



SIXTH FLOOR, 900 HOWE STREET, BOX 250
VANCOUVER, BC V6Z 2N3 CANADA
web site: <http://www.bcuc.com>

**BRITISH COLUMBIA
UTILITIES COMMISSION**

**ORDER
NUMBER G-215-15**

TELEPHONE: (604) 660-4700
BC TOLL FREE: 1-800-663-1385
FACSIMILE: (604) 660-1102

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

and

Corix Multi-Utility Services Inc.
Application for a Certificate of Public Convenience and Necessity for Additional Capital and
Amended Rates for UniverCity Neighbourhood Utility Service on Burnaby Mountain

BEFORE: R. D. Revel, Commissioner

December 30, 2015

O R D E R

WHEREAS:

- A. On November 26, 2010, Corix Multi-Utility Services Inc. (Corix) filed an Application for a Certificate of Public Convenience and Necessity (2010 CPCN) under sections 45 and 46 of the *Utilities Commission Act* (UCA) to construct and operate an alternative energy-based district energy system for the UniverCity residential community on Burnaby Mountain. Corix also sought approval under sections 56, 60, and 61 of the UCA for a deemed capital structure, return on equity, long term debt financing costs, a levelized rate structure and a revenue deficiency deferral account;
- B. On May 6, 2011, by Order C-7-11, the British Columbia Utilities Commission (Commission) granted a CPCN to Corix to construct and operate the initial phase of the Neighbourhood Utility Service (NUS) district energy utility at UniverCity using temporary natural gas central energy plants;
- C. On March 2, 2015, the Commission issued Order G-27-15 approving the Thermal Energy Systems Regulatory Framework Guidelines (TES Guidelines). The TES Guidelines require Stream B TES utilities, to file a CPCN in cases where the ratio of the capital costs of the planned extension to the initial capital cost of the TES, plus any previous extensions, exceeds one;
- D. On October 7, 2015, Corix filed an application for a CPCN for additional capital and amended rates for UniverCity NUS on Burnaby Mountain (Application), requesting approval under sections 45, 56, 60 and 61 of the UCA for expenditures to replace and expand the capacity of the existing temporary natural gas facilities (Project) with a larger capacity natural gas boiler plant, on the basis of Corix's interpretation of the TES Guidelines. Corix stated that when combined with expenditures on the NUS to date, the replacement triggers the requirement to file a CPCN. As part of the Application, Corix also requested approval of amended levelized rates;

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- E. Corix estimates the total cumulative capital costs of the Project for 2015-2020 to be approximately \$2,946,620 in nominal dollars. The Project replaces the existing 2.3 mega-Watt (MW) temporary boiler plant with a larger 8 MW natural gas boiler plant, and distribution piping to allow connections to new buildings. The 8 MW boiler plant is intended to provide 100 percent of the thermal energy for the near future until it is augmented by a low carbon energy source. The low carbon energy system will be the subject of a future CPCN application to the Commission;
- F. On October 23, 2015, by Order G-173-15, the Commission proposed that a Streamlined Review Process (SRP) was suitable for the review of the Application, requested comments from interveners on the appropriateness of an SRP, and set a preliminary Regulatory Timetable. Of the registered interveners, the British Columbia Sustainable Energy Association and the Sierra Club of British Columbia expressed their support of the SRP. None of the other interveners expressed a disagreement with the SRP; and
- G. On December 16, 2015, the SRP took place.

NOW THEREFORE the British Columbia Utilities Commission orders as follows:

