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July 6, 2017

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British Columbia Utilities Commission
6th Floor, 900 Howe Street
Vancouver, BC
V6Z 2N3

**Attention: Patrick Wruck
Commission Secretary**

Dear Sirs/Mesdames:

**Re: Corix Multi-Utility Services Inc.
Application for a Certificate of Public Convenience and Necessity for the
Burnaby Mountain District Energy System
Project No. 3698905/Order G-40-17**

Attached is the Final Argument of Simon Fraser University in this proceeding.

Yours truly,



Robin Sirett*

RS/hk

BRITISH COLUMBIA UTILITIES COMMISSION

Corix Multi-Utility Services Inc.
Project No. 3698905/Order G-40-17

Application for a Certificate of Public Convenience and Necessity
for the Burnaby Mountain District Energy Utility

Final Argument of Simon Fraser University

July 6, 2017

Final Argument of Simon Fraser University

1. This is the final argument of Simon Fraser University (“SFU”) regarding the application (the “Application”) dated February 28, 2017 by Corix Multi-Utility Services Inc. (“Corix”) for the proposed Burnaby Mountain District Energy Utility (the “Burnaby Mountain DEU”).
2. Corix is seeking the following approvals from the Commission:
 - (a) a certificate of public convenience and necessity (“CPCN”) pursuant to section 45 of the Utilities Commission Act authorizing the construction and operation by Corix of the Central Energy Plant (the “CEP”) and related facilities described in the Application, including the Campus Connection and Campus Energy Transfer Station to connect the CEP to SFU’s existing campus thermal energy distribution system, and the UniverCity Connection to connect the CEP to Corix’s existing UniverCity thermal energy distribution system (the “Project Facilities”); and
 - (b) approval pursuant to Sections 60 and 61 of the Utilities Commission Act of the Amended and Restated Thermal Energy Services Agreement dated as of January 27, 2017 between Corix and SFU (the “TESA”), including the cost of service parameters and the cost allocation and rate design principles set out in Schedule 1 (Cost of Service Parameters) and Schedule 2 (Cost Allocation and Rate Design Principles) of the TESA to be used by Corix in establishing SFU’s rates.
3. Prior to the in-service date of the Project Facilities, Corix will apply to the Commission for approval of the SFU and UniverCity rates to be in effect as of the in-service date based on actual project costs and the approved cost of service parameters and cost allocation and rate design principles set out in the Application.

4. The CEP will include a biomass fueled combustion module that will be used by Corix to provide baseload thermal energy to SFU for its Burnaby campus (pursuant to the terms of the TESA) and to the UniverCity community located to the east of the campus (pursuant to the existing Infrastructure Agreement between Corix and the SFU Community Trust and existing customer agreements). The CEP will also include natural gas-fired boilers that will be used by Corix to provide peaking and back-up thermal energy to the UniverCity community. SFU will continue to own and operate its existing Campus thermal energy distribution system and its existing natural gas-fired energy plant to provide peaking and back-up thermal energy to the campus.
5. SFU fully supports the Application. Based on the evidence in this proceeding, SFU submits that the requested approvals are in the public interest and should be approved by the Commission as requested by Corix.
6. The Project Facilities are a cost effective low-carbon energy solution that will enable Corix to meet the baseload thermal energy needs of SFU as well as the full thermal energy needs of the UniverCity community. The project provides benefits to both customer groups through economies of scale and increased operating efficiencies, meets the sustainability objectives of the SFU Community Trust for its ongoing development of the UniverCity community, and will assist SFU in meeting its greenhouse gas (“GHG”) reduction targets. Broader community impacts are important to SFU and were a key consideration in SFU’s decision to proceed with the project and in its negotiation of the commercial agreements with Corix.

Approval of the Application is in the Public Interest

7. SFU and Corix have negotiated and entered into two agreements regarding the Project Facilities:
- (a) First, the Amended and Restated Infrastructure Agreement dated as of January 27, 2017 (the “IA”) under which Corix will, subject to Commission approval and satisfaction of the other conditions precedent set out in Article 7 of the IA, design, construct, own, operate and maintain the Project Facilities to provide thermal energy services to SFU and the UniverCity community as a public utility regulated by the Commission under the Utilities Commission Act. Under the terms of the IA, SFU will grant to Corix the long-term land interests required by Corix for the CEP and related facilities.
 - (b) Second, the TESA under which Corix will, subject to Commission approval, provide thermal energy services to SFU on the terms and conditions set out in the TESA. The TESA includes the cost of service parameters and the rate design and cost allocation principles to be used by Corix in establishing SFU’s rates during the term of the TESA (Schedules 1 and 2 of the TESA). These parameters and principles form the basis on which SFU assessed the economics of the project and agreed to enter into the IA and TESA.
8. SFU is a large and sophisticated institution capable of assessing its long-term energy needs and alternatives. SFU considered its own alternatives¹ and is satisfied that the project will meet its needs for low-carbon energy at reasonable costs and that the arrangements negotiated with Corix are fair and reasonable. These arrangements have

