix utilities regulated by the BCUC.

Corporate Services Costs

Corporate Services costs are shared costs incurred at the corporate level (CII) in order to provide a wide variety of necessary services to all of CII's affiliates. Corporate Services provided to the affiliates include:

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

Business Development costs incurred by CII have been excluded from Corporate Services Costs until such time as it can be quantitatively demonstrated that the benefit from these activities to customers of the existing utilities exceeds the associated costs. Therefore, Corix is not seeking the ability to recover Business Development costs under this methodology at this time.

A more detailed description of each of the Corporate Services provided is included as Appendix A to Corix's Cost Allocation Manual, filed confidentially in Appendix C of this Application.

Contract Shared Services

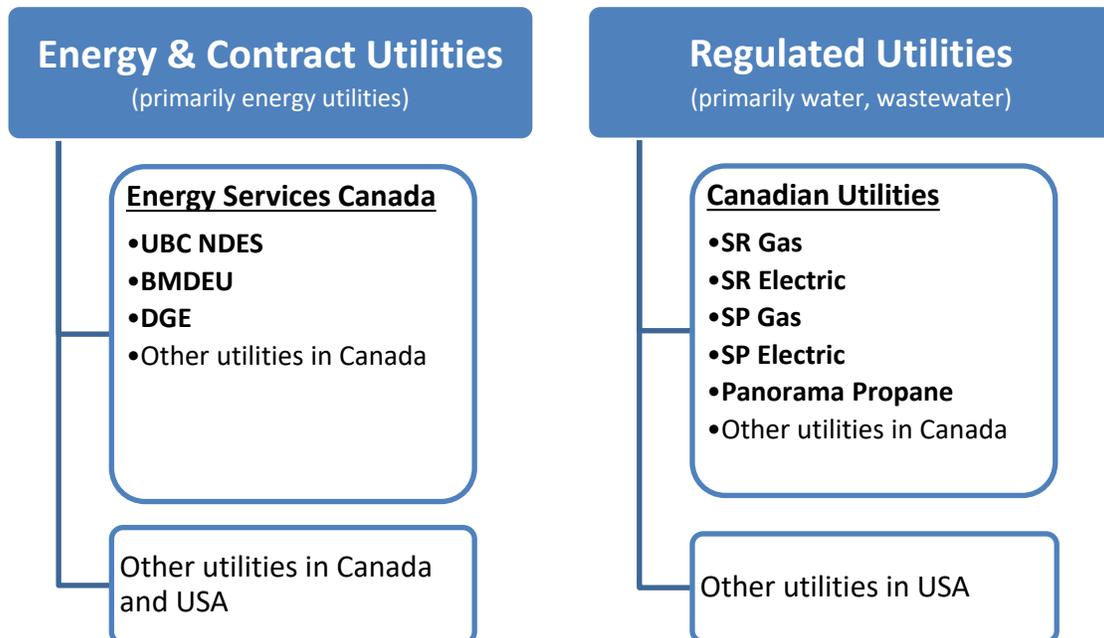
Contract Shared Services costs are necessary costs incurred to provide a variety of services to a specific portion of CII's affiliates. Contract Shared Services include:

- human resources support;
- information technology support;
- utility accounting and accounts payable support;
- payroll support;
- legal support;
- external communications support; and
- health, safety and environment support.

A more detailed explanation of the services provided by Contract Shared Services is included as Appendix C to Corix's Cost Allocation Manual, filed confidentially in Appendix C of this Application.

The majority of Contract Shared Services are for utilities that operate in Canada. With regards to BCUC-regulated utilities, Contract Shared Services activities are currently provided to CII's "**Energy & Contract Utilities**" group and to the "**Canadian Utilities**" group within CII's "**Regulated Utilities**" business.⁵ These businesses within CII's structure are shown in the simplified diagram in Figure 4.

Figure 4: BCUC-regulated Corix utilities within the CII portfolio



⁵ Names used here are specific to Corix's Corporate Structure and internal nomenclature and do not specifically reflect their standard meaning as defined in dictionaries. For example, the Regulated Utilities business within CII contains utilities that do not experience traditional rate regulation by a government tribunal agency.

In CII's functional structure highlighted in Figure 4, the:

- **Energy & Contract Utilities** businesses consist primarily of district energy systems and other utilities in both Canada and the USA operating in rate-regulated, unregulated and contractual environments; and
- **Regulated Utilities** businesses consist primarily of water and wastewater utilities, with some legacy natural gas and electricity distribution utilities, in both Canada and the USA operating in rate-regulated, unregulated and contractual environments.

Corix utilities regulated by the BCUC are also allocated shared costs which are incurred at the regional level ("**Regional Costs**"). Regional Costs include, but are not limited to, shared operating costs such as building rent, utilities expense, salaries, travel, vehicle and office expenses. However, these costs are not included in the Corporate Cost Allocation Model and are outside the scope of review of this Application. Regional Costs are allocated to DGE, BMDEU, UBC NDES and other utilities housed in the Energy Services Canada division from Energy Services Canada only. Regional Costs are allocated to SR Gas, SR Electric, SP Gas, SP Electric, Panorama Propane and other utilities in the Canadian Utilities division from Canadian Utilities only. Energy Services Canada and Canadian Utilities businesses were introduced on page 11 of this Application.

WSC Support Services

WSC Support Services costs are necessary costs incurred to provide a variety of services to a specific portion of CII's affiliates. WSC Support Services activities are primarily provided to CII's business units in the contiguous United States. However, a few WSC Support Services activities are provided to the entire organization and are allocated accordingly. More information is provided on this in Section 3.8. WSC Support Services provided to the applicable affiliates include:

- shared services management;
- risk management;
- corporate finance;
- human resources support;
- information technology support;
- computer systems;
- billing and customer service support;
- health, safety and environment support;
- external communications support; and
- health, safety and environment support.

Further information for WSC Support Services is included as Appendix B to Corix's Cost Allocation Manual, filed confidentially in Appendix C of this Application.

3.2 COST ALLOCATION METHODOLOGY

This Application proposes a methodology to be used to allocate a portion of corporate costs to Corix’s utilities regulated by the BCUC. In this Application, Corix is not requesting approval of the specific allocated corporate cost amounts to the BCUC-regulated utilities. The forecast allocated corporate costs to utilities shown in this Application are indicative amounts that are subject to change as each respective future year is updated. Each of the Corix utilities would seek approval for recovery of the allocated corporate cost amounts in separate applications.

CII has established a structured methodology for allocating corporate costs to each of its utilities. The steps are outlined in Table 3 below.

Table 3: Steps for Allocating Corporate Costs

Item	STEP FOR ALLOCATING CORPORATE COSTS
1.	Corporate costs are first categorized into homogenous categories/services.
2.	Costs are then identified as either: (i) Directly Assignable Costs; or (ii) Indirect Costs.
3.	All Directly Assignable Costs are directly assigned to the appropriate business unit(s).
4.	The basis of variability of the Indirect Costs are then assessed by reviewing what causes these costs to change.
5.	Indirect Costs are then allocated either: <ul style="list-style-type: none"> a. Using a functional allocator on the basis of variability in instances where this method is clearly applicable; or b. Using a Composite Allocator for all other instances.

