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**INFRASTRUCTURE AGREEMENT**

**by and between**

**THE UNIVERSITY OF BRITISH COLUMBIA**

**and**

**CORIX MULTI-UTILITY SERVICES INC.**

**Dated as of September 9, 2014**

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## INFRASTRUCTURE AGREEMENT

THIS AGREEMENT dated the \_\_\_\_ day of September, 2014

BETWEEN:

**THE UNIVERSITY OF BRITISH COLUMBIA**, a corporation continued under the *University Act*, R.S.B.C. 1996, c. 468, having an address at 2075 Wesbrook Mall, Vancouver, British Columbia V6T 1Z1

(“**UBC**”)

AND:

**CORIX MULTI-UTILITY SERVICES INC.**, a British Columbia corporation having an address at Suite 1160, 1188 West Georgia Street, Vancouver, British Columbia, V6E 4A2

(“**Corix**”)

WHEREAS:

- A. Reduction of Greenhouse Gas emissions is an important part of UBC’s vision for UBC’s Vancouver Campus, as reflected in UBC’s Land Use Plan, and in the Community Energy and Emissions Plan (the “**CEEP**”) completed in 2013 by UBC and the UNA and which identified district energy as one of the most significant actions for reducing Greenhouse Gas emissions;
- B. British Columbia’s energy objectives (as that term is defined in the *Clean Energy Act* (British Columbia)) encourage, among other things, communities to reduce Greenhouse Gas emissions, to use and foster innovative technologies and to use waste heat and alternative energy sources;
- C. UBC wishes to enable the development of a neighbourhood district energy utility system (the “**NDES**”) that will use Low Carbon energy sources to generate and provide Thermal Energy to customers in the Development Areas;
- D. Corix Utilities Inc. (“**CUI**”) is an experienced public utility owner and operator with expertise in the area of water, wastewater and energy utility operations and measurement services for municipal and utility customers and private developers;
- E. Corix is a wholly-owned subsidiary of CUI;
- F. Pursuant to a Request for Information and its Supplement, issued by UBC on February 25, 2013 and May 6, 2013 respectively (together, the “**RFI**”), and the resulting Memorandum of Understanding between UBC and CUI dated September 30, 2013, as amended (the “**MOU**”), CUI has undertaken technical and economic feasibility assessments and commenced engineering, design and other work relating to the NDES, and UBC has decided to proceed with the NDES;
- G. UBC has selected Corix, and Corix has agreed, to design, construct, finance, own, operate and maintain the required infrastructure for the NDES, and to provide Energy Services to customers in the

Development Areas as a public utility regulated by the British Columbia Utilities Commission under the *Utilities Commissions Act* (British Columbia), all on the terms and conditions set out in this Agreement;

- H. The NDES may also provide Thermal Energy to UBC (via interconnection with the ADES) and to the area owned by the Musqueam Nation and known as Block F (subject to agreement with the Musqueam First Nation) and, potentially, cooling services to TRIUMF;
- I. UBC and Corix currently expect that waste heat recovered from TRIUMF cooling towers will eventually be used in one or more central energy plants to provide the bulk of Thermal Energy to residential and other customers in the Development Areas, though other Alternate Energy Sources that meet cost-competitiveness and environmental objectives, as agreed upon by the Parties from time to time, may also be used; and
- J. In furtherance of British Columbia's energy objectives (as that term is defined in the *Clean Energy Act* (British Columbia)) and the CEEP, the Parties intend that Alternate Energy Sources will, by final build-out of the NDES, generate a minimum of 60% (plus or minus 5%) of the NDES Customers' annual Thermal Energy requirements;

NOW THEREFORE the Parties covenant and agree as follows:

## 1. INTERPRETATION

### 1.1 Definitions

In this Agreement, the following terms have the meanings respectively set out below:

“**Additional Work**” and “**Additional Work Cap**” have the meanings given to them in Section 22.1(c).

“**ADES**” means the academic district energy system developed and owned by UBC to generate, distribute and provide Thermal Energy to academic or other institutional buildings situated within UBC's Vancouver Campus.

“**ADES Interconnection**” means, collectively, the system of water pipes, fittings and all ancillary equipment and facilities necessary to connect the NDES and the ADES, and to allow the transfer of Thermal Energy between the NDES and the ADES, as further described in the Project Plan.

“**Affiliate**” has the meaning given to it in the *Business Corporations Act* (British Columbia).

“**Allocated Taxes**” has the meaning given to it in Section 7.2(g)(iii).

“**Alternate Energy Sources**” means:

- (i) waste heat recovered from TRIUMF cooling towers; or
- (ii) such other energy sources that meet the standards the Parties accept for Low Carbon energy.

“**Assignment and Assumption Agreements**” means, collectively, the agreements made between UBC and Corix pursuant to which UBC has assigned, and Corix has assumed, all of UBC's right, title and interest in and to those Community Energy Covenants described in Schedule C.

“**BCUC**” means the British Columbia Utilities Commission or a successor entity.

“**BCUC Applications**” has the meaning given to it in Section 4.2(a).

“**Building**” means a residential or other building constructed by a Developer in any of the Development Areas.

“**Building System**” means the system of water pipes and heat and hot water delivery and storage equipment used for distributing and storing Thermal Energy within a Building, connected to but downstream of and excluding the Service Connection and Energy Transfer Station for that Building.

“**Business Day**” means any day except a Saturday, Sunday, statutory holiday in the Province of British Columbia or any other day on which banks are generally not open for business in Vancouver, British Columbia.

“**CEP**” means a temporary or permanent central energy plant for the generation of Thermal Energy, and including any or all of the following: natural gas boilers, heat recovery equipment and all associated mechanical and electrical interconnections, control systems and structures.

“**Change of Law**” means any change in applicable Laws, industry standards, regulatory orders, or conditions affecting the performance of obligations or the exercise of rights under this Agreement.

“**Commencement Date**” means the date on which the last of the conditions precedent set out in Section 2.1 is satisfied or waived by the applicable Party, as evidenced by an acknowledgement in writing by such Party.

“**Community Energy Covenant**” means an agreement made between UBC and a Developer, or between Corix and a Developer, pursuant to which such Developer grants to UBC or Corix, as the case may be, (i) a covenant under Section 219 of the *Land Title Act* (British Columbia) governing the construction, heating and occupancy of a Building and (ii) a statutory right of way under Section 218 of the *Land Title Act* (British Columbia) permitting the grantee, or a third party appointed by the grantee, to provide to the Building service from a community energy system and to access the Building and the lands on which it is built in connection with the provision of such service, a complete list of which agreements, as at the date of this Agreement, is set out in Schedule C, together with a list of all Developers and their Buildings which are not, as at the date of this Agreement, subject to a Community Energy Covenant.

“**Connection Credit**” has the meaning given to it in Section 8.4(a).

“**Contaminants**” means any radioactive materials, asbestos materials, urea formaldehyde, underground or above ground tanks containing contaminants, pollutants, deleterious substances, dangerous substances or goods, hazardous, corrosive, or toxic substances, hazardous waste, waste, pesticides, defoliants, or any other solid, liquid, gas, vapour, odour, heat, sound, vibration, radiation, or combination of any of them, the storage, manufacture, handling, disposal, treatment, generation, use, transport, remediation, or Release into the Environment of which is now or hereafter prohibited, controlled or regulated under Environmental Laws.

“**Contaminated Site**” has the meaning given to it in the *Environmental Management Act* (British Columbia).

“**Corix Cap**” has the meaning given to it in Section 22.1(b).

“**Corix Group**” means, collectively, Corix and its Affiliates and their respective officers, directors, shareholders, employees, contractors, agents, contractors, successors and permitted assigns.

“**Cost of Service**” means an approach used to determine customer rates based on the revenue required by a utility to fully recover design and development costs, operation and maintenance costs, depreciation, debt service costs, a return on equity for capital costs, and all fees and Taxes, all as approved from time to time by the BCUC.

“**costs**” as used in this Agreement means costs including any applicable Taxes, unless this Agreement expressly states otherwise.

“**CPCN**” means a certificate of public convenience and necessity granted by the BCUC pursuant to the *Utilities Commission Act* (British Columbia) authorizing the construction and operation of the Infrastructure or a portion thereof.

“**CUI**” means Corix Utilities Inc.

“**Design Guide**” means the Design Guide for Compatibility with District Energy, as administered and issued by Corix, and as amended from time to time.



**“Developer”** means a Person having entered into an offer to lease or lease for a development site within a Development Area, for the purpose of developing and constructing a Building.

**“Development Areas”** means, collectively, the Wesbrook Place, Acadia Road (which is contemplated to include the Acadia West Neighbourhood and Acadia East student housing precinct), East Campus and Stadium neighbourhoods of UBC’s Vancouver Campus, all as designated in UBC’s Land Use Plan and shown on the map attached as Schedule A, and **“Development Area”** means any of them.

**“Development Forecast”** means the forecast of timing and order of development for the Development Areas, prepared by UBC Properties and presented to the UBC Board of Governors, a copy of which, as at the date of this Agreement, is attached as Schedule D, as amended from time to time.