1. Corix Multi-Utility Services Inc.'s (Corix) request for a Certificate of Public Convenience and Necessity (CPCN) under section 45 of the *Utilities Commission Act* (UCA) is dismissed as unnecessary based on details provided in the Reasons for Decision (Reasons) attached as Appendix A.
2. Corix is directed to report its final actual installed costs for the system within 30 calendar days of achieving the initial approved CPCN (C-7-11) connected load of 2,951 kilowatts or connected development of 92,542 m², whichever occurs first.
3. Corix is directed to remove both the physical containerized 2.3 megawatt (MW) temporary energy centre (TEC) and the soft costs attributable to the 2.3 MW TEC from rate base at the net book value when the new 8 MW TEC is in service, as per details provided in the Reasons. At the time of its removal from rate base, the 2.3 MW TEC must be classified as a non-regulated asset.
4. Corix is directed to submit a compliance filing within 30 days of the date of the attached Reasons which shows the net book value of the physical containerized 2.3 MW TEC at the forecast time of removal from rate base (i.e. April 2016) and the net book value of the soft costs attributable to the physical containerized 2.3 MW TEC at the forecast time of removal.
5. Corix is directed as part of the compliance filing to provide the finalized rates and rate schedule to reflect changes, if any, to the rates as a result of the Commission Panel's determinations. Corix is also directed to provide the finalized initial 2016 rate and 15-year levelized rate in dollars per megawatt hour, including supporting calculations, and to explain any changes.

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6. Approval is granted under sections 60 and 61 of the UCA as follows:
- a. the rate base as provided in Section 2.5.6 of the Application excluding the net book value of both the physical containerized 2.3 MW TEC and the soft costs attributable to the 2.3 MW TEC at the time the new 8 MW TEC is in service;
 - b. the revenue requirement as provided in Section 2.5.8 of the Application and consistent with the recent Commission decision in the Phase 2 Generic Cost of Capital proceeding applicable to small thermal energy utilities:
 - i. a deemed capital structure of 57.5 percent debt and 42.5 percent equity;
 - ii. long term debt financing costs estimated at 3.75 percent;
 - iii. a return on equity of 9.5 percent, which is based on the current low risk benchmark equity return plus 75 basis points to account for additional risk related to the development of the small scale energy utility;
 - iv. operating costs as set out in Section 2.5.4 of the Application; and
 - v. a 15-year levelized rate structure with 11 years remaining, as set out in Section 2.5.9 of the Application; and
 - c. the accounting treatment of the following:
 - i. an updated revenue deferral account which is used to record those portions of revenue requirements which are not recovered in the early stages of development, with the goal of complete recovery of the funds over the 15-year rate levelization period, as set out in Section 2.5.10 of the Application; and
 - ii. the rate design as set out in Section 2.5.11 of the Application.

DATED at the City of Vancouver, in the Province of British Columbia, this 30th day of December 2015.

BY ORDER

Original signed by:

R. D. Revel
Commissioner

Attachment

Corix Multi-Utility Services Inc.
Application for a Certificate of Public Convenience and Necessity for Additional Capital and
Amended Rates for UniverCity Neighbourhood Utility Service on Burnaby Mountain

REASONS FOR DECISION

1.0 INTRODUCTION

On October 7, 2015, Corix Multi-Utility Services Inc. (Corix) filed an application for a Certificate of Public Convenience and Necessity (CPCN) for additional capital and amended rates for UniverCity Neighbourhood Utility Service (NUS) on Burnaby Mountain (Application), requesting approval under sections 45, 56, 60 and 61 of the *Utilities Commission Act* (UCA) for expenditures to replace and expand the capacity of the existing temporary natural gas facilities (Project) with a larger capacity boiler. The CPCN was applied for on the basis that when combined with expenditures on the NUS to date, the replacement triggers the requirement to file a CPCN under the Thermal Energy Systems Guidelines (TES Guidelines). As part of the Application, Corix also requested approval of amended levelized rates.

Matters addressed in the Application represent adjustments to rates and changes in the energy system as originally built and operated under Order C-7-11 which granted a CPCN that allowed Corix to build and operate the initial phase of the UniverCity NUS as applied for in 2010.

In response to the Application, and by request from Corix with no disagreement from interveners, the British Columbia Utilities Commission (Commission), on October 23, 2015, determined by Order G-173-15 that a Streamlined Review Process (SRP) subsequent to one round of information requests was suitable for the review of the Application. The SRP took place on December 16, 2015.

The Strata Council of the owners of Origin (BCS1138), the Strata Council of the owners of Strata Plan EPS1458, Creative Energy Vancouver Platforms Inc., the British Columbia Sustainable Energy Association and the Sierra Club of British Columbia (BCSEA-SCBC) and British Columbia Old Age Pensioners Organisation *et al.* (BCOAPO) registered as interveners. FortisBC Alternative Energy Services Inc. and FortisBC Energy Inc. registered as interested parties. The only interveners attending the SRP were the BCSEA-SCBC and BCOAPO.