Directly Assignable Costs

Directly Assignable Costs are costs that are directly associated with a particular business unit’s activity or operation. These costs can be identified with a specific service or product and can be directly assigned. Directly Assignable Costs are not included in the shared corporate costs that are allocated using the proposed Cost Allocation Methodology and therefore steps 1, 2 and 3 from Table 3 above are outside the scope of review for this Application.

Indirect Costs

Indirect Costs are costs that are incurred by the parent or shared services affiliate that are for the benefit of several companies and are not directly assignable to any particular business unit’s activity or operation. Since these costs are not directly assignable, companies must establish a cost allocation methodology that inherently produces a reasonable estimate of the portion of these costs that is

incurred for the provision of services to each applicable subsidiary receiving the benefits. CII’s Indirect Costs are allocated to the companies that benefit from these costs in accordance with item 5 in Table 3.

Functional allocators are used where the Indirect Costs can be allocated using an identified cost causation driver. Functional Allocators used by CII during the allocation process include:

1. **Employee headcount** – for costs that are directly correlated to the number of employees;
2. **Number of Customers** – for costs that are directly correlated to the number of customers of a particular business unit; and
3. **Call volume by business unit** – for costs that are directly correlated to the number of calls for each particular business unit.

The vast majority of CII’s indirect corporate costs do not have a direct correlation with any one particular cost causation driver. Hence, most costs are allocated using a Composite Allocator. Tables 8, 9, 10 and 11 on pages 21, 22, 23 and 24 respectively, present the type of allocator used for each cost category from Corporate Services, the Chief Operating Officers, Contract Shared Services and WSC Support Services.

Composite Allocator

A Composite Allocator comprises of the three equally weighted factors as shown in Table 4 below. These weightings are kept constant in order to avoid unnecessary complexity of the Cost Allocation Methodology.

Table 4: Composite Allocator Factors and Weighting

Factor	WEIGHT
Gross Revenue	33.33%
Gross Property, Plant & Equipment (“PPE”)	33.33%
Headcount	33.33%

A Composite Allocator was chosen to generally reflect the size, scope and complexity of each of the operating business units in the capital-intensive and labour-intensive nature of utility operations. The Composite Allocator based on the factors and weighting shown in Table 4 allows for a just and reasonable allocation of costs in a transparent, sustainable and cost-effective manner that reflects cost causality for shared costs which do not exhibit direct correlation with any one particular cost causation driver.

This Composite Allocator is consistent with the purpose and use of the Massachusetts Formula, which is commonly utilized in the utility industry in North America. The Massachusetts Formula is a multi-factor model based on gross revenue, capital investment, and direct labour of each affiliate utility to the total. FortisBC Energy Inc. uses a form of the Massachusetts Formula composed of the arithmetical average of (1) operating revenue, (2) payroll, and (3) average net book value of capital assets plus inventories approved by the BCUC.⁶ Section 3.10 provides more information on the use of the Massachusetts Formula in industry.

3.3 HYPOTHETICAL COST ALLOCATION EXAMPLE USING A COMPOSITE ALLOCATOR

The following provides a hypothetical example of the allocation of corporate costs using the Composite Allocator, described above, for Business Unit "A". In this example Business Unit "A" operates in Canada and receives corporate support from: (1) a corporate affiliate who provides services for all of North America; and (2) a corporate affiliate who provides services for Canada only. Assume there are only two allocators for this simplified company which has both rate-regulated utilities and non-regulated operations. Business units in this example are equivalent to separate identifiable utility entities.

Table 5: Hypothetical Composite Allocation Example – Step 1 – Determining the Allocators

Line No.	Description	Pool of Business Units To Be Allocated Corporate Costs \$ millions	Business Unit "A" \$ millions	Factor Ratio	Equal Weighting	Weighted Factor
	(a)	(b)	(c)	(d)	(e)	(f)
				= (c)/(b)		= (d) x (e)
1	<u>Allocator #1:</u>					
2	Gross Property, Plant, and Equipment	\$2,500	\$50	2.0000%	0.3333	0.667%
3	Gross Revenues	\$900	\$8	0.8889%	0.3333	0.296%
4	Headcount	800	10	1.2500%	0.3333	0.417%
5						
6	Allocator #1 for Business Unit "A"					1.38%
7						
8						
9	<u>Allocator #2:</u>					
10	Gross Property, Plant, and Equipment	\$1,000	\$50	5.0000%	0.3333	1.667%
11	Gross Revenues	\$300	\$8	2.6667%	0.3333	0.889%
12	Headcount	120	10	8.3333%	0.3333	2.778%
13						
14	Allocator #2 for Business Unit "A"					5.33%

Table 5 above shows Step 1 of the Composite Allocation Example. In this example there are two allocators (Allocator #1 and Allocator #2) to be calculated using the composite allocation method. For

⁶ FortisBC Energy Inc. 2014-2018 Revenue Requirements Application, p. 278
https://www.bcuc.com/Documents/Proceedings/2013/DOC_34887_B-1_FEI-2014-18-PBR-Application-Vol-1.pdf

each particular allocator to be calculated, the relevant pool of business units are identified (column b for each allocator) that receive services and benefits from the corporate cost. In Allocator #1 the pool of business units receiving services are located across North America. In Allocator #2 the pool of business units receiving services are located in Canada only. Therefore, the pool of business units receiving services for Allocator #2 is a subset of the pool of business units receiving services for Allocator #1.

Figures are obtained for the three input factors (gross PPE, gross revenue, and headcount) for the pool of business units and for Business Unit "A". Business Unit "A" is one of the many business units in the pool. The three factors are equally weighted at 1/3rd each (column e). The weighted factors (column f) are then summed to arrive at the Composite Allocator percentage for Business Unit "A" (line 6 for Allocator #1 and line 14 for Allocator #2). The equal weighting of the components reflects that cost allocations are inherently an estimating exercise to fairly allocate costs and no factor is over-weighted compared to another relevant factor.

Allocator #1 has a percentage ratio of 1.38% for Business Unit "A". In Allocator #1 the pool of business units receiving services are company-wide. This means that Business Unit "A" will receive 1.38% of the corporate costs incurred for each service and benefit received by all business units in North America. In contrast, Allocator #2 has a smaller pool of Canadian business units receiving services. Allocator #2 for Business Unit "A" receives a percentage ratio of 5.33%. This means that Business Unit "A" will receive 5.33% of the corporate costs incurred for each service and benefit received by business units in Canada only.

The Allocator #1 percentages when summed for all business units in the pool equals 100%. This would be the same for Allocator #2. This means when the corporate costs are allocated to the business units in the pool all the costs are allocated out. Business Unit "A" would receive a portion of the corporate costs based on the calculated percentages for each of the two allocators.

Table 6: Hypothetical Composite Allocation Example – Step 2 – Allocating Corporate Costs

Line No.	Description (a)	Corporate Costs to be Allocated \$ millions (b)	Composite Allocator to use (c)	Business Unit "A" Percentage Allocator (d)	Corporate Costs Allocated \$ (d)
1	<u>Corporate Cost Types</u>				
2	Corporate Costs - Company wide	\$17	Allocator #1	1.380%	\$234,537
3	Corporate Costs - Canada	\$11	Allocator #2	5.333%	\$586,667
4	Total	<u>\$28</u>			<u>\$821,204</u>

Table 6 above shows Step 2 of the Composite Allocation Example. After the Composite Allocator percentages are calculated in Step 1, the allocators are applied to the related corporate cost categories.