**“Distribution System”** means, collectively, the system of water pipes, fittings and ancillary equipment and facilities necessary to connect the CEP(s) to and including all of the Energy Transfer Stations and the Service Connections, and which distributes Thermal Energy to Buildings.

**“Due Diligence”** means the financial, legal and technical investigations conducted by Corix in respect of the NDES.

**“Due Diligence Consultants”** means, collectively, the third party consultants and other service providers engaged by Corix in connection with its conduct of the Due Diligence.

**“Encumbrance”** means any mortgage, lien, pledge, judgement, execution, charge, security interest, restriction, claim or encumbrance of a financial nature, including, without limitation, builders liens and claims of the WorkSafe BC, Canada Revenue Agency and any other Governmental Authority.

**“Energy Services”** means the provision of Thermal Energy via the Infrastructure in accordance with the Project Plan.

**“Energy Services Contract”** means an agreement between Corix and a Developer, strata corporation or other NDES Customer, setting out the terms and conditions on which (i) a Building(s) will be connected to the NDES (including, among other things, terms and conditions relating to design of the Building, disclosure by the Developer of information to potential occupiers of space in the Building and, if applicable, the Connection Credit) and (ii) Corix will provide Energy Services to the Developer, strata corporation and/or other eventual NDES Customer(s) who occupy space in such Building(s).

**“Energy Transfer Station”** means, collectively, the system of separate heat exchangers for space heating and domestic hot water (excluding domestic hot water storage tanks), energy meter (including temperature sensors and flow meter), control panel and all pipes, fittings and ancillary equipment and facilities necessary to measure and control the transfer of Thermal Energy from the Distribution System to a Building System.

**“Environment”** includes the air (including all layers of the atmosphere), land (including soil, sediment deposited on land, fill, lands submerged under water, buildings, and improvements), water (including oceans, lakes, rivers, streams, groundwater, and surface water), and all other external conditions and influences under which humans, animals, and plants live or are developed and **“Environmental”** will have a corresponding meaning.

**“Environmental Credits”** means any income, credit, right, benefit or advantage, whether in the form of Greenhouse Gas offset credits, monetary value or some other form or character, relating to Environmental matters including type and level of Environmental emissions or emission reductions, input energy sources and compliance with Environmental Laws; and any market instrument, including without limitation any Environmental emission allowances and Environmental emission reduction credits that accrue to businesses that perform better than certain government, industry, trade organization or Environmental international emission reduction guidelines, net of any costs incurred by Corix associated with obtaining the Environmental Credit.

**“Environmental Laws”** means all applicable statutes, laws, regulations, orders, bylaws, standards, guidelines, protocols, permits, and other lawful requirements of any Governmental Authority relating to the Environment or

its protection, environmental assessment, health, occupational health and safety, protection of any form of plant or animal life, or transportation of dangerous goods, including the principles of common law and equity.

“**Extension Test**” means the test used to assess the economic viability of a proposed NDES Extension.

“**Fair Market Value**” has the meaning given to it in Section 7.2(g)(i).

“**Force Majeure**” has the meaning given to it in Section 23.2.

“**Franchise Fee**” has the meaning given to it in Section 11.3(a).

“**Greenhouse Gas**” has the meaning given to the term “greenhouse gas” in the *Greenhouse Gas Reduction Targets Act* (British Columbia).

“**Governmental Authority**” means any federal, provincial, regional, municipal, local or other government, governmental or public department, court, tribunal, arbitral body, commission, board, bureau or agency and any subdivision, agent, commission, board or authority, including without limitation UBC (in its capacity as Municipal Authority Having Jurisdiction) and the BCUC.

“**Income Tax Act**” means the *Income Tax Act* (Canada).

“**Infrastructure**” means, collectively, the CEP(s), Distribution System, Energy Transfer Stations, Service Connections, ADES Interconnection, connections to the Alternate Energy Source(s), equipment to recover, upgrade, top-up, etc. waste heat from TRIUMF and includes any ancillary equipment and facilities.

“**Infrastructure Specifications**” means, collectively, the standards, specifications, procedures, design criteria, design guidelines and other requirements applicable to all design, construction and installation activities included in the Infrastructure Work.

“**Infrastructure Work**” means, collectively, the work required to complete the engineering, design, construction and installation by Corix of any and all portions of the Infrastructure while this Agreement is in force.

“**Laws**” means any law, statute, regulation, bylaw, Permit, order or legal requirement of or issued by or under the direction or authority of any Governmental Authority having jurisdiction.

“**Low Carbon**” is a description of the quantity of Greenhouse Gas emissions produced by an energy-producing process or technology if:

- (a) the quantity of Greenhouse Gas emissions is equal to or less than that associated with waste heat recovered from TRIUMF cooling towers; or
- (b) the process or technology is considered carbon neutral in accordance with recognized Greenhouse Gas accounting protocols such as British Columbia’s SMARTTool or equivalent protocol.

“**Low Rise Building**” means a wood-frame Building of less than 7 storeys.

“**Material Permits**” means, collectively, the Permits that are required for the construction and operation of the NDES, including those permits described in Schedule E.

“**Meter**” means any measuring device installed by Corix, and is the delineation point between the Infrastructure and the property leased, subleased or otherwise occupied by an NDES Customer. For further clarity, Corix will Meter to Buildings, but will not submeter individual suites.

“**MOU**” has the meaning given to it in Recital F.

“**Municipal Authority Having Jurisdiction**” means The University of British Columbia's Department of Campus & Community Planning in its capacity as regulatory, inspection and permitting authority for UBC’s Vancouver Campus or such other department of The University of British Columbia as becomes responsible for this function from time to time. In the event that UBC’s Vancouver Campus become part of a municipality or the UEL, or any other governing body acquires jurisdiction over UBC’s Vancouver Campus similar to that of

municipalities and assumes these functions, that governing body will become the Municipal Authority Having Jurisdiction.

“**NDES**” has the meaning given to it in Recital C.

“**NDES Customer**” means any Person who receives Energy Services.

“**NDES Extension**” means any addition to or upgrade of the Infrastructure in connection with any of the following:

- (i) addition of an NDES Customer or group of NDES Customers;
- (ii) a physical extension of the Distribution System;
- (iii) addition of a temporary or permanent CEP;
- (iv) addition of an Alternate Energy Source to or for one or more CEPs;
- (v) addition of capacity to a CEP; or
- (vi) interconnection of the NDES and the ADES.

“**Neighbourhood Plan**” means a document approved by the UBC Board of Governors that contains a detailed land use plan, development controls, design guidelines, and servicing and transportation strategies applicable to a particular Development Area, and consistent with UBC’s Land Use Plan.

“**Net Book Value**” has the meaning given to it in Section 7.2(g)(ii).

“**New Development Areas**” has the meaning given to it in Section 5.4(a).

“**Option to Purchase**” has the meaning given to it in Section 7.2(a)(i).

“**Party**” means either UBC or Corix and “**Parties**” means both of them.

“**Permanent CEP Site**” means those UBC-Owned Lands on which a permanent CEP is or will be situate.

“**Permits**” means all permits, licences, certificates, approvals, authorizations, consents and the like issued by UBC or any other Governmental Authority for the Infrastructure or the provision of the Energy Services.

“**Person**” means an individual or his or her legal personal representative, an unincorporated organization or association, or a corporation, partnership, trust, trustee, syndicate, joint venture, limited liability company, union, Governmental Authority or other entity or organization.

“**Phase I Application**” has the meaning given to it in Section 3.2(a).

“**Phase I CPCN**” means a CPCN authorizing the construction and operation of those portions of the Infrastructure described in or otherwise contemplated by the Phase I Application.

“**Phase II Application**” has the meaning given to it in Section 3.2(b).

“**Phase II CPCN**” means a CPCN authorizing the construction and operation of those portions of the Infrastructure described in or otherwise contemplated by the Phase II Application.

“**Project Plan**” means the plan for carrying out the Infrastructure Work, the operation of the NDES and the provision of Energy Services, a copy of which as at the date of this Agreement is attached as Schedule B, setting out:

- (i) an indicative development and load forecast;
- (ii) technical design specifications, including DPS layout, and current and future energy sources;
- (iii) a capital plan reflecting the indicative development and load forecast and technical specifications;

- (iv) operating assumptions, including equipment efficiencies, labour requirements and all costs to provide the Energy Services;
- (v) input fuel price assumptions;
- (vi) the Project Plan Pro Forma;
- (vii) rate design and rate setting principles; and
- (viii) the Extension Test;

as approved by the BCUC and as amended thereafter in accordance with this Agreement, including so as to reflect changes in the Development Forecast and in NDES operating costs that are a flow-through to NDES Customers.

**“Project Plan Pro Forma”** means the financial model forming part of the Project Plan and reflecting the forecast loads, capital and operating costs of the NDES and from which indicative rates will be determined, as amended from time to time in accordance with the Project Plan.

**“Purchased Assets”** as at any time means, collectively, all of the Infrastructure then in service, together with all work-in-progress at such time and reasonably expected to be included in rate base once in service (including any design, development or construction work related thereto), and together with all NDES Customer contributions in aid of construction, pending or unused grants, regulatory assets (including any carbon offset funds accumulated and not yet spent on Alternate Energy Sources), all leases, licences, registered rights of way, easements or other rights, all contracts and Permits, NDES Customer information (including historical records) and all other assets relating to the NDES.