2.0 APPROVALS REQUESTED

In its Application Corix specifically requested approval of the following:

1. A Certificate of Public Convenience and Necessity under section 45 of the UCA for the construction and operation for the expansion to the approved temporary natural gas UniverCity NUS at UniverCity, Burnaby, BC.
2. Approval under sections 56, 60 and 61 of the UCA for the proposed revenue requirements, rate design and rates set out in the Application as follows:
 - a. the rate base as provided in Section 2.5.6 of the Application;
 - b. the revenue requirement as provided in Section 2.5.8 of the Application and consistent with the recent Commission decision in the Phase 2 Generic Cost of Capital proceeding applicable to small thermal energy utilities:

- i. a deemed capital structure of 57.5 percent debt and 42.5 percent equity;
 - ii. long term debt financing costs estimated at 3.75 percent;
 - iii. a return on equity of 9.5 percent, which is based on the current low risk benchmark equity return plus 75 basis points to account for additional risk related to the development of the small scale energy utility;
 - iv. operating costs as set out in Section 2.5.4 of the Application; and
 - v. an 11-year levelized rate structure with an overall 15-year plan compared to the originally approved 20-year plan, as set out in Section 2.5.9 of the Application; and
- c. the accounting treatment of the following:
- i. an updated revenue deferral account which is used to record those portions of revenue requirements which are not recovered in the early stages of development, with the goal of complete recovery of the funds over the 15-year rate levelization period, as set out in Section 2.5.10 of the Application; and
 - ii. the rate design as set out in Section 2.5.11 of the Application.¹

3.0 CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY – SECTION 45

In its Application, Corix applied for a CPCN because its understanding of the TES Guidelines is that under Stream B Guidelines thermal energy utilities are required to file subsequent CPCN applications with the Commission based on certain capital expenditure or rate impact thresholds. In section 2.4.5 of the TES Guidelines (Extensions to a Stream B TES), the Commission states:

Once a CPCN is granted for a Stream B TES, a new CPCN Application may be required if the TES Provider plans to construct or operate an extension to the TES. An extension is a capital addition to the system of a material dollar amount to provide additional capacity to meet increased demand. If the ratio of the capital costs of the planned extension to the initial capital cost of the TES, plus any previous extensions, exceeds one, a CPCN is required. A CPCN is also required if, as a result of the extension, rates for existing customers will increase by an amount greater than 10 percent...²

On page 40 of its Application, Corix provided Table 22 (below) showing the approved CPCN capital of its fully built-out temporary solution as \$3.252 million after Contributions in Aid of Construction (CIAC) and its actual costs to date of \$4.404 million. Table 22 also shows that it is proposing to spend an additional \$2.946 million (after CIAC) including approximately one quarter of that amount representing the new 8 megawatt (MW) energy centre.

¹ Exhibit B-1, pp. 8-9

² TES Guidelines, Section 2.4.5, p. 23

Table 22: Initial Phase Scope and Cost Comparison

SCOPE OF WORK	APPROVED CPCN (2015) ⁶	ACTUALS PDT 2014	PROPOSED NEW TEMPORARY SOLUTION	TO COMPLETE
Development – m ²	92,542	35,112	181,660	146,548
Load kW	2,951	1,576	7,714	6,138
No. of Connections	10	6	18	12
CEP Capacity MW	4.4	2.3	8	5.7
CAPITAL COSTS 000's	APPROVED \$\$	ACTUALS \$\$	PROPOSED \$\$	TO COMPLETE \$\$
TCEP	684	566	1,571	1,005
DPS	1,994	3,280	4,316	1,036
ETS	1,364	991	3,116	2,125
Solar Thermal	110	-	-	-
Dev/Legal/PM	90	407	740	333
Total Capital	4,242	5,244	9,743	4,499
CIAC	(990)	(840)	(2,393)	(1,553)
RATE BASE	\$3,252	\$4,404	\$7,350	\$2,946

In BCUC IR1.1 Corix was asked what its interpretation was of the TES Guidelines in terms of defining the “initial capital cost of the TES” system and Corix responded:

Corix interpreted the “initial capital cost of the TES” to be the dollar amount approved by the Commission in the 2011 CPCN decision. Based on this interpretation, the initial capital cost of the TES as approved by the Commission was \$3.252 million.³

The Panel notes that Section 2.4.5 of the TES Guidelines has not heretofore been tested by previous applications so no precedents exist as to its interpretation. As a result of the ambiguity this matter was further explored during the SRP.