In the example for Business Unit “A”, Corporate Costs - Company wide has Allocator #1 at 1.38%. Corporate Costs - Canada has Allocator #2 at 5.333%. Each allocator is multiplied by the related corporate cost. In the above example Business Unit “A” is allocated a total of \$821,204 from corporate costs totaling \$28 million, representing 2.93% of total corporate costs. Therefore, based on the allocators used, it is estimated that \$821,204 of the total corporate costs were incurred to provide corporate services to Business Unit “A”. The allocated costs for Business Unit “A” reflect company-wide services it received from the corporate parent (Allocator #1 at \$234,537) and services to Canadian utilities only received from the corporate parent (Allocator #2 at \$586,667).

The above process provides a simplified example of how the cost allocation methodology at CII is applied using a composite allocator for corporate costs. This example with hypothetical figures for the allocator percentages and allocated cost amounts are not indicative of the Corix allocations shown in this Application. The example shown above is intended to show the methodology on how the allocators in CII’s cost allocation model is calculated and applied to corporate costs.

3.4 UPDATING INPUTS ANNUALLY

Due to the constantly changing input figures, CII uses an annual reference point to determine the Functional Allocators and the Composite Allocators to be used for the upcoming year. This approach provides stability for allocations as well as a reference for year-over-year comparisons.

Table 7: Updating Inputs for the Cost Allocation Model

No.	Inputs (Actuals)	REFERENCE
1.	Gross Revenue	Trailing Twelve Months up to June 30 th of prior year
2.	Gross Property, Plant & Equipment	As at June 30 th of prior year
3.	Headcount	As at June 30 th of prior year
4.	Number of Customers	As at June 30 th of prior year
5.	Call Volume by Operating Business	As at June 30 th of prior year

Therefore, the Composite Allocators to be used to allocate 2021 Corporate Costs will be determined by:

- Trailing Twelve Months of Actual Gross Revenue up to and including June 30, 2020;
- Actual Gross Property, Plant & Equipment as at June 30, 2020; and
- Actual Headcount as at June 30, 2020.

June 30th was chosen as the most appropriate date that as it allows for the use of the most recent actual information without risking any delays to the budget process. A date earlier than June 30th would result in the unnecessary use of outdated information. A date after June 30th would yield more current information but may cause delays to the budget process for the entire organization.

3.5 KNOWN AND MEASURABLE CHANGES

In unique circumstances, adjustments are made for known and measurable changes that would otherwise result in a cost allocation that does not reflect cost causality. The Known and Measurable Changes accounted for through the Cost Allocation Methodology are:

- 1) Bargain Acquisition Adjustment;
- 2) Asset Impairment Adjustment; and
- 3) Approved Major Capital Projects.

(1) Bargain Acquisition Adjustment

In some situations, utility assets are acquired for \$1, or purchased for an amount significantly below the net book value of the assets. These purchases will be considered as though the utility assets were acquired at cost (for new assets) or fair market value (for assets previously in use). When the actual acquisition cost is lower than the associated cost (for new assets) or fair market value (for assets previously in use), Corix will recognize a corresponding Contribution in Aid of Construction (“CIAC”) to reduce the net book value of the asset to the actual purchase price, for example \$1. In this case, the Gross Property, Plant and Equipment figure used to determine the CAM composite figures would be the gross book value of the assets at the time of purchase prior to the application of the CIAC. For example, if an asset had a fair market value of \$200,000 at the time of acquisition, but was acquired by Corix for \$1, Corix would record the gross PPE as \$200,000, a CIAC of \$199,999 and the resulting net book value of the asset after acquisition would be \$1. The gross PPE figure of \$200,000 would be used to determine the CAM composite figures.

Despite the uniqueness surrounding this scenario, this adjustment is necessary for Dockside Green Energy. Corix acquired all the assets of the Dockside Green Energy LLP partnership for \$1 in 2018 after receiving BCUC approval through Order G-166-18. For DGE the gross plant balance in the financial system and rate base was set to \$1 as indicated by Corix to the BCUC during the review of the application for approval of the acquisition. The assets were purchased at a bargain price because Dockside Green Energy LLP’s ongoing operating costs and cost to carry the assets at original cost were much greater than the revenue that could reasonably be charged to customers. The assets by themselves have a value significantly greater than \$1 and require continuous ongoing management oversight and stewardship as the utility continues to provide service to customers.

In order to ensure a just and reasonable corporate cost allocation to Corix’s DGE utility and all other utilities within the CII portfolio, an acquisition adjustment has been made to DGE’s Gross PPE to account for the fair market value of the assets at the time of acquisition. The effect of this adjustment is similar to if the assets were initially booked into the Corix financial system at a gross plant level equal to the fair market value of the assets at the time of acquisition less a CIAC to bring the net book value to the amount of the negotiated purchase price, which in the case of DGE is \$1.

(2) Asset Impairment Adjustment

In instances where assets have been written down for accounting impairment purposes, the assets would continue to be recognized at their historical gross PPE value for the calculation of the Composite Allocator, provided that such assets continue to be used and are useful in the provision of service to customers. Despite the uniqueness surrounding this scenario, this adjustment is necessary for some utilities within CII's portfolio, including Sonoma Pines Electric whose assets were written down for accounting impairment purposes in 2018. Therefore, an Asset Impairment Adjustment has been performed for Sonoma Pines Electric to account for the fact that the physical assets continue to require ongoing management oversight and stewardship as the utility continues to provide service to customers.

(3) Approved Major Capital Projects

This is an adjustment to include approved major capital projects that are about to go into service after the June 30th cut-off date for inputs that year. It recognizes that the June 30th cut-off in the year for actual inputs to calculate the following year's corporate cost allocation may omit impending known and measurable changes that were previously approved by regulators. This is because the six-month period from July 1st to December 31st does not get reflected in the following year's cost allocations. As the corporate cost allocation is inherently an estimate to calculate a reasonable allocation of costs any minor changes or activity is immaterial. However, in some cases an approved major capital project that is to be placed in service during the July 1st to December 31st period may have a large material impact on the revenue requirement for several utilities. This adjustment, with regard to allocation of corporate costs, recognizes that conceptually a project placed in service in the latter half of the year is treated the same as if a project is placed in service in June 30th of that same year.

The following provides specifics with example dates for the 2021 cost allocation to illustrate the adjustment. As shown in Section 3.4 the inputs for the cost allocation model are based on actual gross PPE figures at June 30th. This means for cost allocations for 2021 the underlying allocators are based on June 30, 2020 information. There is a 6-month period in 2020 (from July 1st to December 31st) in which changes in that period do not get reflected in 2021. For ongoing operations with consistent activities this short lag is immaterial. However, for certain approved major capital projects it could have a significant impact to the revenue requirement for the utility and other utilities receiving costs from the same corporate cost category(s).