**“Purchased Shares”** has the meaning given to it in Section 7.2(a)(iv).

**“Release”** includes any release, spill, leak, pumping, pouring, emission, emptying or discharge, injection, escape, leaching, migration, disposal, or dumping.

**“Required Purchase”** has the meaning given to it in Section 7.2(c).

**“Right to Purchase”** has the meaning given to it in Section 7.2(a)(ii).

**“RFI”** has the meaning set out in Recital F.

**“Service Connection”** means, collectively, the system of water pipes, fittings and ancillary equipment and facilities necessary to connect a Building to the Distribution System via an Energy Transfer Station.

**“SRW”** means a statutory right of way agreement, substantially in the form attached as Schedule F which permits Corix exclusive access to the lands and improvements thereon for the purpose of performing Corix’s obligations under this Agreement.

**“Support and Indemnity Agreement”** means the agreement made between UBC and Corix in respect of the rights and obligations of Corix, as assignee pursuant to the Assignment and Assumption Agreements, under the Community Energy Agreements described in Schedule C.

**“Taxes”** means all applicable taxes, including without limitation all income tax, sales tax, excise tax, transfer taxes or fees, and further includes property taxes, levies, penalties including interest, franchise fees and royalties, if validly levied by a federal, provincial, regional, municipal, or other local governmental authority, including UBC, and exigible upon Corix or the NDES customers, as applicable.

**“Temporary CEP Site”** means a site agreed to by the Parties for the location of a temporary CEP.

**“Thermal Energy”** means thermal energy for space heating, ventilation heating and domestic hot water heating.

**“TRIUMF”** means Canada’s national laboratory for particle and nuclear physics, situate at 4004 Wesbrook Mall, within UBC’s Vancouver Campus and owned and operated pursuant to a joint venture agreement made as of March 31, 2008 among UBC and certain other universities and institutions.

“**UBC Cap**” has the meaning given to it in Section 22.1(a).

“**UBC-Owned Lands**” means those lands within UBC’s Vancouver Campus that are owned in fee simple by UBC.

“**UBC Properties**” means UBC Properties Investments Ltd., in its capacity as trustee of UBC Properties Trust.

“**UBC’s Land Use Plan**” means the land use plan adopted by the Minister of Community and Rural Development pursuant to Part 10-2010 of the *Municipalities Enabling and Validating Act (No.3)* [SBC 2001], c.44.

“**UBC’s Vancouver Campus**” means the lands within the boundaries described in the *Point Grey Campus Lands Regulation (195/2010)*.

“**UEL**” means the administration set up pursuant to the *University Endowment Land Act*, R.S.B.C., 1996, Ch. 496 and amendments thereto for the purpose of administering all land included within the definition of land set out in Section 1 of the *University Endowment Land Act*, which lands can be generally described as being situated in the areas east of Wesbrook Mall and north of Agronomy Road.

“**UNA**” means the University Neighbourhoods Association, a society incorporated under the *Society Act* (British Columbia).

## **1.2 Interpretation**

Unless otherwise expressly provided, in this Agreement:

- (a) “this Agreement” means this agreement, including any recitals and schedules, as it may from time to time be supplemented, amended or restated;
- (b) all references in this Agreement to a designated “Section”, “subsection” or “Schedule” is to the designated Section or subsection of or Schedule to this Agreement;
- (c) the words “herein”, “hereof” and “hereunder” and other words of similar import refer to this Agreement as a whole and not to any particular portion hereof;
- (d) the headings are for convenience only, do not form a part of this Agreement and are not intended to interpret, define or limit the scope, extent or intent of this Agreement or any provision hereof;
- (e) the singular of any term includes the plural, and vice versa; the use of any term is equally applicable to any gender and, where applicable, a body corporate;
- (f) the word “including” is not limiting whether or not non-limiting language (such as “without limitation” or “but not limited to” or words of similar import) is used with reference thereto;
- (g) references to time of day or date mean the local time or date in Vancouver, British Columbia; and
- (h) all references to amounts of money mean lawful currency of Canada.

## **1.3 Statutory References**

Unless otherwise specified, each reference to a statute is deemed to be a reference to that statute, and to the regulations made under that statute, as amended or re-enacted from time to time.

## 1.4 Schedules

The following are the Schedules to this Agreement:

Schedule A	Map of Development Areas
Schedule B	Project Plan
Schedule C	Community Energy Covenants and Chart of Applicability
Schedule D	Land Use Plan and Development Forecast
Schedule E	Material Permits
Schedule F	Form of Statutory Right of Way
Schedule G	Form of Licence Agreement – Temporary CEP Site
Schedule H	Form of Lease Agreement – Permanent CEP Site
Schedule I	Form of Energy Services Contract

## 2. CONDITIONS PRECEDENT

### 2.1 Conditions Precedent to Commencement of Phase I

- (a) The obligation of Corix to carry out any of the Infrastructure Work shall be subject to fulfilment, on or before September 1, 2015 or such other date as the Parties may agree, of each of the following conditions precedent:
- (i) the BCUC will have issued the Phase I CPCN and approved rates for the Energy Services (including tariff terms and conditions and a form of Energy Services Contract), on terms and conditions that are reasonably acceptable to Corix, by reference to the Project Plan;
  - (ii) the board of directors of Corix, as necessary, will have approved the execution and delivery of the Licence Agreement, an Assignment and Assumption Agreement for each of the Community Energy Covenants described in Schedule C, and the Support and Indemnity Agreement;
  - (iii) UBC will have executed and delivered to Corix the Licence Agreement, an Assignment and Assumption Agreement for each of the Community Energy Covenants described in Schedule C, and the Support and Indemnity Agreement;
  - (iv) all Material Permits (other than the Phase I CPCN) necessary to allow Corix to commence the Infrastructure Work will have been obtained on terms and conditions acceptable to Corix, acting reasonably;
  - (v) the representations and warranties of UBC set out in Section 16.1 continue to be true; and
  - (vi) all licences (other than the Licence Agreement), statutory rights of way, easements, leases or other agreements required for Phase I, granting Corix access as contemplated in Section 5.2, will have been executed and delivered by, or otherwise obtained from, UBC and other Persons, as applicable, on terms and conditions acceptable to Corix, acting reasonably.

Corix will use commercially reasonable efforts to satisfy the conditions contained in this Section 2.1(a), provided, however, that each such condition is for the sole and exclusive benefit of Corix and may be waived by Corix in whole or in part at any time.

- (b) The obligations of UBC in connection with the Infrastructure Work associated with Phase I shall be subject to fulfilment, on or before September 1, 2015 or such other date as the Parties may agree of each

of the following conditions precedent:

- (i) the BCUC will have issued the Phase I CPCN and approved rates for the Energy Services (including tariff terms and conditions and a form of Energy Services Contract), all on terms and conditions that are reasonably acceptable to UBC, by reference to the Project Plan;
- (ii) the UBC Board of Governors, as necessary, will have approved the execution and delivery of the Licence Agreement, an Assignment and Assumption Agreement for each of the Community Energy Covenants described in Schedule C, and the Support and Indemnity Agreement;
- (iii) Corix will have executed and delivered to UBC the Licence Agreement, an Assignment and Assumption Agreement for each of the Community Energy Covenants described in Schedule C, and the Support and Indemnity Agreement;
- (iv) all Material Permits, (other than the Phase I CPCN) will have been obtained on terms and conditions acceptable to UBC, acting reasonably; and
- (v) the representations and warranties of Corix set out in Section 16.2 continue to be true.

UBC will use commercially reasonable efforts to satisfy the conditions contained in this Section 2.1(b), provided, however, that each such condition is for the sole and exclusive benefit of UBC and may be waived by UBC in whole or in part at any time.

### **3. PROJECT PLAN AND PHASING**

#### **3.1 Project Plan**

- (a) Corix will design, construct, develop, extend, operate and maintain the NDES in accordance with the Project Plan.
- (b) Corix will, from time to time but in any event no less frequently than annually after issuance of the Phase I CPCN, consult with UBC on any amendments to the Project Plan considered by either Party to be necessary or desirable as a result of changes in key input assumptions or identification of new opportunities. The Parties may amend the Project Plan from time to time after issuance of the Phase I CPCN, but subject always to further BCUC approval as applicable.

#### **3.2 Phases**

The Parties expect Corix will develop the NDES in two phases, as follows:

- (a) Phase 1: Corix will prepare and submit to the BCUC an application (the “**Phase I Application**”) for a CPCN authorizing Corix to construct and operate the NDES. As part of the Phase I Application, Corix will submit the Project Plan and will request that the BCUC authorize the use of the Project Plan Pro Forma for determining the ongoing feasibility of all anticipated NDES Extensions and for determining the feasibility of all unanticipated NDES Extensions.
- (b) Phase 2: Promptly after the occurrence of the target date identified in the Project Plan for commercial viability of either or both of:
  - (i) the interconnection of the Wesbrook portion of the NDES and the ADES; and

- (ii) the connection of a permanent CEP to an Alternate Energy Source;

and provided that all material assumptions set out in the Project Plan in support of the selection of such target date remain valid at that time, Corix will prepare and submit to the BCUC, with sufficient lead time to meet the relevant target in-service date set out in the Project Plan, and thereafter diligently prosecute, an application (the “**Phase II Application**”) for a CPCN authorizing Corix to interconnect the NDES and the ADES and/or connect a permanent CEP to an Alternate Energy Source.