During the SRP, Mr. Wigington of Corix was asked if Corix would be troubled if the Commission ruled that Corix did not need a CPCN. His response indicated that if such were the case, Corix would still have the Rates component of the application to be heard and that Corix would not be upset if a CPCN were ruled as unnecessary.⁴

³ Exhibit B-2, BCUC IR 1.1

⁴ SRP Transcript, pp. 93-95

Neither BCSEA-SCBC nor BCOAPO raised this matter specifically related to the CPCN portion of the Application during questioning.

In final argument, Ms. Tuck for Corix requested that the Commission grant or confirm the CPCN or in the alternative order that an extension application is required. In support of the request that a CPCN be granted, Corix stated:

... we would submit that the application and the information provided in support shows that the CPCN is necessary for public convenience and properly conserves the public interest. The information we've provided includes factors relating to continued reliable service serving the forecasted demands of the community, enhanced disclosure to the customers within the community, continued commitment to the energy objectives of the community, the University, and the Province, and enhanced effectiveness and cost reasonableness of the service.⁵

In final argument, BCOAPO did not oppose the granting of the CPCN; however, it did specifically request that the Commission in its decision provide some clarity with respect to the interpretation of Section 2.4.5 of the TES Guidelines regarding when a CPCN is required. BCOAPO submitted that:

...this would be useful, not only for this application, but for subsequent applications involving TEC utilities. ... But we think it would be helpful to clarify in particular whether initial capital costs are the BCUC-approved costs or the actual capital costs of the project. And also whether the rate impact threshold is based on nominal levelized rates and, if so, over what period the levelization is.⁶

In final argument BCSEA-SCBC indicated that the CPCN passes the public interest test.⁷

In reply, Corix indicated that it supported BCOAPO's request that the Commission provide clarity on the interpretation and intent of the TES Guidelines Section 2.4.5.

Commission discussion and determination

As noted earlier, Section 2.4.5 of the TES Guidelines has not heretofore been tested by previous applications so no precedents exist as guides to its interpretation. The Panel agrees that the question of whether the interpretation of "initial capital costs" in Section 2.4.5 of the TES Guidelines means the actual (as built) capital costs or the Commission approved capital costs should be dealt with at this time.

For the reasons below, the Panel finds that initial capital costs are the true and actual costs to build the initial approved scope or phase of the project as outlined in the initial CPCN application.

The "initial" CPCN approval largely addresses the need to construct a physical plant or system within a certain area and/or capacity and scope for the public convenience and necessity. The cost estimate in a CPCN application is helpful in clarifying and ensuring that the applicant has sufficiently defined the scope and estimated, to a level of reasonableness, the costs for which it may seek to earn a return on invested capital. It is the invested capital, meaning actual capital costs of construction, which are relevant as it pertains to the approved scope of the CPCN.

⁵ SRP Transcript, p. 107

⁶ Ibid., p. 111

⁷ Ibid., p. 110

In this particular case, the Panel has only to look at Table 22 on page 40 of the Application to see the broad variance between the CPCN approved and Actual (to date) results in both dollar terms and scope of progress. The evidence given is that the actual (to date) connected load is approximately one half the CPCN approved load, the installed energy centre is roughly half of the approved capacity and only six actual connections to the NUS have been made of the approved ten while at the same time that \$4.404 million has been spent compared to the CPCN estimate of \$3.252 million.

The Panel has difficulty with the notion that by approving a CPCN in this case it would be both approving costs that exceeded estimates and some amount of ongoing build-out that was already approved within the original CPCN. The Panel finds that the initial installed capital costs of the original CPCN scope are yet to be realized and confirmed but based on the evidence provided by Corix this amount would land somewhere between the \$4.404 million incurred to date and the \$7.350 million forecast for an expanded system and that the scope of what would be an extension to the original approved CPCN would be somewhat less than the \$2.946 million stated in Table 22 to complete an expanded system.