To address this situation, Corix includes an exception to the June 30th cut-off for this 6-month period for Approved Major Capital Projects. Corix will make an adjustment using the most recent projected figures if all of the following apply to the situation:

- (1) Corix has previously received regulatory approval for the execution of a major capital project, such as a Certificate of Public Convenience and Necessity ("CPCN");
- (2) there is reasonable certainty that the major capital project will be completed, and the associated assets will be placed in service between July 1st and December 31st, after the June 30th cut-off date; and

- (3) there is a significant impact and change to the allocation of corporate costs to the utility and other utilities absent such an adjustment.

In a hypothetical example, if a \$30 million capital project was approved through a CPCN by the BCUC in 2017 and is scheduled for completion in October 2020 then the Gross PPE associated with this capital project would be \$0 at June 30, 2020. Based on this input, the total value of the capital project scheduled to go into service in October 2020 would not be factored into the cost to serve customers and the rates for 2021. While this capital project would be requiring management time and effort and associated costs in 2021 it would receive no associated allocations in 2021 if no adjustment was carried out. Since the corporate costs are being forecasted to account for this new capital project and included as inputs to the Cost Allocation Model, if no adjustment to the Gross PPE was carried out, it would artificially reduce allocations for this utility while artificially inflating corporate costs for the other utilities in the CII portfolio. Corix considers that the Approved Major Capital Project adjustment is just and reasonable in cases where the data at June 30th indicates that the project is scheduled to start providing service to customers within the following 6 months.

3.6 CORPORATE SERVICES ALLOCATORS

As stated in Section 3, CII’s Corporate Costs are broken down internally into three major groups:

1. Corporate Services;
2. Contract Shared Services; and
3. WSC Support Services.

Table 8 below provides the Corporate Services cost categories and the allocation methodology used to allocate the Indirect Costs associated with each category.

Table 8: Summary of Corporate Services cost categories and allocation methodology

Item	Cost	ALLOCATION METHODOLOGY
1.	Corporate Office and Admin	Composite Allocator
2.	Corporate Finance	Composite Allocator
3.	Human Resources Corporate	Composite Allocator
4.	Information Technology	Composite Allocator
5.	Legal Corporate	Composite Allocator
6.	Corporate Health, Safety and Environment	Composite Allocator
7.	Corporate Communications	Composite Allocator
8.	Continuous Improvement	Composite Allocator
9.	Strategy	Composite Allocator

All Corix utilities regulated by the BCUC receive costs from each of the Corporate Services categories in the table above. A more detailed description of each of the Corporate Services provided is included as Appendix A to Corix’s Cost Allocation Manual, filed confidentially in Appendix C of this Application.

Chief Operating Officer

Figure 4 on page 11 identified the Energy & Contract Utilities and the Regulated Utilities businesses within the CII portfolio. Within CII the:

- **Regulated Utilities** businesses consist primarily of water and wastewater utilities, with some legacy natural gas and electricity distribution utilities, in both Canada and the USA operating in rate-regulated, unregulated and contractual environments; and
- **Energy & Contract Utilities** businesses consist primarily of district energy systems and contractual utilities, in both Canada and the USA operating in rate-regulated, unregulated and contractual environments.

These have been grouped functionally to achieve efficiencies and synergies taking into consideration the type of utility operations. Due to the size and complexity of each portfolio CII maintains a Chief Operating Officer (“COO”) for Regulated Utilities and a Chief Operating Officer for Energy & Contract Utilities. While costs associated with the COOs are considered corporate costs they are not included in the standard categories provided in Table 8. These costs are shown as a separate line item but are allocated to the relevant utilities using the Composite Allocator. Table 9 below provides the allocation methodology used to allocate the Indirect Costs associated with each COO.

Table 9: Summary of COO categories and allocation methodology

Item	Cost	ALLOCATION METHODOLOGY
1.	Energy & Contract Utilities COO Cost Centre	Composite Allocator
2.	Regulated Utilities COO Cost Centre	Composite Allocator

Of the Corix utilities regulated by the BCUC:

- DGE, BMDEU, UBC NDES receive allocated costs only from the Energy & Contract Utilities COO Cost Centre and do not receive costs from the Regulated Utilities COO Cost Centre.
- SR Gas, SR Electric, SP Gas, SP Electric and Panorama Propane receive allocated costs only from the Regulated Utilities COO Cost Centre and do not receive costs from the Energy & Contract Utilities COO Cost Centre.

3.7 CONTRACT SHARED SERVICES ALLOCATORS

Table 10 below provides the Contract Shared Services categories and the allocation methodology used to allocate the Indirect Costs associated with each category.

Table 10: Summary of Contract Shared Services cost categories and allocation methodology

Item	Cost	ALLOCATION METHODOLOGY
1.	Human Resources Support	Headcount
2.	Information Technology Support	Composite Allocator
3.	Accounting/Accounts Payable Support	Composite Allocator
4.	Payroll Support	Composite Allocator
5.	Legal Support	Composite Allocator
6.	External Communications Support	Composite Allocator
7.	Health, Safety and Environment Support	Composite Allocator

All Corix utilities regulated by the BCUC receive costs from each of the Contract Shared Services categories in Table 10 above. A more detailed explanation of the services provided by Contract Shared Services is included as Appendix C to Corix’s Cost Allocation Manual, filed confidentially in Appendix C of this Application.

3.8 WSC SUPPORT SERVICES ALLOCATORS

Table 11 below provides the WSC Support Services categories and the allocation methodology used to allocate the Indirect Costs associated with each category.

Table 11: Summary of WSC Support Services cost categories and allocation methodology

Item	Cost	ALLOCATION METHODOLOGY
1.	Chief Shared Services Office	Composite Allocator
2.	Chief Risk Officer (Risk Management)	Composite Allocator
3.	WSC Corporate Finance	Composite Allocator
4.	Human Resources Support	Headcount
5.	Information Technology Support	Headcount
6.	Computer System Cost	Composite Allocator
7.	Billing	No. of customers
8.	Customer Service	Call Volume by operating Business
9.	Health, Safety and Environmental Support	Headcount
10.	External Communications Support	Composite Allocator
11.	Other Indirect Capital, Depreciation and Costs	Composite Allocator

Of the WSC Support Services costs listed above, only three have Indirect Costs allocated to Corix utilities regulated by the BCUC. These three all use the Composite Allocator and are:

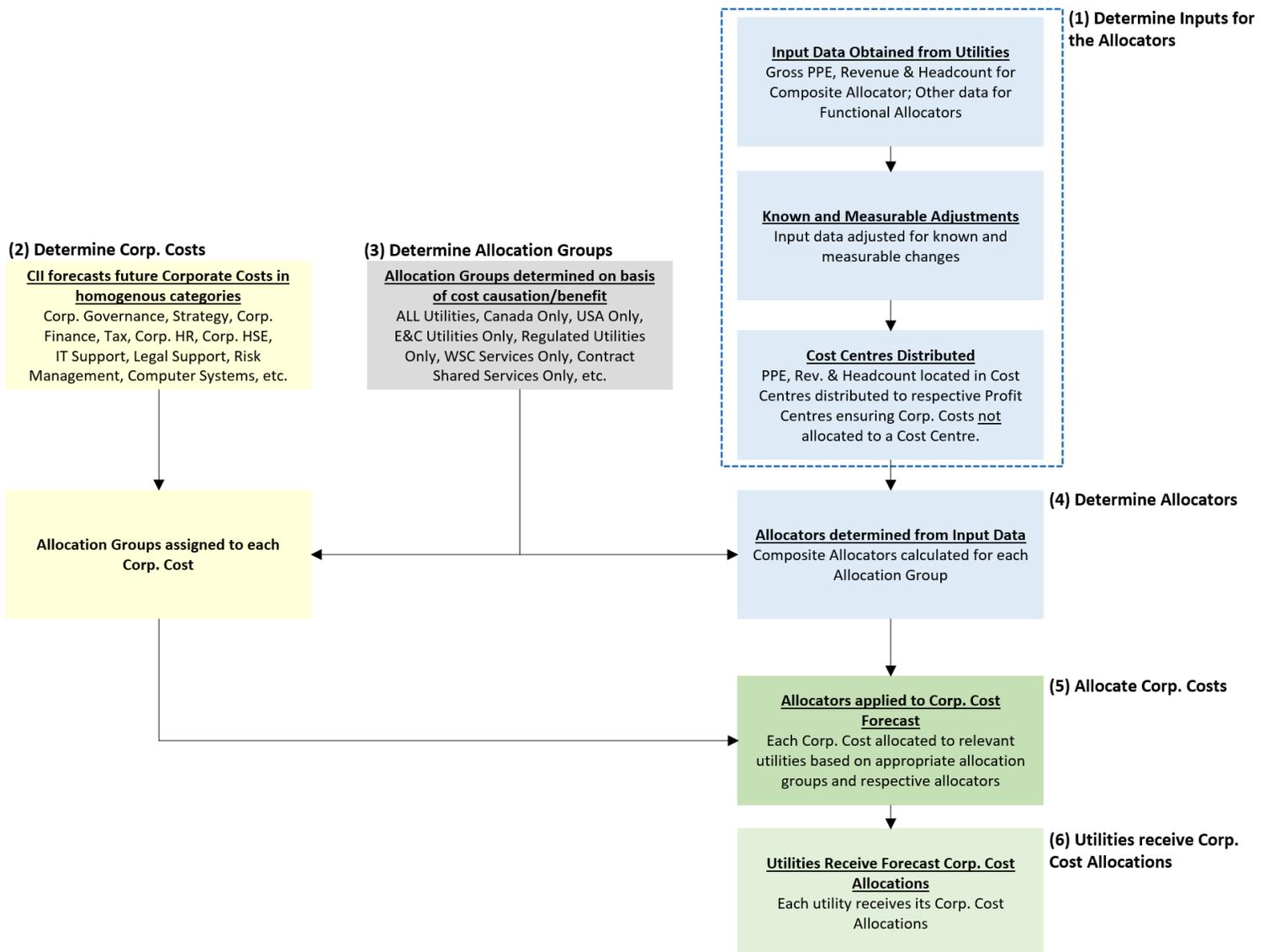
1. Chief Risk Officer (Risk Management) - provides services for all utilities within CII's portfolio;
2. WSC Corporate Finance - provides services for all utilities within CII's portfolio; and
3. Computer System Cost - provides services to all utilities within CII's portfolio.

Further information for WSC Support Services is included as Appendix B to Corix's Cost Allocation Manual, filed confidentially in Appendix C of this Application.

3.9 CORPORATE COST ALLOCATION METHODOLOGY FLOW-CHART

The following diagram illustrates the key steps taken during the calculation of each utility’s corporate cost allocations.

Figure 5: Key Steps during CII's Corporate Cost Allocation Methodology



3.10 USE OF THE MASSACHUSETTS FORMULA IN THE INDUSTRY

Except for Contract Shared Services Human Resources Support, all Corporate Costs are allocated to Corix's BCUC-regulated utilities using the Composite Allocator. The Composite Allocator is consistent with the Massachusetts Formula. The Massachusetts Formula is a multi-factor model based on gross revenue, capital investment, and direct labour of each affiliate utility to the total. The use of the Massachusetts Formula to allocate corporate or shared services costs is a widely used and accepted method for allocating costs in the utility industry in North America. The Massachusetts Formula has been used in the US by the Federal Energy Regulatory Commission ("FERC") to allocate corporate overhead costs where the three factors are weighted equally.⁷ In Alberta the Alberta Utilities Commission ("AUC") has also approved a form of the Massachusetts Formula for EPCOR Distribution & Transmission Inc. where the three factors are equally weighted.⁸ In addition to the FERC and the AUC, the Massachusetts Formula has been approved to allocate corporate costs in British Columbia for public utilities regulated by the BCUC.

FortisBC Energy Inc. and FortisBC Inc.

In British Columbia, the BCUC previously approved the allocation of eligible corporate services costs from Fortis Inc. and FortisBC Holdings Inc. to subsidiaries such as FortisBC Energy Inc. ("FEI") and FortisBC Inc. ("FBC") using the Massachusetts Formula.⁹ FEI is the largest natural gas distribution utility in British Columbia and has been designated as the benchmark utility for the purpose of setting the approved return on equity for other utilities regulated by the BCUC. FBC is an electric utility that operates in the Okanagan region of British Columbia. Both FEI and FBC are owned by Fortis Inc. through FortisBC Holdings Inc. FEI and FBC have applied the Massachusetts Formula to allocate common costs in rate applications previously approved by the BCUC. Some examples of these are:

- The allocation of corporate service costs from FortisBC Holdings Inc. to the three utilities which later amalgamated to the current FEI was done using the Massachusetts Formula for many years.
- Board of Directors costs have been allocated from FHI to FEI and FBC utilizing the Massachusetts Formula since 2012 as approved by BCUC Order G-110-12; and
- Executive costs were approved to be allocated between FEI and FBC using the Massachusetts Formula beginning in 2012 pursuant to BCUC Orders G-138-14 and G-139-14.¹⁰

⁷ For example in FERC Opinion 511 for SFPP, L.P., <https://www.ferc.gov/whats-new/comm-meet/2011/021711/G-2.pdf>

⁸ AUC Decision 2012-272 for EPCOR Distribution & Transmission Inc., http://www.auc.ab.ca/regulatory_documents/ProceedingDocuments/2012/2012-272.pdf

⁹ [FortisBC Energy Inc. and FortisBC Inc. 2020-2024 Multi-year Rate Plan Application](#) to the BCUC, Section D-5, pp. D-41 to D-42.

¹⁰ [FortisBC Energy Inc. and FortisBC Inc. 2020-2024 Multi-year Rate Plan Application](#) to the BCUC, Section D-5, pp. D-49 to D-50.

Creative Energy

In the Decision for BCUC Order G-205-18, the Panel approved the use of the Massachusetts Formula to allocate Creative Energy's Sales, General & Administrative costs between its steam service utility and other projects or entities. The Panel stated:

"The Panel also agrees that the Massachusetts Formula is in use in many utilities and is a valid methodology commonly used to allocate costs to outside projects or other entities. **Therefore, the Panel finds Creative Energy's recommendation of the Massachusetts Formula to be acceptable and approves this methodology for application in this and future revenue requirements.** The Panel notes that for this methodology to be effective, it must be updated to reflect ongoing changes related to the addition of new projects."¹¹

Corix's methodology includes an annual update of all the inputs in order to allocate Corporate Costs for the following year. This was described in Section 3.4.