### **3.3 Commencement of Phase I Work**

Corix will commence the Infrastructure Work contemplated by the Phase I Application within 90 Business Days after the Commencement Date.

### **3.4 Commencement of Phase II Work**

Corix will commence the Infrastructure Work contemplated by the Phase II Application within 120 Business Days after the last to occur of the following:

- (a) all Material Permits, statutory rights of way, easements, licences, leases and other rights of access requisite for the Infrastructure Work contemplated in the Phase II Application have been obtained and are in effect on terms satisfactory to Corix, acting reasonably;
- (b) Corix has entered into one or both of the following agreements, as relevant and applicable:
  - (i) an agreement with UBC to interconnect the Wesbrook portion of the NDES and the ADES for the purposes of supplying to or purchasing from UBC an Alternate Energy Source;
  - (ii) an agreement with one or more Persons for the supply from an Alternate Energy Source for the Permanent CEP; and
- (c) the BCUC will have issued the Phase II CPCN on terms and conditions that are reasonably satisfactory to each of Corix and UBC, by reference to the Project Plan.

### **3.5 Lack of Funds**

Lack of funds will not be a ground for any failure or refusal by Corix to:

- (a) commence the Infrastructure Work contemplated by the Phase I Application, in accordance with Section 3.3;
- (b) extend the Infrastructure as a result of anticipated or unanticipated customer additions in accordance with the Project Plan and subject to the Extension Test;
- (c) make the Phase II Application, subject to and in accordance with Section 3.2(b); or
- (d) commence the Infrastructure Work contemplated by the Phase II Application, subject to and in accordance with Section 3.4.



## **4. SUBMISSIONS TO REGULATOR**

### **4.1 Regulation of Rates**

- (a) Corix will be regulated, as applicable, by the BCUC as a public utility (as that term is defined in the *Utilities Commission Act* (British Columbia)).
- (b) Corix will charge for the Energy Services on a Cost of Service approach, subject to BCUC approval as applicable.
- (c) The NDES will operate as an integrated energy system and distribution network, and, subject to BCUC approval as applicable, there will be a distinct tariff, applicable in all Development Areas, for each class of NDES Customer.

### **4.2 BCUC Applications**

- (a) Corix will prepare and submit to the BCUC such applications for CPCNs under the *Utilities Commission Act* (British Columbia) as may be necessary for development of the NDES in accordance with the Project Plan, including the Phase I Application, the Phase II Application (subject to Section 3.2(b)) and any other applications that may be necessary in accordance with the Project Plan and the *Utilities Commission Act* (British Columbia (collectively, the “**BCUC Applications**”).
- (b) UBC will provide reasonable support for the BCUC Applications, as requested by Corix, provided such applications are in accordance with this Agreement and the Project Plan.
- (c) Corix will comply with the respective terms and conditions upon which each of the Phase I CPCN and the Phase II CPCN was issued, and with the terms and conditions upon which any other order or decision of the BCUC is issued for the NDES.

### **4.3 NDES Extensions**

Subject to BCUC approval, as applicable:

- (a) Corix will use the Project Plan Pro Forma as a reference for determining the ongoing feasibility of all anticipated NDES Extensions and for determining the feasibility of unanticipated NDES Extensions;
- (b) Corix will carry out all NDES Extensions contemplated in the Project Plan;
- (c) Corix may carry out any NDES Extension not contemplated in the Project Plan, if:
  - (i) it would result in rates for the NDES Customers that are comparable to or lower than those projected in the then-current Project Plan; or
  - (ii) Corix wishes to design, construct and install such NDES Extension at its own cost and expense;
- (d) if a proposed NDES Extension would increase any of the rates chargeable to NDES Customers above the rates projected in the then-current Project Plan, Corix may, after first giving reasonable advance notice to UBC, apply to the BCUC for approval of the proposed NDES Extension on the basis that the

NDES Extension is (or should be deemed to be), despite the anticipated increase in rates, in the public interest; and

- (e) Corix may, if applicable, mitigate any anticipated increase in rates for the NDES Customers by seeking a voluntary contribution in aid of construction from UBC or any customers who seek to be connected to the NDES via the proposed NDES Extension and any applicable grants or other consideration that would reduce impacts to rates for the NDES Customers.

## **5. EXCLUSIVITY AND ACCESS TO LAND**

### **5.1 Exclusive Franchise and Obligation to Serve**

- (a) UBC grants Corix an exclusive franchise and right to provide Energy Services to NDES Customers in the Development Areas in accordance with the Project Plan, and to effect any NDES Extensions from time to time contemplated thereby, and UBC shall provide such access to any UBC-Owned Lands as is necessary for Corix, in the exercise of such franchise:
  - (i) to carry out the Infrastructure Work; and
  - (ii) to operate and maintain the Infrastructure.
- (b) Subject only to the rights of those Developers or strata corporations whose Buildings are not subject to a Community Energy Covenant, the powers and rights granted to Corix under this Agreement are exclusive to Corix and UBC will not perform, or allow any other Person (except subcontractors and agents of Corix) to perform, any Infrastructure Work or to construct, install or operate the Infrastructure or any other system (not permitted by applicable building regulations or the Design Guide) that would provide Thermal Energy to NDES Customers, to provide the Energy Services or to exercise any other right or privilege granted to Corix under this Agreement, except as necessary during Force Majeure events.
- (c) Corix acknowledges that:
  - (i) certain UBC-Owned Lands within the Development Areas that are leased by UBC to certain Developers are subject to a Community Energy Covenant, and UBC Properties has entered into offers to lease certain other UBC-Owned Lands within the Development Areas, which offers to lease require the Developer(s) to enter into and register against title to the applicable lands a Community Energy Covenant, a complete list of which lands is set out in Part 1 of Schedule C; and
  - (ii) certain UBC-Owned Lands within the Development Areas that were leased prior to the date of this Agreement by UBC to certain Developers are not subject to a Community Energy Covenant, a complete list of which lands is set out in Part 2 of Schedule C.
- (d) Corix will have no obligation to connect to the NDES any Building constructed by a Developer on lands described in Section 5.1(c)(ii).
- (e) Despite Sections 5.1(a), (b) and (c):
  - (i) UBC will have no responsibility for or in relation to any Developer or strata corporation who fails to comply with its obligations, or otherwise defaults, under a Community Energy Covenant for which the Parties have entered into an Assignment and Assumption Agreement, except and

to the extent expressly so provided in such Assignment and Assumption Agreement and in the Support and Indemnity Agreement; and

- (ii) UBC will have no responsibility for or in relation to any Developer or strata corporation not subject to a Community Energy Covenant who chooses not to enter into an Energy Services Contract with Corix.
- (f) Upon the exercise by UBC of its Option to Purchase, or upon termination of this Agreement and exercise by UBC of its Right to Purchase or exercise by Corix of the Required Purchase, Corix will assign to UBC (or, at UBC's direction, to another Person designated by UBC) all of Corix's relevant right, title and interest in and to any and all Community Energy Covenants.

## **5.2 Access Rights within UBC's Vancouver Campus**

- (a) Except in relation to those UBC-Owned Lands already subject to a Community Energy Covenant, UBC will from time to time grant, and, where applicable, UBC and Corix will each use commercially reasonable efforts to cause the relevant Developers, strata corporations or other lessees to grant, to Corix and its subcontractors, agents, employees and representatives (subject to any requisite consents, authorizations or approvals from any applicable Governmental Authority), for nominal consideration, pursuant to licences, statutory rights of way, easements or other agreements, as applicable, on terms and conditions acceptable to Corix and UBC, each acting reasonably, such non-exclusive, and where appropriate exclusive, access and other rights to, on, over and under such of the UBC-Owned Lands as may be required to enable Corix to perform its obligations under this Agreement, without undue interference from UBC, such Developers or any of their respective contractors, agents, employees or representatives or any other Person.
- (b) Each SRW, easement or other registrable interest granted by UBC pursuant to Section 5.2(a) may be registered by Corix in the relevant Land Title Office, together with any priority agreements as Corix may deem advisable.
- (c) UBC will use commercially reasonable efforts to assist Corix from time to time in obtaining such non-exclusive access rights to, on, over and under such other lands within UBC's Vancouver Campus (other than the UBC-Owned Lands) as may be required to enable Corix to perform its obligations under this Agreement.