Based on these figures the ratio of the capital costs of the planned extension (less than \$2.946 million) to the initial capital cost of the TES, plus any previous extensions (greater than \$4.404 million) will clearly be less than 1.0 and therefore no CPCN is required according to the TES Guidelines.

Further on the need for a CPCN under Section 2.4.5 of the TES Guidelines, the Panel has also considered the second criteria of whether a rate impact exceeding 10 percent is relevant. While this criterion was established to identify potential rate shock for customers,⁸ the TES Guidelines are unclear on how this interpretation translates in a levelized rate design methodology. Notwithstanding, the Panel applies this criterion to the actual rates being charged to the customer.

Table 16 on page 27 of the Application illustrates the rate design and rate impact forecast by Corix. Based on the levelized rate structure, it appears that the rate increase year over year is no more than 2 percent. In fact, the rate increase in 2016 is only a 0.2 percent increase over 2015 rates. Accordingly, the Panel confirms that the rate impact threshold has not been breached and therefore a CPCN is also not required under this criterion of the TES Guidelines.

The Panel therefore dismisses the request for a CPCN as it is not necessary in this case according to the TES Guidelines but directs Corix to report its final actual installed costs for the system within 30 calendar days of achieving the initial approved CPCN connected load of 2,951 kilowatts or connected development of 92,542 m², whichever occurs first.

4.0 REVENUE REQUIREMENTS, RATE DESIGN, AND RATES – SECTION 60 AND 61

4.1 Salvage Value

Corix proposes to replace the existing 2.3 MW temporary energy centre (TEC) with a larger 8 MW TEC in 2016. As part of its proposal, the existing 2.3 MW TEC would remain in rate base until such time as it is able to be re-deployed to another project.⁹

⁸ TES Guidelines, Section 2.4.3, p. 22

⁹ Exhibit B-1, p. 20.

Corix estimates that re-deployment will occur in 2021, at which time the boiler plant will be re-deployed to the Oval Village District Energy Utility (DEU) project located in the City of Richmond.¹⁰ The Oval Village DEU is another Corix project but is not directly connected to the UniverCity project.¹¹

The forecast sales proceeds of \$325,000 from re-deployment of the 2.3 MW boilers are recorded as a reduction to the UniverCity rate base at the end of 2020. The sales proceeds are based on the appraised market salvage value determined by the appraisal company Universal Appraisal.¹² Corix confirms that it has an arm's length, third party relationship with Universal Appraisal.¹³

When asked whether the 2.3 MW TEC should be classified as no longer "used and useful" once it has been replaced by the new 8 MW TEC, Corix responded:

In the context of a mature utility, the asset would not typically be classified as used and useful. In the case of UniverCity, Corix believes special consideration should be given in determining treatment of the asset given the uncertainty surrounding build-out, energy demand, and the economic benefits of replacing the asset before the end of its useful life.¹⁴

Based on the proposal put forth in the Application, the 2.3 MW TEC would remain in rate base and thus depreciation and earned return would continue to be recovered from ratepayers until the asset is re-deployed to the Oval Village DEU.¹⁵ When asked if there is a possibility that the re-deployment could be delayed, Corix confirmed that there is a possibility of delay but submitted that its estimated timeline "is a reasonable projection based on how that development is currently building out, and we feel that it is likely that that piece of equipment will be redeployed to that utility in 2020, if not even sooner, potentially."¹⁶

Corix also submitted, however, that there is a possibility that the asset may not be re-deployed at all and that there is no formal, signed agreement to provide assurance that the asset will be re-deployed. Corix further submitted that if there was no expected net benefit to be received from the re-deployment of the asset, it would remove the asset from rate base.¹⁷

During the SRP, Corix was asked how it would proceed if the Commission directed Corix to remove the 2.3 MW TEC from rate base at the time the asset is replaced with the 8 MW TEC. Mr. Hickford-Kulak of Corix responded as follows:

Corix would simply remove it based on its current net book value at the time it was directed to remove that asset and that Corix would retain it on its own internal balance sheet. And when we were able to either transfer or sell that asset, that Corix would see the net benefit from selling that asset as opposed to the UniverCity ratepayers.¹⁸

¹⁰ Exhibit B-2, BCUC IR 1.5.2.1.