¹ Exhibit B-2, Corix response to BCUC I.R. No. 2.2; and Exhibit B-6, Corix response to BCUC I.R. No. 30.2.

been endorsed by the SFU Board of Governors. SFU has also secured grant funding in the amount of \$4.75 million under the Province of British Columbia's Carbon Neutral Capital Program that will enable SFU to make a contribution in aid of construction to reduce the capital costs of the Project Facilities allocated to SFU for rate-making purposes.²

9. SFU would expect the Commission's review of the Application to be focused primarily on whether a shared energy plant as proposed by Corix is in the overall public interest and, specifically, in the interests of the UniverCity customer group. SFU believes that the terms of the commercial arrangements that it has negotiated with Corix are beneficial to UniverCity customers, and that UniverCity customers will receive a more reliable and cost effective service from Corix as a result of these arrangements.
10. The Project Facilities will enable Corix to transition from the temporary natural gas facilities that it currently uses to provide service to the UniverCity community to a permanent central energy plant with biomass as the baseload fuel source. Biomass is currently the only practical low-carbon technology able to supply the combined baseload requirements of SFU and the UniverCity community.³
11. Corix's evidence demonstrates that the Burnaby Mountain DEU will supply low-carbon energy to UniverCity customers at lower cost than would be the case if a separate energy plant and associated facilities were built to serve only UniverCity.⁴ The estimated UniverCity customer rates for the project are lower than the rates for stand-alone systems sized to serve only the UniverCity load either through biomass or natural gas

² Exhibit B-1, Application page 34; and TESA Section 4.5.

³ Exhibit B-2, Corix Response to BCUC I.R. No. 2.1; and Exhibit B-6, Corix response to BCUC I.R. No. 30.2.

⁴ Exhibit B-1, Application page 46; and Exhibit B-2, Corix response to BCUC I.R. No. 2.3.

fuel sources. Moreover, natural gas alone does not meet the GHG performance expectations of the UniverCity community.

12. While the UniverCity community is not a party to the IA and the TESA, UniverCity customers will indirectly benefit from these arrangements in a number of important respects. These include:

- (a) SFU's decision to support the development of a shared energy plant was a necessary pre-condition to achieving the economies of scale benefits afforded by the proposed facility in the first place.
- (b) Community impacts on Burnaby Mountain are very important to SFU, both with regard to the university campus and the adjacent UniverCity community. Potential community and environmental impacts have been addressed in the IA, including through appropriate siting of the CEP away from the central campus and the UniverCity residential and commercial buildings,⁵ stringent biomass quality specifications, stringent air quality and emission monitoring requirements,⁶ noise control requirements,⁷ and the requirement for a traffic management plan to minimize traffic impacts.⁸
- (c) The IA and TESA include numerous of provisions regarding the design, construction and operation of the CEP that are beneficial to UniverCity customers, including detailed design requirements, operating specifications and performance testing.⁹

⁵ Exhibit B-1, Application page 15 and IA Schedule 1.

⁶ Exhibit B-1, IA Schedule 2 (Part D).

⁷ Exhibit B-1, IA Schedule 2 (Part E).

⁸ Exhibit B-1, IA Schedule 2 (Part F); and Exhibit B-2, Corix response to BCUC I.R. No. 4.1.

⁹ Exhibit B-1, IA Schedule 2 (Parts B and C) and TESA Article 5 and Schedule 4.