## **5.3 Rights of Way for Infrastructure**

- (a) UBC will from time to time grant to Corix and its subcontractors, agents, employees and representatives (subject to any requisite consents, authorizations or approvals from any applicable Governmental Authority), and duly register in the relevant Land Title Office, a SRW containing terms and conditions acceptable to Corix and UBC, each acting reasonably, on and over each parcel of land within the UBC-Owned Lands in which any portion of the Distribution System is or will be constructed, as required to enable Corix to perform its obligations under this Agreement.
- (b) UBC will use commercially reasonable efforts to assist Corix from time to time in obtaining such statutory rights of way, or similar rights or interests, on, over and under such other lands within UBC's Vancouver Campus (other than the UBC-Owned Lands) in which any portion of the Distribution System is or will be constructed, as may be required to enable Corix to perform its obligations under this Agreement.

## 5.4 New Development Areas

- (a) If UBC amends UBC's Land Use Plan to:
- (i) designate as a "Neighbourhood Housing Area" an area of UBC's Vancouver Campus not so designated as at the date of this Agreement; or
  - (ii) expand the boundaries of any of the Development Areas (as shown on the map attached as Schedule A);

(such newly designated area or area of expansion, as the case may be, being hereinafter called a "**New Development Area**"),

it will, by notice to Corix, grant Corix a right of first offer to construct an NDES Extension into such New Development Area for the purpose of providing Energy Services to NDES Customers who may lease, sublease or otherwise occupy any space within such New Development Area. The notice will identify, with reasonable particularity, the New Development Area and provide information reasonably required in order for Corix to perform the Extension Test as set out in the Project Plan.

- (b) Corix will perform the Extension Test for the NDES Extension proposed to serve the New Development Area and provide the results to UBC, for UBC's consideration, all within such period of time as may be agreed between the Parties, each acting reasonably.
- (c) The Parties may, subject always to the Project Plan, agree on certain accommodations for any New Development Area, including allowing construction of Buildings within the New Development Area having standalone energy systems that are not directly or immediately connected to a CEP, or the use of temporary facilities by Corix as a bridging strategy.
- (d) If:
  - (i) Corix fails to provide to UBC the results of the Extension Test within the agreed-upon time period; or
  - (ii) the results of the Extension Test are unsatisfactory to either of the Parties (each acting reasonably) and the Parties cannot, within 60 days after Corix has provided such results to UBC, agree upon a contribution in aid of construction for the NDES Extension proposed to serve the New Development Area;

then UBC may pursue other alternatives for providing Thermal Energy services in the New Development Areas including allowing stand-alone (on-site) systems, extension of the ADES, or soliciting from any other Persons offers for the provision of Thermal Energy services to the New Development Area or any part or parts thereof.

- (e) Corix will be responsible for seeking to negotiate with the Musqueam Nation, using reasonable diligence exercised in good faith, a plan for the provision of Energy Services to the area known as Block F, and for that purpose Corix will also prepare any relevant forecasts and other requisite documents and materials.

## **6. INFRASTRUCTURE**

### **6.1 Design, Engineering and Construction of Infrastructure**

- (a) Corix will, at its own cost and expense, engineer, design, construct, install, operate and maintain the Infrastructure in a good and workmanlike manner, consistent with industry standards and in compliance with the Project Plan and all applicable Laws.
- (b) UBC requires utility and other service infrastructure installed within UBC's Vancouver Campus to be located, as much as is commercially reasonable, within existing utility corridors, roadways, greenways and other public rights of way or public spaces. Accordingly, Corix will cooperate with UBC and, as applicable, Developers and other Persons to:
  - (i) acquire any rights contemplated in Sections 5.2 and 5.3; and
  - (ii) install the Distribution System;

as much as is commercially reasonable within such existing utility corridors, roadways, greenways and other public rights of way or public spaces. Corix will use commercially reasonable efforts to exercise all such rights with minimal cost and disruption to such utility corridors, roadways, greenways, public rights of way or public spaces, and to other holders of rights therein or thereto and users thereof.

### **6.2 Material Permits and Authorizations**

Each Party will apply for and use commercially reasonable efforts to obtain and maintain all Material Permits for which it has primary responsibility as set out in Schedule E. The Parties will cooperate and coordinate with each other to obtain and maintain all Material Permits.

### **6.3 Provision of Infrastructure Specifications**

Corix will promptly give UBC all of the proposed Infrastructure Specifications available as at the date of this Agreement. Any addition to or modification of such Infrastructure Specifications will form part of the ongoing updates to the Project Plan.

### **6.4 ADES Interconnection**

When the Parties decide to proceed with the interconnection of the NDES and the ADES, in accordance with the Project Plan, they will negotiate a written agreement to provide for such interconnection and allow for the transfer of Thermal Energy between the NDES and the ADES.

## **7. OWNERSHIP OF INFRASTRUCTURE**

### **7.1 Corix as Owner**

- (a) Corix will own the Infrastructure and all related materials, supplies, equipment and facilities that become a part of the NDES.
- (b) Notwithstanding any degree of annexation or affixation of any part of the Infrastructure to the UBC Lands, all components of the Infrastructure will, as between Corix and UBC, be owned by Corix.

## 7.2 UBC Purchase

- (a) Corix hereby grants to UBC, subject to BCUC approval as applicable, as hereinafter provided:
- (i) an option (the “**Option to Purchase**”), exercisable by UBC at any of the time(s) hereinafter provided; and
  - (ii) a right (the “**Right to Purchase**”), exercisable by UBC at any time within the period of 60 days after the effective date of termination of this Agreement pursuant to Section 21.2;

in either case:

- (iii) to purchase the Purchased Assets from Corix; or
- (iv) to require Corix to implement a reorganization on terms and conditions which are mutually agreeable to Corix and UBC, each acting reasonably and in good faith, pursuant to which the Purchased Assets shall be transferred, either directly or indirectly, to a newly formed corporation on a tax-deferred basis to the greatest extent possible and thereafter to purchase all of the shares which are issued and outstanding in the capital of that corporation (the “**Purchased Shares**”);

on the terms and conditions hereinafter provided. UBC may exercise the Option to Purchase (subject as hereinafter provided) or the Right to Purchase by delivering to Corix a written notice exercising the Option to Purchase or the Right to Purchase, as the case may be, in relation to either the Purchased Assets or the Purchased Shares.

- (b) At any time during the period (each an “**Option Period**”) of nine months commencing on:
- (i) the date that is the 30<sup>th</sup> anniversary of the date (the “**Commercial Operation Date**”) on which any part of the NDES first commences commercial operation by effecting the sale of Thermal Energy to NDES Customers; or
  - (ii) the date that is the 50<sup>th</sup> anniversary of the Commercial Operation Date; or
  - (iii) the date that is the 70<sup>th</sup> anniversary of the Commercial Operation Date;

UBC may deliver to Corix a written notice exercising the Option to Purchase. Not less than 6 months before it delivers any written notice exercising the Option to Purchase, UBC will first deliver to Corix a written notice of its intention to select an appraiser to determine the Fair Market Value (a “**Notice to Determine FMV**”). Corix will cooperate with the appraiser selected by UBC (and approved by Corix, acting reasonably and in a timely manner) to determine the Fair Market Value, in such appraiser’s conduct of all investigations relating to the Purchased Assets that the appraiser (acting reasonably) considers necessary, including by responding in requests from such appraiser for information regarding the Purchased Assets. If, during the Option Period immediately following delivery by UBC of a Notice to Determine FMV, UBC does not deliver to Corix a written notice exercising the Option to Purchase, UBC shall not thereby be disentitled from delivering to Corix a Notice to Determine FMV or a written notice exercising the Option to Purchase which UBC may otherwise be permitted to give in respect of any subsequent Option Period.

- (c) At any time within the period of 120 days after the effective date of termination of this Agreement pursuant to Section 21.3, Corix may, subject to BCUC approval as applicable, as hereinafter provided,

require UBC to purchase, at UBC's election, either the Purchased Assets or the Purchased Shares (the "**Required Purchase**") on the terms and conditions hereinafter provided. Corix may exercise the Required Purchase by delivering to UBC a written notice exercising the Required Purchase and UBC shall, within 15 Business Days after its receipt of the appraisal containing the determination of Fair Market Value referred to in Section 7.2(g)(i), deliver to Corix a written notice stipulating its election to purchase either the Purchased Assets or the Purchased Shares. Corix and UBC agree that if UBC elects to purchase the Purchased Shares, Corix shall implement the reorganization contemplated by Section 7.2(a) in accordance with its provisions.