¹¹ Ibid., BCUC IR 1.5.2.

¹² Exhibit B-1, p. 20.

¹³ Exhibit B-2, BCUC IR 1.5.4.

¹⁴ Ibid., BCUC IR 1.5.7.

¹⁵ Ibid., BCUC IR 1.5.8.

¹⁶ SRP Transcript, p. 82.

¹⁷ Ibid., pp. 82-83.

¹⁸ Ibid., p. 84.

Corix submits that the net book value (NBV) of the 2.3 MW TEC at the time of replacement in April 2016 is \$200,545.¹⁹ The NBV of the 2.3 MW TEC was further clarified through Corix's responses to Commission staff questions provided in advance of the SRP as well through oral responses to Commission staff questions during the SRP.

Mr. Hickford-Kulak clarified that the NBV of \$200,545 "only pertains to the cost of the actual physical containerized asset" and does not include "the cost of the slab or the landscaping or the above ground piping and all the other stuff that would actually remain on site."²⁰

In addition to these excluded costs described by Mr. Hickford-Kulak, the soft costs attributable to the 2.3 MW TEC are also excluded from the NBV of \$200,545. These soft costs are described as "CEP Engineering" and "CEP Corix Project Management" and have a combined NBV of approximately \$108,151 at the time of replacement in April 2016.²¹ Corix forecasts project management and construction management costs at approximately 6 percent of the total capital costs. Mr. Hickford-Kulak stated at the SRP that "the 6 percent would represent the project management and construction management costs associated with implementing that infrastructure."²²

The total NBV of the 2.3 MW TEC at the end of April 2016 is approximately \$394,653. This amount is comprised of the NBV of the "actual physical containerized asset" (\$200,545), the NBV of the soft costs attributable to the 2.3 MW TEC (\$108,151), and the NBV of the other physical assets which will remain on site and will continue to be used in the future (\$85,957).²³

Immediately preceding its final oral submission, Corix provided a further response to its proposed treatment of the 2.3 MW TEC if it was directed to remove the asset from rate base upon replacement by the 8 MW TEC:

...I understand that keeping it entered in rate base may not be an option, and I think we were told about two choices. One might be putting into a deferral account, and the other would be putting it into plant held for future use. Again, back to the spirit and the principles in this developing utility, where you have a temporary gas plant and you don't know when exactly you'll be taking it out of service, but have the flexibility to possibly do that early if you have a better solution, that's more efficient and serve the growth there. So, given the situation we're in, and the plan we had for the temporary facility, if it is not in a rate base, we think it's appropriate to move that over to a deferral account, and provided that deferral account is earning the same rate of return as the existing deferral account.²⁴

In its final oral submission, BCOAPO stated the following:

...the asset should be removed from rate base. There is an issue about – in this proceeding about the treatment of assets that are no longer used or useful, which this 2.3 megawatt TEC won't be after 2016. And in our submission, it should not continue to earn a rate of return, regardless of whether it's considered to be in rate base or whether it's put into a deferral account makes actually very little difference if the proposal is that it would earn the same rate of return regardless, when it's not actually being used to provide service.²⁵

¹⁹ Exhibit B-2, BCUC IR 1.5.10.

²⁰ SRP Transcript, p. 19.

²¹ Calculated based on Exhibit B-7, BCUC IR 3-A, Table C.

²² SRP Transcript, p. 25.

²³ Calculated based on Exhibit B-7, BCUC IR 3-A, Table C.

²⁴ SRP Transcript, pp. 105-106.

²⁵ *Ibid.*, p. 112.

Corix responded to BCOAPO's submission as follows:

In respect of the second point relating to disposal of the boiler and treatment of the boiler, Corix believes the treatment proposed under the deferral account is reasonable and it's reasonable that Corix be allowed to earn a return on capital investment. And Corix commits to exercising every ability to dispose of the asset during the period that it's held in the deferral account.²⁶

Corix further submitted:

...we [Corix] believe it's reasonable that we be allowed to earn a return on our capital investment, but the disposal of the asset if possible to a third party would result in...a return going back to the core market.²⁷

Commission determination

There are a number of issues arising regarding the treatment of the 2.3 MW TEC once it is replaced by the new 8 MW TEC. Based on the evidence, it is clear that upon replacement by the 8 MW TEC, the existing 2.3 MW TEC will no longer be "used and useful" in the UniverCity NUS. Accordingly, the Panel finds it is not appropriate for the 2.3 MW TEC to remain in rate base and for the costs to continue to be recovered from UniverCity ratepayers once the new 8 MW TEC has been installed.

