IN THE MATTER OF

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

and

Corix Multi-Utility Services Inc.

Application for Approval to Divest Certain Assets from

the

Burnaby Mountain District Energy Utility

Corix Multi-Utility Services Inc.

FINAL ARGUMENT

Submitted 28 August 2019

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I. INTRODUCTION

1. This submission summarizes the position of Corix Multi-Utility Services Inc. ("**Corix**") on its Application for Disposition of Certain Assets from the Burnaby Mountain District Energy Utility ("**Application**").

2. This submission briefly reviews the main aspects of the Application and, in light of British Columbia Utilities Commission ("**BCUC**") staff questions received during the regulatory review process, clarifies and provides justification for the approval sought by Corix.

II. BACKGROUND

3. In 2011, the BCUC issued Order C-7-11 granted a Certificate of Public Convenience and Necessity ("**CPCN**") to Corix UniverCity Neighbourhood Utility Service ("**UniverCity NUS**") to begin providing hydronic based thermal energy to UniverCity customers on Burnaby Mountain using a temporary energy centre ("**TEC1**") that would house three (3) natural gas boilers.

4. In 2016, the BCUC issued Order G-48-16A, which approved a second temporary energy centre ("**TEC2**") to serve increased load demand as the UniverCity community continued to grow.

5. In 2017 the BCUC issued Order C-5-17 approving the CPCN for Corix to proceed with construction of a central energy facility that would use biomass to supply hydronic based thermal energy to Corix's existing customers in the UniverCity community and to Simon Fraser University. With the approval of the expanded service, Corix changed the name of the utility to Burnaby Mountain District Energy Utility ("**BMDEU**").

6. The new central energy plant ("**CEP**") is scheduled to be in service in the summer of 2020[1] and will include re-purposed gas boilers from TEC2 to provide peaking and back-up service for UniverCity customers.

III. BCUC APPROVALS SOUGHT

7. Corix seeks BCUC approval under section 52 of the *Utilities Commission Act* ("**Act**") for the disposition and transfer of the three natural gas boilers and associated equipment that are a part of the BMDEU TEC1 ("**TEC1 Assets**") to the Corix Dockside Green Energy utility ("**DGE**"). The proposed disposition and transfer are referred to in this document as the "**Proposed Transaction**".

8. Since Corix owns both BMDEU and DGE, Corix does not anticipate documenting the Proposed Transaction with a formal sale agreement.

[1] Updated from spring 2020 due to delays in permitting as reported in the BMDEU Semi-Annual Progress Report No. 4 filed with the BCUC in August 2019.

9. While neither BMDEU nor DGE are separate legal entities, the BCUC has treated each of these utility projects as distinct utility operations and has granted approval of distinct CPCNs, revenue requirements, and customer tariffs. Based on the stand-alone principle[2], Corix is applying for approval of the Proposed Transaction under section 52 of the Act.

IV. PROPOSED TRANSACTION

10. Under the Proposed Transaction, Corix will remove and transfer the TEC1 Assets currently part of BMDEU to DGE no earlier than spring 2020. As part of the Proposed Transaction, DGE will pay BMDEU a sum equal to the net book value of the TEC1 Assets at the time of the transfer[3]. The redeployment of the assets at DGE is the subject of a separate application currently before the BCUC[4].

V. JUSTIFICATION

11. In the Application, Corix referenced criteria used by the BCUC in the past to assess the potential impacts of sale transactions on utility customers and on the broader public interest[5]. For reasons outlined in its previous submissions and highlighted in this Final Argument, Corix submits the Proposed Transaction satisfies those criteria and further submits that the Proposed Transaction is in the public interest. Accordingly, Corix's application warrants approval.

12. BCUC staff raised several questions on various topics during the regulatory review process. Corix addresses the key topics below, providing further justification for approval of the Application.