- (d) The exercise of any of the Option to Purchase, the Right to Purchase or the Required Purchase, as the case may be, whether in relation to the Purchased Assets or the Purchased Shares, is hereinafter called a "**Purchase**".
- (e) If the BCUC approves the Purchase, the contract of purchase and sale will be completed on a day agreed upon by the Parties (the "**Purchase Date**").
- (f) The purchase price for the Purchased Assets or the Purchased Shares, as the case may be, (the "**Purchase Price**") will be an amount equal to:
  - (i) in the case of an exercise by UBC of its Option to Purchase, the greater of (A) the Net Book Value and (B) the average of (I) the Fair Market Value and (II) the Net Book Value as at the Purchase Date;
  - (ii) in the case of an exercise by UBC of its Right to Purchase, the Net Book Value as at the Purchase Date; or
  - (iii) in the case of an exercise by Corix of its Required Purchase, the greater of (A) the Net Book Value and (B) the average of (I) the Fair Market Value and (II) the Net Book Value as at the Purchase Date.
- (g) For the purpose of this Section 7.2 the terms "Fair Market Value", "Net Book Value" and "Allocated Taxes" will have the following meanings:
  - (i) "**Fair Market Value**" means the amount that would have been paid for the Purchased Assets if they had been sold at a date to be agreed upon by the Parties (the "**Valuation Date**") in the open market by a willing seller to a willing buyer, as determined by a duly qualified appraiser with experience valuing regulated utility assets, selected by UBC (subject to the approval of Corix, acting reasonably and in a timely manner) and instructed by UBC acting reasonably, and paid for by UBC, taking into account all relevant considerations, including the following:
    - (A) the use, age, location and condition of the Purchased Assets at the Valuation Date;
    - (B) other utility systems of a nature and size and in an operating environment all reasonably comparable to those of the NDES;
    - (C) the terms and conditions of the franchise granted by UBC to Corix under this Agreement;
    - (D) the terms and conditions on which Corix occupies any of the UBC-Owned Lands;
    - (E) the regulatory burden to which the NDES is subject at the Valuation Date, including all

orders of the BCUC then applicable to the NDES or the Energy Services; and

(F) the reasonable opportunities for growth or expansion of the NDES or the NDES Customer base remaining unexploited at the Valuation Date.

(ii) “**Net Book Value**” means the value of all of the Purchased Assets, net of depreciation, external grants and NDES Customer contributions in aid of construction, all as included on the balance sheet and regulated rate base of Corix as at the relevant time, plus any Allocated Taxes owing by Corix in connection with the Purchase.

(iii) “**Allocated Taxes**” in respect of a particular taxation year of Corix means the amount determined by the following formula:

$$(A \times C) + (B \times C)$$

where

(A) is the amount, if any, by which

- the aggregate of each amount that is required by subsection 13(1) of the Income Tax Act, or by any successor provision thereof, to be included by Corix in computing its income for that particular taxation year as a consequence of the Purchase

exceeds

- the aggregate of each amount that is deductible by Corix pursuant to subsection 20(16) of the Income Tax Act, or pursuant to any successor provision thereof, in computing its income for that particular taxation year as a consequence of the Purchase;

(B) is the aggregate amount that is required to be included in computing the income of Corix for that particular taxation year as a consequence of the implementation of the reorganization contemplated by Section 7.2(a) or Section 7.2(c); and

(C) is the effective combined federal and British Columbia rates of taxation that are generally applicable to business income earned by Corix during that particular taxation year.

(h) On the Purchase Date, UBC will deliver to Corix, by electronic funds transfer, certified cheque or bank draft payable at par or otherwise as the Parties may agree, at Vancouver, British Columbia, an amount (the “**Closing Payment**”) in respect of the Purchase Price calculated as follows:

(i) if the Purchase is pursuant to the exercise by UBC of its Option to Purchase, an amount that is equal to the greater of (A) the Net Book Value as at the end of the financial period of Corix most recently ended prior to the date of delivery of the notice referred to in Section 7.2(a) and (B) the average of (I) the Fair Market Value and (II) the Net Book Value as at the end of the financial period of Corix most recently ended prior to the date of delivery of the notice referred to in Section 7.2(a);

(ii) if the Purchase is pursuant to the exercise by UBC of its Right to Purchase, an amount that is equal to the Net Book Value as at the end of the financial period of Corix most recently ended prior to the date of delivery of the notice referred to in Section 7.2(a); or



- (iii) if the Purchase is pursuant to the exercise by Corix of its Required Purchase, an amount that is equal to the greater of (A) the Net Book Value as at the end of the financial period of Corix most recently ended prior to the date of delivery of the notice referred to in Section 7.2(c) and (B) the average of (I) the Fair Market Value and (II) the Net Book Value as at the end of the financial period of Corix most recently ended prior to the date of delivery of the notice referred to in Section 7.2(c);
- (i) On the Purchase Date, Corix will deliver to UBC duly executed transfers or assignments in registrable form conveying to UBC all interests in land that comprise part of the Purchased Assets or all interests in the Purchased Shares, as the case may be, free and clear of all financial encumbrances and non-registered charges, except as may be disclosed and agreed to in advance, and Corix will deliver to UBC any other documents reasonably requested by UBC to ensure the balance of the Purchased Assets or the Purchased Shares, as the case may be, are transferred to UBC free and clear of all financial encumbrances and non-registered charges.
- (j) Corix will deliver vacant possession of the Purchased Assets either to UBC or to the corporation referred to in Section 7.2(a)(iv), as the case may be, on or before the closing on the Purchase Date.
- (k) If the Closing Payment included an interim Net Book Value amount, then not later than 60 days after the Purchase Date, Corix will prepare and deliver to UBC:
  - (i) an unaudited balance sheet of Corix (the “**Closing Balance Sheet**”) as at the Purchase Date, prepared consistently with Corix’s financial statements prepared for previous financial periods of Corix;
  - (ii) a divisional balance sheet or working paper specific to the NDES; and
  - (iii) a closing adjustment statement setting out:
    - (A) the Net Book Value as set out in the Closing Balance Sheet;
    - (B) the Fair Market Value, if applicable,
    - (C) the resulting (final) Purchase Price; and
    - (D) a calculation of the final Purchase Price less the Closing Payment (the difference being the “**Delta Amount**”).

and Corix will further provide to UBC, on request from time to time, such explanations and data with respect to the Closing Balance Sheet as UBC may reasonably request.

- (l) If the Delta Amount is:
  - (i) positive, then UBC will pay such amount to Corix; or
  - (ii) negative, then Corix will reimburse and pay such amount to UBC;by no later than 10 Business Days after the date on which Corix delivers the last of the items described in Section 7.2(k).
- (m) Time will be of the essence of the Purchase.

- (n) Corix and UBC will each use reasonable commercial efforts to structure any Purchase transaction (including with respect to its timing) in such a manner as to achieve the most efficient tax result for the Parties.
- (o) Any sale or transfer of the Purchased Assets to a third party or Corix Affiliate will be and remain subject to the Option to Purchase.
- (p) If Corix implements the reorganization contemplated by Section 7.2(a) or by Section 7.2(b), UBC shall reimburse Corix for all legal and accounting expenses reasonably incurred by it as a consequence of the planning and implementation of the reorganization.
- (q) The Right to Purchase, the Required Purchase rights, and this Section 7.2 as applicable thereto, will survive any termination of this Agreement.

### **7.3 Grant to UBC of Right of First Refusal**

Corix grants to UBC a right of first refusal (the “**ROFR**”) on the following terms and conditions:

- (a) Corix will not sell, assign or transfer or otherwise dispose of or lease any interest in the Purchased Assets or any part thereof (the “**Offered Assets**”) to any Person other than UBC unless and until the Offered Assets are first offered for sale to UBC upon the same terms and conditions as will have been contained in a bona fide written offer (the “**Offer**”) to Corix from a Person (the “**Offeror**”) with whom Corix deals at arm’s length, and which Offer Corix intends to accept.
- (b) Any offer required to be made to UBC by Corix will be made in writing and delivered to UBC, will contain a copy of the Offer received by Corix and will set forth the name of the Offeror, the price and all the terms and conditions of such proposed purchase.
- (c) UBC will have 60 days from the date of receipt of such Offer to elect to acquire the Offered Assets on the same terms and conditions as those in such Offer except that the sale and purchase will be closed as hereinafter provided and UBC will have the right to pay all cash for the Offered Assets.
- (d) Subject always to the approval of the BCUC, and subject to Section 7.3(c) above, UBC may exercise the ROFR by delivering to Corix a notice in writing exercising the ROFR.
- (e) If UBC does not exercise the ROFR by notifying Corix in writing of its election to do so within the time set out in Section 7.3(c), Corix may, within a period of 90 days thereafter, enter into a binding agreement with the Offeror for the purchase and sale of Corix’s interest in the Offered Assets upon the same terms and conditions as set forth in the Offer but not otherwise, and failing such disposition, the provisions of this Section 7.3 will apply again.
- (f) If the BCUC approves the exercise of the ROFR, the contract of purchase and sale arising therefrom will be completed on a day agreed by the parties (the “**ROFR Completion Date**”).
- (g) Corix will deliver to UBC at the closing duly executed transfers or assignments in registrable form conveying to UBC all interests in land that comprise part of the Offered Assets free and clear of all financial encumbrances and non-registered charges, except as may be disclosed and agreed to in advance, and Corix will deliver to UBC any other documents reasonably requested by UBC to ensure the balance of the Offered Assets are transferred to UBC free and clear of all financial encumbrances and non-registered charges.

- (h) UBC will deliver payment of the purchase price to Corix by electronic funds transfer, certified cheque or bank draft payable at par or otherwise as the Parties may agree, at Vancouver, British Columbia, on the ROFR Completion Date.
- (i) Corix will deliver vacant possession of the Offered Assets upon the closing on the ROFR Completion Date.