- (d) The TESA includes a number of provisions that provide financial incentives for Corix to construct and operate the CEP cost efficiently and reliably, including a collar on capital costs allocated to SFU¹⁰ and other performance-related financial relief provisions. These provisions do not affect rates for the UniverCity community, and while only SFU will be compensating Corix for these provisions in its rates they will indirectly benefit UniverCity customers by providing incentives for Corix to minimize the capital costs of shared infrastructure, to maximize plant performance and availability and to ensure minimum efficiency levels.
13. The Project Facilities also align with provincial energy and climate action policy objectives.¹¹ Specifically with regard to GHG emissions, the use of biomass, and in particular clean wood waste, as a fuel source is recognized by provincial, federal and international agencies as an appropriate approach for mitigating GHG emissions when compared to conventional fossil fuel energy sources. Biomass is recognized under the Clean Energy Act as a clean or renewable resource and the CO₂ emissions from burning biomass are considered carbon neutral under the B.C. Ministry of Environment's "2016/17 B.C. Best Practices Methodology for Quantifying Greenhouse Gas Emissions".¹²
14. The biomass that will be used in the CEP will be clean wood waste that meets the definition of "biomass" under the IA and TESA, and it must meet stringent specifications to comply with Metro Vancouver by-law requirements.¹³

¹⁰ Exhibit B-1, TESA Schedule 1.

¹¹ Exhibit B-1, Application pages 12 and 13.

¹² Exhibit B-2, Corix response to BCUC I.R. Nos. 3.1 and 5.6.

¹³ Exhibit B-1, Application page 27; and Exhibit B-4, Corix response to BCSEA I.R. Nos. 1.2, 1.3 and 1.4.

15. Corix estimates that the use of biomass as fuel source will reduce GHG emissions by approximately 11,600 tonnes per year, a conservative estimate that takes into account the total emissions from transporting the fuel to the CEP but excludes the emission savings from alternate disposal methods.¹⁴

The Cost Allocations are Fair and Reasonable

16. A number of questions regarding the proposed allocation of costs between SFU and the UniverCity were raised in information requests. Under the proposed allocations, all direct costs will be allocated to the customer group making use of specific facilities. For example, the capital costs of the SFU interface with the biomass module in the CEP, the Campus Connection and the Campus Energy Transfer Station will be allocated entirely to SFU, and the capital costs of the natural gas module in the CEP and the UniverCity Connection will be allocated entirely to UniverCity customers.
17. However, because the CEP is a common use facility and the Burnaby Mountain DEU will operate as a single utility with common management and operating personnel, it is necessary to allocate certain shared capital and operating costs. In SFU's submission, all of the proposed cost allocators are principle-based and will produce a fair and reasonable allocation of costs between customer groups. The allocation of shared capital and fixed operating costs based on fixed capacity allocations is not only fair, but also enables SFU to retain full rights over dispatch from the CEP for its own use while ensuring that this has no impact on UniverCity customers. With regard to the allocation of various overhead costs, SFU submits that the proposed methodology is not only fair but also minimizes ongoing administrative complexity, which should be an important consideration in the Commission's determination.

¹⁴ Exhibit B-2, Corix response to BCUC I.R. No. 3.1.

18. Specifically with regard to project development costs (proposed to be allocated on a 50/50 basis), SFU wishes to highlight that it has incurred considerable internal and external costs to conduct project due diligence and assessment and to negotiate the terms of the IA and TESA. SFU believes that these development costs have improved and made the overall project possible, but SFU is not seeking recovery of any of these costs from UniverCity customers.

SFU Supports the Proposed Change to the SFU Fuel Deferral Account

19. With regard to Corix's application for a deferral account to capture differences between the forecast and actual costs incurred by Corix for biomass and electricity to provide service to SFU under the TESA (as set out on page 10 of Schedule 1 of the TESA under "Deferral Account Treatment"), SFU wishes to confirm that it supports the change to the mechanism for recovering or crediting the deferral account balance each year as described by Corix in its final argument (namely, through an adjustment to the SFU Capacity Charge rather than the SFU Consumption Charge).¹⁵ This change will ensure that the deferral balance will be cleared each year as was intended by the parties, and has no impact on UniverCity customers. Accordingly, SFU requests that the Commission's approval of the Application reflect this change to the deferral account recovery mechanism.

Conclusion

20. For the reasons set out above and in Corix's final argument, SFU submits that approval of the Application is in the public interest.

¹⁵ Corix Final Argument, para. 9, page 4; see also Exhibit B-6, Corix response to BCUC I.R. No. 40.3.

21. SFU requests that the Commission issue a CPCN for the Project Facilities and approve the TESA, including the cost of service parameters and the cost allocation and rate design principles set out in Schedules 1 and 2 of the TESA, all as requested by Corix.

All of which is respectfully submitted by SFU this 6th day of July, 2017.

By its Counsel
McCarthy Tétrault LLP

Per: 
Robin Sirett