<u>(i) TEC1 Boilers are no longer required at the BMDEU</u>

13. Based on a combination of actual observed coincident peak data, re-forecasted peak loading for the remaining buildout, and timing for projected buildout of the BMDEU UniverCity customers, Corix has determined that from spring 2020 onwards, only the two larger 3MWt[6] boilers from TEC2 will be required in combination with the CEP.[7] As a result, BMDEU will no longer require the TEC1 Assets to provide service to its customers.

<u>(ii) No significant risk to Corix's ability to serve customers</u>

14. The TEC2 boilers can provide sufficient back up. Should the CEP experience a major failure resulting in a complete shutdown, Corix expects, based on its calculations, that the TEC2 boilers

[2] BMDEU Disposition of Certain Assets Application, p. 2.
[3] The three TEC1 natural gas boilers had a total net book value of $98,004.96 at June 30, 2019.
[4] Corix Revenue Requirements and Rates Application for the Dockside Green Energy Utility, dated April 1, 2019.
[5] BMDEU Disposition of Certain Assets Application, pp. 3-4.
[6] MWt (megawatt thermal) is a unit of measure for the thermal power produced by a plant.
[7] Exhibit B-2, Response to BCUC IRs 2.1 and 2.2, pp. 2-3.

will be able to maintain 90% of UniverCity load demand in peak demand conditions, and 100% demand in non-peak conditions.[8]

15. Accordingly, there will be no significant risk to Corix's ability to serve BMDEU UniverCity customers because of the transfer of the TEC1 Assets to DGE. Furthermore, given the engineering design of the CEP and Corix's experience with district energy systems, Corix considers the likelihood of a complete shutdown of the biomass unit to be low.

(iii) It is not economically feasible to integrate the TEC1 boilers into the BMDEU CEP

16. Integrating the TEC1 boilers into the BMDEU would result in increased and, given Corix's other submissions regarding the boilers, unnecessary costs.

17. First, the BMDEU CEP is designed to operate at approximately 232 PSI[9], which results in it becoming a registered pressure vessel with Technical Safety BC (TSBC). TSBC requires that all equipment associated with a registered pressure vessel must meet or exceed the 232 PSI design pressure rating. The TEC1 boilers operate at pressures up to 160 PSI, so Corix would have to isolate the TEC1 boilers from the distribution piping system via heat exchangers.[10]

18. In addition, a review of the detail design of the BMDEU CEP highlights the fact that there are physical constraints that restrict the integration of TEC1 into the BMDEU system.[11]

19. Corix estimates that the purchase of the additional equipment needed to address the TEC1 boilers' relatively low operating pressure and physically integrating TEC1 would result in incremental costs totaling between $500,000 and $600,000.[12]

20. Corix submits that keeping TEC1 and integrating it into the BMDEU CEP is not practical, as it would have an adverse impact on rates for BMDEU customers.

21. Furthermore, the option of keeping TEC1 and integrating it into the BMDEU CEP should also take into consideration replacement costs for the TEC1 boilers due to the remaining service life, currently estimated to be fifteen (15) years.[13] In response to BCUC information request (IR) 4.10, Corix provided the net present value for three scenarios regarding the plans for the future use of the TEC1 boilers. Even with the future replacement costs excluded from the scenario to keep TEC1 and integrate it into the BMDEU, that option is costlier than the scenario where Corix transfers the

[8] Exhibit B-2, Response to BCUC IR 2.2, p. 3.
[9] PSI is a unit of pressure that means pound per square inch.
[10] Exhibit B-3, Response to BCUC IR 4.7, p. 3.
[11] Exhibit B-3, Response to BCUC IR 4.8, pp. 3-4.
[12] Exhibit B-3, Response to BCUC IR 4.8, p. 3 and IR 4.11, pp. 5-6.
[13] Exhibit B-3, Response to BCUC IR 4.1, p. 1.

assets as proposed in this Application, and purchases a new natural gas boiler when necessary in the future.[14]

22. The proposal in this Application has a favourable financial impact on ratepayers when compared to the alternative considered during the regulatory review.