#### **7.4 Removal or Abandonment On Termination**

If this Agreement is terminated:

- (a) pursuant to Section 21.2 and, within 60 days after the effective date of termination, UBC does not exercise the Right to Purchase; or
- (b) pursuant to Section 21.3 and, within 60 days after the effective date of termination, Corix does not exercise the Required Purchase;

then Corix may:

- (c) within 120 days thereafter, remove from the UBC-Owned Lands such portion or portions of the Infrastructure as Corix wishes to remove, restoring the surface of such UBC-Owned Lands as nearly as may reasonably be possible to the same condition as they were on the date of this Agreement, to the satisfaction of UBC, acting reasonably; or
- (d) abandon all or part of the Infrastructure provided it is safely decommissioned and does not pose or constitute any Environmental or other hazard, and release the rights granted to Corix under this Agreement. Any such abandoned Infrastructure will belong to the respective owners of the lands on, in or under which it is located.

### **8. DEVELOPMENT AND CONNECTION OF BUILDING SYSTEMS**

#### **8.1 Design, Engineering and Construction of Building Systems**

- (a) Each Building System has been or will be designed, engineered, constructed and installed by the relevant Developer(s) and will be operated and maintained by the relevant Developer(s) or strata corporation (as applicable).
- (b) Except to the extent expressly provided in Section 8.1(e), Corix will not be responsible for any aspect of the design, engineering, construction, installation, operation or maintenance of any Building System.
- (c) Except to the extent expressly provided in Section 8.1(d), UBC will not be responsible for any aspect of the design, engineering, construction, installation, operation or maintenance of any Building System.
- (d) UBC will, as Municipal Authority Having Jurisdiction, for the Developer(s) of each Building constructed in any of the Development Areas after the date of this Agreement (unless such Building is situated on lands described in Section 5.1(c)(ii)), make compliance with the reasonable requirements of Corix, as operator of the NDES, a condition precedent or subsequent to UBC's issuance of a development permit for the Building.
- (e) The Design Guide will be attached as a schedule to each Energy Services Contract and/or Community

Energy Covenant. If, for any particular Building, Corix wishes to waive, alter or amend any of the standards or requirements set out in the Design Guide it will first consult with UBC.

## 8.2 Development and Connection

UBC will cause UBC Properties to make it a condition of any offer to lease and/or lease it enters into with a Developer after April 15, 2014 for the lease of lands within any of the Development Areas, that the offer to lease and/or lease must contain terms that require the tenant to enter into both an Community Energy Covenant and an Energy Services Contract with Corix.

## 8.3 Amendments to Forecasts and Plans

- (a) UBC Properties may from time to time, in its sole discretion, amend the Development Forecast and any of the Neighbourhood Plans. UBC will, or will cause UBC Properties to, give prompt notice to Corix of any such amendments and provide copies of such amended documents, but UBC will have no liability to Corix for any such amendment.
- (b) At the date of this Agreement, Neighbourhood Plans have been approved only for the Wesbrook Place and East Campus Development Areas. Corix will consult with UBC before planning any NDES Extension intended to serve any Development Area for which UBC has not at that time adopted a Neighbourhood Plan.
- (c) UBC may from time to time initiate or propose amendments to UBC's Land Use Plan. UBC will give notice to Corix of any such proposed amendments and provide copies of such amended documents. If an amendment to UBC's Land Use Plan causes all or a portion of any assets which, immediately prior to the initiation or proposal of such amendments already comprise, or are under construction and intended in good faith to comprise, part of the Infrastructure (except to the extent such assets are used solely to provide Energy Services to the area owned by the Musqueam Nation and known as Block F) to become stranded then, to the extent that Corix cannot, despite having used commercially reasonable efforts, mitigate the loss, cost or expense it would otherwise suffer as a result of such stranding of assets (the "**Stranded Asset Losses**"), UBC will indemnify and hold harmless Corix from and against any such Stranded Asset Losses.

## 8.4 Connection Credit

- (a) Subject to BCUC approval, Corix will offer to the Developer(s) of each new Low-Rise Building constructed in the Development Areas after the date of this Agreement a connection credit (the "**Connection Credit**") to assist in offsetting the additional incremental cost such Developer(s) are expected to incur to construct such Low-Rise Building so as to be capable of using heat from the NDES for space heating within suites, in addition to domestic hot water and ventilation air.
- (b) The Connection Credit will be offered to such Developer(s) pursuant to an Energy Services Contract made between Corix and the Developer(s), and will be available, calculated and paid in accordance with the applicable terms and conditions set out in the Project Plan, which terms and conditions will be incorporated into each such Energy Services Contract.
- (c) Each Energy Services Contract will be conditional upon the BCUC first having approved Corix's recovery of the full costs of all funds provided as Connection Credits in customer rates as applied for in the Phase I Application.

- (d) Subject to BCUC approval, Corix will recover in the rates chargeable to NDES Customers an amount equal to the total costs of Connection Credits provided to Developers, including financing, to be recovered over a period of no less than 10 years.

## **8.5 Developer Contributions**

During implementation of Phase I, no Developer contributions will be levied for the costs of the NDES. Before commencement of Phase II, the Parties will revisit the issue, and may consider levying Developer contributions where the efficiency or Low Carbon status of the Thermal Energy generated by an Alternate Energy Source provides significant benefits to Developers in terms of avoided costs for meeting applicable building code and certification requirements.

## **9. ENERGY SERVICES**

### **9.1 Purchase and Sale of Thermal Energy**

- (a) Corix will sell Energy Services only at rates based on a Cost of Service approach, consistent with the rate design and rate setting principles set out in the Project Plan, and with a distinct tariff, applicable in all Development Areas, for each class of NDES Customer, all as approved by the BCUC and otherwise on the terms and conditions of service approved by the BCUC.
- (b) Corix will perform all metering, billing, collecting and other customer service functions associated with the operation and maintenance of the NDES.

### **9.2 Energy Services Contracts**

Corix will enter into an Energy Services Contract with each NDES Customer. Each such Energy Services Contract (except in the case of any Energy Services Contract between Corix and UBC, the terms and conditions of which will be separately negotiated and settled between the Parties) will be in substantially the form set out in Schedule I. In circumstances in which a Developer is the initial signatory to an Energy Services Contract but is not an NDES Customer in the relevant Building, such Energy Services Contract will be assignable to and enforceable against the NDES Customer(s) in that Building.

### **9.3 Standard of Performance**

In providing the Energy Services, Corix will:

- (a) use qualified personnel and exercise the same degree of care, skill and supervision as would be exercised by a reasonable and prudent utility operator experienced in performing like services;
- (b) comply with all applicable Laws; and
- (c) provide service levels and quality substantially similar to current market standards for similar services provided to similar customers in British Columbia at the time the Energy Services are provided.

## **10. COST RECOVERY**

### **10.1 Cost Recovery**

Corix will, based on a Cost of Service approach and subject to BCUC approval, recover through the rates it charges NDES Customers for Energy Services the following items as provided in the Project Plan:

- (a) all prudently incurred costs and expenses, including operating costs, capital costs (including design, development and construction costs), depreciation expenses, debt service costs and a return on equity, a return on working capital, Permit and licence fees, and all federal, provincial, regional and municipal or other local Governmental Authority Taxes incurred by it; and
- (b) subject to the UBC Cap, all external development costs incurred by UBC and reimbursed by Corix;

in connection with the development and construction of the NDES and the supply of Thermal Energy to NDES Customers.

## **10.2 Grants**

The Parties will each use commercially reasonable efforts to obtain grants from applicable Governmental Authorities to assist in financing the costs of construction and operation of the Infrastructure. Any grants received that are specific to a particular rate class of NDES Customers will be allocated as a contribution in aid of construction to reduce the applicable rate for that NDES Customer rate class (including the ADES, as applicable). All other grants that are not specific to a particular rate class of NDES Customers will be applied to the entire NDES capital costs and allocated to each rate class in proportion to its respective allocation of capital costs.

## **10.3 Environmental Credits**

- (a) Notwithstanding any other provision of this Agreement, all right, title and interest in any Environmental Credit related to the construction or operation of the Infrastructure will be the property of Corix to be applied for the sole benefit of NDES Customers (including UBC).
- (b) Any costs associated with quantifying or validating the volume and/or value of such credits will be paid for by the beneficiary(ies) of such credits.

## **11. LICENCE/LEASE OF LANDS**

### **11.1 License of Temporary CEP Sites**

UBC will license to Corix the Temporary CEP Sites pursuant to licence agreements substantially in the form set out in Schedule G. If, despite the reasonable efforts of Corix to commence the Infrastructure Work contemplated by the Phase II CPCN, extension of any of such licence agreements is necessary beyond its initial five-year term but UBC does not agree to such extension, UBC will pay any and all costs necessary to relocate any (or all) CEPs from the Temporary CEP Sites to such other sites as are acceptable to both Parties, acting reasonably. Corix will reimburse UBC for all such costs, if such costs are recoverable through rates chargeable to the NDES Customers as approved by the BCUC.