The Panel has considered the evidence put forth by Corix regarding the net book value of the 2.3 MW TEC at the time of replacement in April 2016. The Panel accepts that certain costs attributable to this asset, such as landscaping, concrete slabs and above ground distribution piping will continue to be used once the 8 MW TEC is in service and therefore should remain in rate base and continue to be recovered from ratepayers. However, the Panel does not agree that the softs costs attributable to the 2.3 MW TEC should remain in rate base.

As part of the construction and completion of the 2.3 MW TEC, Corix has incurred project management and engineering costs which have been capitalized and included in rate base. Corix will incur further project management and engineering costs in order to complete the installation of the new 8 MW TEC. The Panel does not consider it appropriate that the UniverCity ratepayers should continue to pay for the soft costs attributable to the 2.3 MW TEC when they are no longer receiving service from that asset while also being required to pay for the soft costs attributable to the new 8 MW TEC. **Therefore, at the time of replacement with the 8 MW TEC, the Panel directs Corix to remove from rate base the net book value of both the physical containerized 2.3 MW TEC and the soft costs attributable to the 2.3 MW TEC.**

Based on the information provided by Corix in Table C in response to Commission staff's advanced SRP question No. 3-A, it is clear that Corix capitalized a total of \$121,442 in soft costs which have been attributed to the 2.3 MW TEC.²⁸ It is not clear, however, based on Table C, whether all of these soft costs relate to the engineering and management of the physical containerized asset, or if some of the soft costs relate to the landscaping and other capital components which will remain in rate base once the 8 MW TEC has been installed. **Therefore, the Panel directs Corix to submit a compliance filing to the Commission within 30 days of the date of these Reasons for Decision which shows the net book value of the physical containerized 2.3 MW TEC at the forecast time of removal from rate base (i.e. April 2016) and the net book value of the soft costs attributable**

²⁶ Ibid., p. 114.

²⁷ Ibid., pp. 114-115.

²⁸ Calculated based on Exhibit B-7, BCUC IR 3-A, Table C.

to the physical containerized 2.3 MW TEC at the forecast time of removal. Corix is directed as part of the compliance filing to provide the finalized rates and rate schedule to reflect changes, if any, to the rates as a result of the Panel's determinations. Corix is also directed to provide the finalized initial 2016 rate and 15-year levelized rate in dollars per megawatt hour, including supporting calculations, and to explain any changes.

The remaining issue for the Panel to consider is the appropriate treatment of the 2.3 MW TEC once it has been removed from rate base. The Panel acknowledges Corix's proposal to place the asset in a deferral account earning a return based on the Company's weighted average cost of capital until such time as the asset is re-deployed. The Panel also acknowledges Corix's submissions that any net benefits received from re-deployment of the asset would flow back to UniverCity ratepayers. However, the Panel has a number of concerns about this proposal. First, there is a risk that re-deployment of the asset could be delayed beyond the anticipated five-year timeline or that re-deployment does not occur at all. This is especially concerning in light of the lengthy lag between when the asset is removed from rate base and when it is expected to be re-deployed. This puts the risk entirely on the customers of NUS where Corix has the most ability to control the timing and negotiation for selling or re-deploying the asset.

Second, there is a risk that even if the re-deployment does occur as planned, the actual salvage proceeds received for the asset may be less than the forecast amount of \$325,000. The estimated salvage value is based on an appraisal of the asset's value as of 2015. While the Panel acknowledges Corix's statements that it expects the asset to preserve its current assessed value or even to increase in value over time, the Panel does not consider the evidence on the record in this proceeding sufficient to support these statements.