¹¹ Decision for Order G-205-18 regarding the Creative Energy 2018-2022 Revenue Requirements Application, p. 37.

4. INDICATIVE COST ALLOCATIONS

Table 12 below provides the current indicative forecast corporate cost allocations to each of the utilities regulated by the BCUC. The actual allocation percentages and corporate cost allocations to each utility will vary each year depending on the size of CII's eligible corporate cost pool, the number of utilities in CII's portfolio and the gross PPE, revenue and headcount associated with each of the utilities in CII's portfolio.

Table 12: Indicative Corporate Cost Allocations

Item	Utility	INDICATIVE CORPORATE COST ALLOCATIONS (CAD\$)		
		2020F	2021F	2022F
1.	Dockside Green - Energy	\$ 76,787	\$ 78,868	\$ 68,324
2.	UBC	231,037	213,183	183,179
3.	BMDEU - UniverCity	202,998	299,636	364,790
4.	BMDEU - SFU	--	142,601	449,197
5.	Panorama - Propane Storage ¹²	38,894	35,504	34,835
6.	Panorama - Propane Distribution	40,714	37,543	37,030
7.	Sun Rivers - Electric	156,182	141,279	138,131
8.	Sun Rivers - Gas	23,845	21,396	20,804
9.	Sonoma Pines - Electric	49,284	44,216	42,735
10.	Sonoma Pines - Gas	19,721	17,863	17,370
	Subtotal	839,462	1,032,089	1,356,396
	Total for BCUC-Regulated Utilities <i>(excludes Panorama – Propane Storage)</i>	\$ 800,568	\$ 996,585	\$ 1,321,561

UniverCity customers and the SFU customer of the BMDEU will have separate rate bases with separate revenue requirements and rates and so are allocated corporate costs separately despite being provided energy service from the same biomass central energy plant. As discussed in Section 3.4 above, the inputs (gross PPE, gross revenue and headcount) used to determine the Composite Allocator that is then used to forecast the corporate cost allocations for a particular year are based on actual data at June 30th of the previous year with adjustments for known and measurable changes. In other words, the

¹² Not regulated by the BCUC. Due to the nature of the acquisition of Panorama Propane's assets, the unregulated propane storage facility assets are separate from the regulated propane distribution assets in Corix's records. For transparency, Corix has shown the Indicative Corporate Cost Allocations for both sets of assets.

Composite Allocator to determine 2020 forecast Corporate Cost Allocations is based on inputs from June 30, 2019.

Table 13 below shows that when combined, indicative corporate cost allocations to Corix utilities regulated by the BCUC account for 1.64%, 2.09% and 2.67% of CII’s total forecast Corporate Costs for 2020F, 2021F and 2022F respectively. This highlights the relatively large size of CII’s businesses in the United States which is allocated approximately 88% of the total forecast Corporate Costs in each of 2020F, 2021F and 2022F respectively.

Table 13: Forecast Indicative Percentages of Total CII Corporate Costs

Item	Utility	INDICATIVE PORTION OF TOTAL CII CORP. COSTS		
		2020F	2021F	2022F
1.	Dockside Green - Energy	0.16%	0.17%	0.14%
2.	UBC	0.47%	0.45%	0.37%
3.	BMDEU - UniverCity	0.42%	0.63%	0.74%
4.	BMDEU - SFU	0.00%	0.30%	0.91%
5.	Panorama - Propane Storage ¹³	0.08%	0.07%	0.07%
6.	Panorama - Propane Distribution	0.08%	0.08%	0.07%
7.	Sun Rivers - Electric	0.32%	0.30%	0.28%
8.	Sun Rivers - Gas	0.05%	0.04%	0.04%
9.	Sonoma Pines - Electric	0.10%	0.09%	0.09%
10.	Sonoma Pines - Gas	0.04%	0.04%	0.04%
	Subtotal	1.72%	2.16%	2.74%
	Total for BCUC-Regulated Utilities <i>(excludes Panorama – Propane Storage)</i>	1.64%	2.09%	2.67%

¹³ Not regulated by the BCUC. See note 12.

5. CAPITALIZATION OF CORPORATE COSTS

5.1 CAPITALIZATION OF A PORTION OF CORPORATE COSTS

A portion of shared costs, both corporate costs and Regional Costs, can be attributed to the execution of major capital projects at Corix’s utilities. Corix obtains BCUC approval, typically through a Certificate of Public Convenience and Necessity, prior to executing these major capital projects at rate-regulated utilities. Possible reasons for major capital projects include, but are not limited to:

- Expansion of the distribution system due to ongoing building development and customer additions at greenfield utilities. In these cases, capital costs are usually incurred periodically and are typically associated with the addition of new customers.
- Capacity expansion due to ongoing building development and customer additions at greenfield utilities. These capital projects are typically less frequent than those associated with the expansion of the distribution system due to customer additions.
- A switch to a cleaner or renewable energy source associated with lower greenhouse gas emissions. An example of this is if a district energy system operating with natural gas boilers is then converted into a district energy system operating with a biomass central energy plant or a sewer heat recovery system.
- Replacement of old, worn, inefficient plant equipment and systems with newer, more efficient versions in the case of legacy utilities or acquisitions of old utility plants.

In each of these cases a portion of shared costs, at both the corporate and the regional level, is associated with the implementation of these capital projects.

In future utility applications to the BCUC, Corix may seek to capitalize a portion of these shared costs allocated to each utility on a case-by-case basis. The relevant information supporting the percentage of corporate costs to be capitalized would be submitted at the same time that Corix is seeking approval of the corporate cost allocations for that utility. The capitalized portion of corporate cost allocations would be added to rate base and depreciated over an appropriate timeframe. The remaining portion of the corporate cost allocations would be included as an expense item in the annual operating and maintenance expenses.

Corix is not seeking approval for the capitalization of corporate costs in this Application.

5.2 USE OF CAPITALIZED OVERHEAD IN THE INDUSTRY

Capitalized overhead on gross operating and maintenance (“**Gross O&M**”) costs is a common practice in the energy industry in North America. It reflects a reasonable approach to capitalize shared costs for capital activities that have not been charged to capital projects. Capitalization of overheads is recognized in the BCUC Uniform System of Accounts in the account “Overhead Charged to Construction”. Utilities regulated by the BCUC have historically and recently been granted approval to

capitalize overhead from their gross O&M. These utilities include FortisBC Energy Inc.¹⁴, FortisBC Inc.¹⁵, Creative Energy Vancouver Platforms Inc.¹⁶, and Pacific Northern Gas Ltd.¹⁷.

Certain activities that are incurred during the construction or acquisition of a capital asset and are directly related to the acquisition, development and construction of the asset are direct costs. These directly attributable costs may be directly charged to the capital project or charged to capital project from operations and maintenance expenses by a capitalization methodology. The use of a capitalization methodology is more cost efficient than directly charging to each individual project. Some examples of activities that are not directly attributable to a specific project but are eligible to be capitalized include, but are not limited to, legal, regulatory, finance, and human resources. These support activities are an integral part of the construction or acquisition process in a capital project.

The use of a capitalized overhead rate on Gross O&M recognizes that a portion of expenses incurred are related to capital projects. Due to the onerous nature of capturing these costs, a capitalized overhead rate is a reasonable method to allocate costs that are attributable to capital activity for new assets acquired or constructed.