(iv) Sale of the entire TEC1 system is not a reasonable alternative

23. Corix submits that the sale of the TEC1 system to a third party is not a reasonable alternative. The Proposed Transaction involves only the TEC1 Assets, i.e. the boilers and boiler pumps. TEC1 contains other components, which are required for TEC2's operation and therefore will remain used and useful after the transfer of the TEC1 Assets. TEC2 does not contain this equipment and is therefore reliant on components from TEC1 to remain operational.[15]

(v) Corix's proposal retains flexibility and adaptability for the BMDEU CEP

24. The design of the BMDEU's CEP includes room for an additional boiler to be added later. Should Corix require additional capacity for backup/peaking requirements in the future, Corix would have the flexibility to purchase equipment with the correct working pressures and appropriate capacity that best aligns to the forecast load demand at that time. In addition, Corix would have the flexibility to choose the most appropriate technology at that time.[16]

25. Corix's proposal retains flexibility and adaptability and provides Corix the opportunity to select technology that could further increase system efficiency at that time.

(vi) Timing of the disposition of the assets

26. Subject to BCUC approval, Corix proposes complete the Proposed Transaction after BCUC approval of the revenue requirement and rate application for DGE, completion of detailed design for the DGE refit, and tendering of the work. At this time, Corix expects to initiate work associated with the Proposed Transaction by early spring 2020.

27. Corix submits that the anticipated timing of the disposition of the TEC1 assets is appropriate because peak demand intensity drops from its winter highs as spring approaches and experiences a further significant reduction during the summer. Due to the seasonality in the peak demand intensity, Corix submits that the proposed timing for the disposition of the TEC1 Assets will not adversely impact BMDEU's customers.

[14] Exhibit B-3, Response to BCUC IR 4.10, pp. 4-5.
[15] Exhibit B-2, Response to BCUC IRs 1.1 and 1.1.1, p. 1.
[16] Exhibit B-3, Response to BCUC IR 4.3, p. 2.

(vii) Proposed Transaction benefits UniverCity ratepayers and impacts DGE ratepayers

28. The customers of the BMDEU system would receive a financial benefit from the transfer of the TEC1 Assets to DGE. This would result in a one-time reduction of UniverCity's portion of rate base according to the net book value of the TEC1 Assets at the time of transfer.

29. The fact that the Proposed Transaction impacts DGE ratepayers warrants consideration as part of this Application. While the regulatory review of this Application has understandably focused on the financial and operational impact of the Proposed Transaction for BMDEU and the utility's customers, Corix submits that the outcome of this Application has implications for the capital expenditure associated with DGE's infrastructure upgrades. DGE's infrastructure upgrades are currently being reviewed by the BCUC as part of DGE's Revenue Requirement and Rates Application.

30. From Corix's point of view, there will be no financial gain or loss for Corix since Corix owns both BMDEU and DGE.

VI. CONCLUSION

31. The information presented throughout this regulatory review show that Corix's proposal should be approved as in the public interest for the following compelling reasons:

a) The TEC1 Assets will no longer be required at the BMDEU from Spring 2020;

b) The transfer of the TEC1 Assets will not adversely affect Corix's ability to serve BMDEU customers;

c) There are prohibitive costs associated with the alternative of integrating the TEC1 Assets into the BMDEU's CEP due to working pressure differences, physical constraints and the future replacement costs for the TEC1 Assets;

d) The alternative of selling the TEC1 system is not feasible since TEC2 is reliant on components from TEC1 to remain operational;

e) The proposal in this Application allows Corix to retain flexibility and adaptability to select the most appropriately sized boiler with the appropriate technology if and when it is needed in the future;

f) The proposed timing for the disposition of the TEC1 Assets is appropriate as the transfer would occur when the TEC1 Assets are no longer required at BMDEU; and

g) UniverCity NUS ratepayers would receive a financial benefit from the approval of this proposal in the form of a one-time reduction to rate base based on the net book value of the TEC1 Assets at the time of transfer.

Vancouver, BC

August 28, 2019

All of which is respectfully submitted.

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