Third, Corix confirmed during the SRP that its proposal to re-deploy the asset to the Oval Village DEU is a management decision and that it had not at this time considered the possibility of attempting to sell the asset on the open market to an independent third party.²⁹ While the Panel understands that Corix seeks to find the most optimal solution for re-purposing of the 2.3 MW TEC, the Panel notes that the Oval Village DEU is also a Corix DEU project and therefore is cognizant of the potential for there to be conflicts between the best interests of the UniverCity ratepayers and the best interests of the future Oval Village DEU ratepayers.

In consideration of the above, the Panel finds the risks to UniverCity ratepayers to be too high to justify any potential benefits which may accrue to ratepayers from the future re-deployment of the 2.3 MW TEC. **The Panel rejects Corix's proposal to hold the 2.3 MW TEC in a deferral account and to continue to earn a weighted average cost of capital return on the asset. The Panel directs Corix to remove the 2.3 MW TEC from rate base at the previously directed net book value at the time the new 8 MW TEC is in service and to classify the 2.3 MW TEC as a non-regulated asset.**

4.2 Revenue Deficiency Deferral Account

Pursuant to Order C-7-11, Corix was approved to levelize rates for the UniverCity NUS project over 20 years through the use of the revenue deficiency deferral account (RDDA). The RDDA is included in rate base and earns a return based on Corix's after-tax weighted average cost of capital (WACC).³⁰

Corix submits that with its updated project assumptions, it now proposes to recover the RDDA by the end of year 15 instead of year 20 and therefore requests approval to change the total levelization period from 20 years to 15 years. This results in the RDDA being fully recovered by 2026.³¹

²⁹ SRP Transcript, p. 65.

³⁰ Exhibit B-1, pp. 25-26.

³¹ Ibid.

Based on Corix's revised levelized rate structure proposed in the Application, the 2016 rate to be charged to UniverCity ratepayers is \$109.27 per MWh and the 15-year levelized rate is \$121.68 per MWh. Corix estimates that the proposed change in levelized rates results in an increase of 2 percent to annual customer energy bills for a typical 1,000 square foot suite.³²

Corix submits that the main driver behind its proposal to shorten the levelization period is that the energy volumes have increased in relation to the cost increases, resulting in a reduced levelized cost per unit of energy over time.³³ Corix states that the advantages of reducing the RDDA recovery period are: (i) reduced financing costs; and (ii) fairness between customers due to fewer costs being deferred to future periods and potentially being charged to different customers.³⁴

When asked to describe the disadvantages of reducing the RDDA recovery period, Corix responded that a reduced recovery period results in higher rates to customers in the earlier years but also points out that the higher rates are offset by lower financing costs in the long term.³⁵

BCOAPO opposes the proposed reduction to the levelization period and argues that reducing the recovery period of the RDDA from 20 years to 15 years "would increase rates – 2016 rates by over 16 percent, as compared to using a 20-year recovery period."³⁶

Corix responded to BCOAPO's statements as follows:

...it's Corix's position that 15 years rather than 20 is a reasonable balance of a cost burden between current and future customers and that it's a fair and balanced approach and that it helps mitigate the risk to which a deferral account is aimed at.³⁷

Commission determination

The Panel approves Corix's request to reduce the overall levelization period from 20 years to 15 years, which results in a remaining 11-year levelized rate structure. The Panel further approves Corix's proposed accounting treatment of the RDDA, which includes an updated total recovery period of 15 years. The Panel considers the reduced RDDA recovery period proposed by Corix to be preferable because it reduces the amount of accrued financing costs charged to ratepayers over the life of the RDDA and it reduces the potential for intergenerational inequity.

The Panel also notes that BCOAPO's statement regarding a 16 percent rate increase in 2016 appears to be based on a misunderstanding of the evidence. While there may be a 16 percent differential between the alternatives presented by Corix in response to BCUC IR 1.9.3, the actual rate increase experienced by ratepayers in 2016 as a result of the change in levelization period is within the range of 2 percent when compared to 2015 rates currently being charged to ratepayers.

³² Exhibit B-1, p. 25.

³³ Exhibit B-2, BCUC IR 1.9.2.

³⁴ Ibid., BCUC IR 1.9.4.

³⁵ Ibid.

³⁶ SRP Transcript, pp. 112-113.

³⁷ Ibid., p. 114.