¹⁴ Capitalized overhead rate of 12 percent approved by BCUC Order G-138-14.

¹⁵ Capitalized overhead rate of 15 percent approved by BCUC Order G-139-14.

¹⁶ Capitalized overhead provision approved by BCUC Order G-167-16.

¹⁷ Capitalized overhead provision approved by BCUC Order G-139-14.

6. CORPORATE COST ALLOCATIONS AND THE RELATIONSHIP WITH CORIX UTILITIES

As stated in Section 2.1, the BCUC regulates eight Corix utilities. These include:

1. DGE
2. BMDEU (*which comprise of two customer groups, SFU and customers at UniverCity*)
3. UBC NDES
4. SP Electric
5. SP Gas
6. SR Electric
7. SR Gas
8. Panorama Propane

As the Corporate Cost Allocation Methodology has an impact on the corporate cost allocations, the final decision on this Application will have an indirect impact to the cost of service for each of the above utilities. However, only three of the above utilities currently have customer rates that are set based on their cost of service.

6.1 DGE, BMDEU AND UBC NDES

Rates for DGE, BMDEU and UBC NDES are set based on their cost of service. For each of these utilities Corix would submit subsequent rate applications, if necessary, for the recovery of the corporate cost allocations and capitalized corporate costs based on the approvals from this Application. Until the time when these rate applications are filed, Corix is unable to show an indicative impact to utility rates as a result of the proposed Corporate Cost Methodology. Other factors that would have to be taken into consideration include, but are not limited to:

- Forecasted CII corporate costs at that time;
- CII's acquisitions/dispositions up to the time of that rate application; and
- Updated buildout schedules and customer counts, the size of any deferral accounts, capital projects, annual operating expenses and forecast revenues for the applicant utility submitting the rate application.

6.2 SONOMA PINES AND SUN RIVERS UTILITIES

BCUC Order C-13-05 approved a flow-through rate adjustment mechanism for electricity rates at SP to amend the electricity rates in order to maintain customer rates at levels equivalent to those of British Columbia Hydro and Power Authority ("**BC Hydro**"), the electric utility adjacent to SP. Order C-13-05 also approved a flow-through rate adjustment mechanism for natural gas rates at SP to amend the natural gas rates in order to maintain customer rates at levels equivalent to those of the Terasen Gas Inland Division (now FEI), the natural gas utility adjacent to SP.

BCUC Order G-68-05 approved a flow-through rate adjustment mechanism for electricity rates at SR to amend the electricity rates in order to maintain customer rates at levels equivalent to those of BC

Hydro, the electric utility adjacent to SR. Order G-68-05 also approved a flow-through rate adjustment mechanism for natural gas rates at SR to amend the natural gas rates in order to maintain customer rates at levels equivalent to those of the Terasen Gas Inland Division (now FEI), the natural gas utility adjacent to SR.

Following Orders C-13-05 and G-68-05, BCUC Order G-87-08 approved the consolidation of the Electric Tariffs for SR and SP, into a single electric tariff that covers both SR and SP electric utilities.

Therefore, the customer rates at SP Electric, SP Gas, SR Electric and SR Gas are not based on the cost to serve customers. The customer rates at these four utilities are based on BC Hydro and FEI's rates, regardless of the costs incurred by Corix at each of these utilities. Until such time that the BCUC approves a cost of service methodology for setting rates for SR and SP utilities, the proposed Corporate Cost Allocation Methodology will have no impact to customer rates for these four utilities.

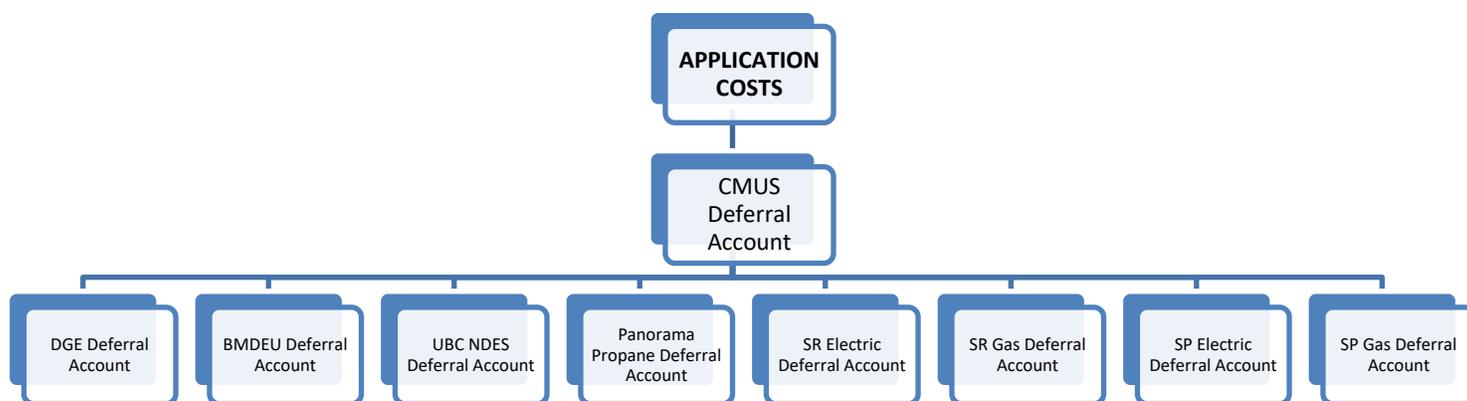
6.3 PANORAMA PROPANE

Panorama Propane's commodity rates are set as a direct flow-through cost to customers and Corix earns no return on these commodity rates. While Corix has the ability to set Panorama Propane's delivery rates based on a cost of service methodology, these rates are not currently set based on the cost of service. Therefore, until such time that the BCUC approves delivery rates for Panorama Propane that are based on its cost of service, the proposed Corporate Cost Allocation Methodology will have no impact to customer rates at Panorama Propane.

7. COSTS ASSOCIATED WITH THIS APPLICATION

Corix proposes to capture external regulatory costs and internal incremental application expenses associated with the regulatory review of this application in a deferral account for Corix Multi-Utility Services Inc. (“**CMUS Deferral Account**”). External regulatory costs would include any proceeding costs charged to Corix by the BCUC for this proceeding and any intervener cost awards. Depending on the level of participation by interveners in this regulatory process, these costs could become significant. After all costs are accounted for in the CMUS Deferral Account, Corix proposes to then allocate the balance in the CMUS Deferral Account to each of the eight BCUC-regulated utilities¹⁸ using the Composite Allocator. Each utility would then require its own deferral account for costs associated with this Application.

Figure 6: Deferral Accounts for costs associated with this Application



Corix’s utilities regulated by the BCUC have different regulatory constructs, which were described in Section 6. Where a utility will be making a revenue requirements application within two years, Corix will address the recovery of the deferral account in that application.

Corix proposes to make an application with the BCUC for recovery through a rate rider if the allocated deferral costs are significant for a utility and;

- its revenue requirement and rate applications are infrequent; or
- its utility rates are pegged to another utility.

If the allocated amount is small for a particular utility, Corix may instead add it to an existing revenue deficiency deferral account balance where applicable or flow it through as an expense in the year and not seek recovery from ratepayers.

¹⁸ Please see Table 2 on page 5 for Corix’s eight BCUC-regulated utilities.

If Corix is able to gain efficiencies and group the utility's deferral accounts into one application for recovery it will do so. Corix recognizes that for these small utilities initiating a regulatory application for the sole purpose of recovery of the deferral accounts may be more costly than the amount to be recovered. Where Corix chooses to clear the deferral account by expensing the amount, the financial impact would be to the account of the shareholder and no recovery from customers would be realized.

8. CONCLUSION

The proposed corporate cost allocation methodology, described in detail throughout Section 3, allocates indirect corporate costs to each of CII's operating business units in a manner that is fair, just and reasonable. A corporate cost allocation is inherently an estimate of a reasonable allocation of shared costs that are not directly assignable. It relies on the use of Functional Allocators where a cost causation driver can be identified and a Composite Allocator for indirect corporate costs that do not have a direct correlation with any one particular cost causation driver. The vast majority of CII's indirect corporate costs are allocated using a Composite Allocator. CII's Composite Allocator comprises of three factors with equal weighting: (i) Gross Revenue; (ii) Gross Property, Plant and Equipment; and (iii) Headcount.

The Composite Allocator was chosen to generally reflect the size, scope and complexity of each of the operating business units in the capital-intensive and labour-intensive nature of utility operations. The three factors with equal weightings allow for a fair, just and reasonable allocation of costs in a transparent, sustainable and cost-effective manner that appropriately reflects the apportionment of shared costs which do not exhibit direct correlation with any one particular cost causation driver.

The Composite Allocator is consistent with the purpose and use of the Massachusetts Formula, which is commonly utilized in the utility industry in North America. Section 3.10 of this Application provides instances where the BCUC has approved the use of the Massachusetts Formula for energy utilities.

Corix has presented indicative corporate cost allocations for its BCUC-regulated utilities in Section 4. Table 13 in Section 4 shows that the total corporate cost allocations to all Corix utilities regulated by the BCUC is forecasted to represent 1.64%, 2.09% and 2.67% of the total CII corporate costs in 2020, 2021, 2022 respectively. This highlights the size of Corix's ultimate parent company, CII, which has approximately \$2 billion in assets and 1,370 utility systems in operation across 20 U.S. states and 3 Canadian provinces.

Corix is not requesting approval of the allocated corporate cost amounts in this Application. Approval of the allocated corporate costs will be requested in subsequent applications to the BCUC.

With 1,370 operating business units spread out across North America, shared corporate costs allows utilities to benefit from increased efficiencies through economies of scale and increased functionality and cost effectiveness. Many of these utilities are small utilities and shared resource initiatives are a more efficient and cost-effective approach than having each business unit procure corporate services on a standalone basis.

Corix has presented a corporate cost allocation methodology that is fair, just and reasonable and consistent with the purpose and the use of the Massachusetts Formula, which has been approved by the BCUC on multiple occasions. The information presented throughout this Application provides clarification and justification for the approvals sought.

APPENDIX A: **CONFIDENTIAL** TABLES

Please note that information contained in Corix's Corporate Cost Allocation Breakdown Tables (Appendix A) is strictly confidential and privileged and has been submitted electronically exclusively for use by British Columbia Utilities Commission and its representatives/designees in connection with the evaluation of this Application. The release, use, or distribution of the enclosed corporate cost allocation breakdown to any organization outside of the British Columbia Utilities Commission could subject Corix to substantial harm and loss of competitive advantage.

Filed as a separate and confidential document.

APPENDIX B: CONFIDENTIAL CORPORATE COST ALLOCATION MODEL

Please note that information contained in Corix's Corporate Cost Allocation model is strictly confidential and privileged and has been submitted electronically exclusively for use by British Columbia Utilities Commission and its representatives/designees in connection with the evaluation of this Application. The release, use, or distribution of the corporate cost allocation model to any organization outside of the British Columbia Utilities Commission could subject Corix to substantial harm and loss of competitive advantage.

Filed as a separate and confidential document.

APPENDIX C: CONFIDENTIAL CORPORATE COST ALLOCATION MANUAL

Please note that information contained in Corix's Corporate Cost Allocation Manual is strictly confidential and privileged and has been submitted electronically exclusively for use by British Columbia Utilities Commission and its representatives/designees in connection with the evaluation of this Application. The release, use, or distribution of the enclosed corporate cost allocation manual to any organization outside of the British Columbia Utilities Commission could subject Corix to substantial harm and loss of competitive advantage.

Filed as a separate and confidential document.



APPENDIX D: DRAFT ORDER



DRAFT ORDER
ORDER NUMBER
G-xx-20

IN THE MATTER OF
the *Utilities Commission Act*, RSBC 1996, Chapter 473

and

Corix Multi-Utility Services Inc.
Application for Corporate Cost Allocation Methodology

BEFORE:
[Panel Chair]
Commissioner
Commissioner

on Date

ORDER

WHEREAS:

- A. On June 5, 2020, Corix Multi-Utility Services Inc. (“Corix”) submitted an application seeking approval for a methodology for allocating corporate costs to its utility operations; the creation of a deferral account to capture the costs associated with the regulatory review of this application; and the subsequent allocation of the deferred costs to individual deferral accounts created for each of the utilities by using the Composite Allocator described in the application (“Application”);
- B. Corix owns and operates eight utilities regulated by the BCUC:
- Three Stream B district energy utilities (as defined by the BCUC Thermal Energy Systems Framework Guidelines),
 - Two electricity distribution utilities,
 - Two natural gas distribution utilities, and
 - One propane distribution utility;
- C. The eight utilities for which Corix is seeking approval in this Application are:
- i. Dockside Green Energy Utility,
 - ii. Burnaby Mountain District Energy Utility,
 - iii. Neighbourhood District Energy System at the University of British Columbia,

- iv. Sun Rivers Gas,
- v. Sun Rivers Electric,
- vi. Sonoma Pines Gas,
- vii. Sonoma Pines Electric, and
- viii. Panorama Propane;

D. Corix filed its Application with confidential materials contained in Appendix A: Confidential Tables; Appendix B: Confidential Corporate Cost Allocation Model; and Appendix C: Confidential Corporate Cost Allocation Manual. Corix requests confidentiality due to the commercially sensitive nature of the information; and

E. The BCUC has reviewed the Application and considers that approval is warranted.

NOW THEREFORE pursuant to sections 59 and 60 of the *Utilities Commission Act*, the BCUC orders as follows:

1. Corix is granted approval of its methodology for allocating corporate costs as described in its Application.
2. Corix is granted approval for the creation of a deferral account to capture the costs associated with the regulatory review of this Application and the subsequent allocation of the final balance in this regulatory cost deferral account to individual deferral accounts created for each of its utilities regulated by the BCUC, by using the Composite Allocator.
3. The Commission will keep confidential the Confidential Tables (Appendix A), the Confidential Corporate Cost Allocation Model (Appendix B), and the Confidential Corporate Cost Allocation Manual (Appendix C) due to the commercially sensitive nature of the information.

DATED at the City of Vancouver, in the Province of British Columbia, this 30th day of November, 2020.

BY ORDER

(X. X. last name)
Commissioner