### **11.2 Lease of Permanent CEP Site**

UBC will lease to Corix a portion or portions of the UBC-Owned Lands for any permanent CEP pursuant to a lease agreement substantially in the form set out in Schedule H. The location of the portion(s) of the UBC Lands to be so leased will be determined during the design process for the permanent CEP, including the Alternate Energy Source contemplated as part of Phase II. Subject to the Project Plan and to BCUC approval as applicable, UBC will lease the relevant land to Corix at then-current market rates (which, for greater certainty, will be no higher than as approved by the BCUC for recovery in the rates Corix charges NDES Customers for Energy Services) on a 99-year triple net ground lease, and on such other terms as are consistent with the ground leases used by UBC in the Wesbrook Place neighbourhood, adapted for the permanent CEP or as otherwise

agreed by the Parties, each acting reasonably and in good faith.

### **11.3 Franchise Fee**

- (a) UBC will charge Corix a franchise fee (the “**Franchise Fee**”), calculated as three (3%) percent of the gross revenues (before any additional Taxes chargeable to NDES customers that are not otherwise included in the calculation of monthly rates) collected by Corix in connection with its provision of the Energy Services, provided that such Franchise Fee is recoverable through rates chargeable to the NDES Customers, as approved by the BCUC.
- (b) Despite Section 11.3(a), UBC will waive and will not charge Corix the Franchise Fee at any time during the period commencing on the Commencement Date and ending on the date that is the 15<sup>th</sup> anniversary of the Commencement Date. For any year(s) after the 15<sup>th</sup> anniversary of the Commencement Date, UBC may waive Corix’s obligation to pay the Franchise Fee, or reduce the Franchise Fee, if it determines, in its sole discretion, that the rates then chargeable to the NDES Customers exceed a generally-accepted competitive benchmark for the provision of Thermal Energy, whether via on-site systems (including total costs of ownership for on-site systems) or by reference to some other comparable benchmark for Thermal Energy service.

## **12. STAKEHOLDER COMMUNICATIONS**

Corix will initiate and both Parties will participate in:

- (a) cooperative interaction with stakeholders, including Developers, on the NDES; and
- (b) BCUC process planning and communication.

## **13. SHARED SERVICES**

- (a) The Parties may at any time negotiate and execute a shared services agreement, if they consider it mutually advantageous to do so.
- (b) If economically beneficial to the NDES Customers and to UBC, UBC:
  - (i) may collaborate with Corix to negotiate a supply of the requisite electricity service from the UBC-owned power distribution system; and
  - (ii) will collaborate with Corix to negotiate a supply of the water and sanitary sewer services managed by UBC.

## **14. DATA COLLECTION, REPORTING AND USE OF INFORMATION**

### **14.1 Collection and Use of Data**

- (a) Corix may, as commercially reasonable and allowable under applicable laws, collect and provide to UBC data regarding:
  - (i) the performance of the NDES, on a system-wide basis;
  - (ii) the performance of the NDES, in relation to specific Buildings, as reasonably requested by UBC; and

- (iii) any other aspect of the NDES, the Infrastructure, or any of the NDES Customers, as reasonably requested by UBC;

together with such reports as UBC may reasonably request, all with such frequency as UBC may reasonably request.

- (b) UBC shall bear the costs of collection and provision of any data described in Section 14.1(a)(iii).
- (c) UBC may use any and all data provided by Corix pursuant to:
  - (i) Section 14.1(a)(i), for any purpose or purposes;
  - (ii) Section 14.1(a)(ii), for any purpose or purposes relating to the administration or performance of this Agreement;
  - (iii) Section 14.1(a)(iii), for academic research purposes only.
- (d) Corix will include in its Energy Services Contracts the right to provide to UBC the data described in Section 14(a), for the purposes described in Section 14(c)(ii) or (iii), as applicable.

## **14.2 UBC Subject to FIPPA**

- (a) UBC is a public body that is subject to the *Freedom of Information and Protection of Privacy Act* (British Columbia) (“**FIPPA**”). UBC will comply with the provisions of FIPPA. Under FIPPA, UBC may be required to release books, records, reports, documents, maps, drawings, correspondence, system logs, system development records, accounts, invoices, backup data (including original source documents) and other similar documents, images, writings or information by any means whether graphic, electronic, audio, mechanical or otherwise, that are in its custody or control.
- (b) UBC agrees that in the event that it or its employees or agents are requested or required under a FIPPA request or by any judicial, administrative or governmental proceeding to disclose this Agreement or any information regarding or arising from this Agreement or the business arrangements between UBC and Corix, UBC will notify Corix so that Corix may seek any appropriate protective order it so wishes.
- (c) UBC agrees that it will not reveal trade secrets of Corix, or commercial, financial, labour relations, scientific or technical information of or about Corix, except:
  - (i) in accordance with (and after complying with the requirements of) FIPPA; or
  - (ii) with the prior written consent of Corix.
- (d) Subject to Sections 14.2(b) and (c), if, in the absence of a protective order, UBC or its employees or agents are nonetheless, in the opinion of its legal counsel, legally required to disclose this Agreement or any information regarding or arising from this Agreement or the business arrangements between UBC and Corix or else stand liable for contempt or suffer other censure or penalty, UBC may disclose such information.



## **15. COORDINATING COMMITTEE**

### **15.1 Appointment of Representatives**

The Parties will form a Coordinating Committee consisting of representatives of each Party.

### **15.2 Meetings**

The Coordinating Committee will meet (in person at a location convenient to the Parties or by telephone or video conference) as often as required to carry out its duties and responsibilities under this Agreement, and in any event at least once each calendar year, and will keep written records of its meetings and determinations. Either Party may require that a meeting of the Coordinating Committee be held by giving notice of the time and location (or telephone or video conference arrangements) and notice of the topics to be discussed at the meeting, to the other Party at least 10 days prior to the date of the meeting. The Coordinating Committee may establish additional rules, procedures and terms of reference governing its own meetings and determinations.

### **15.3 Role of Coordinating Committee**

The Coordinating Committee will:

- (a) share information regarding the Project Plan, the Development Forecast, Neighbourhood Plans and other information as relevant;
- (b) confirm periodic updates to the Design Guide;
- (c) negotiate any applicable Energy Services Contract relating to the ADES;
- (d) coordinate the design of the interconnection between the NDES and the ADES;
- (e) coordinate operations between the NDES and ADES in the event of interconnection between those two systems, in order to ensure compatibility and efficiency;
- (f) coordinate arrangements for contracting for natural gas or Alternate Energy Sources for any service provided to UBC; and
- (g) make such determinations, take such actions and perform such roles and responsibilities as are contemplated by this Agreement, or as the Parties from time to time direct.

## **16. REPRESENTATIONS AND WARRANTIES**

### **16.1 Representations and Warranties of UBC**

UBC represents and warrants to Corix the following, and acknowledges that Corix is relying on such representations and warranties in entering into the transactions contemplated by this Agreement.

- (a) Status of UBC. UBC is a corporation duly continued and validly existing under the laws of British Columbia, with full power and authority to enter into and perform all of its obligations under this Agreement.

- (b) Litigation. To the best of its knowledge, UBC is not a party to any action, suit or legal proceeding, actual or threatened, and there are no circumstances, matters or things known to UBC which might give rise to any such action, suit or legal proceeding, and there are no actions, suits or proceedings pending or threatened against UBC before or by any Governmental Authority, which could affect UBC's ability to perform its obligations under this Agreement.
- (c) No Breach of Agreement. This Agreement and the performance of the obligations of UBC under this Agreement does not and will not breach any provisions of any other agreement or Law that is binding on or applicable to UBC as of the date of this Agreement.
- (d) No Conflict with Constating Documents. Neither the entering into of this Agreement nor the consummation of the transactions contemplated hereby will result in a breach of any of the provisions of the incorporating statute of UBC and all necessary corporate action on the part of UBC has been or will be taken to authorize and approve the execution and delivery of this Agreement and the performance by UBC of its obligations hereunder.

## **16.2 Corix's Representations and Warranties**

Corix represents and warrants to UBC the following, and acknowledges that UBC is relying on such representations and warranties in entering into the transactions contemplated by this Agreement.

- (a) Status of Corix. Corix is a corporation duly incorporated and validly existing under the laws of British Columbia, with full power and authority to enter into and perform all of its obligations under this Agreement.
- (b) Litigation. To the best of its knowledge, Corix is not a party to any action, suit or legal proceeding, actual or threatened, and there are no circumstances, matters or things known to Corix which might give rise to any such action, suit or legal proceeding, and there are no actions, suits or proceedings pending or threatened against Corix before or by any Governmental Authority, which could affect Corix's ability to perform its obligations under this Agreement.
- (c) No Breach of Agreement. This Agreement and the performance of the obligations of Corix under this Agreement does not and will not breach any provisions of any other agreement or Law that is binding on or applicable to Corix as of the date of this Agreement.
- (d) No Conflict with Constating Documents. Neither the entering into of this Agreement nor the consummation of the transactions contemplated hereby will result in a breach of any of the terms or provisions of the constating documents of Corix and all necessary corporate action on the part of Corix has been or will be taken to authorize and approve the execution and delivery of this Agreement and the performance by Corix of its obligations hereunder.
- (e) Resident. Corix is not a non-resident of Canada within the meaning of the *Income Tax Act* (Canada).

## **17. ENVIRONMENTAL MATTERS**

### **17.1 Environmental Condition of the Development Areas Lands**

Except as set out in this Section 17, Corix will have no liability for any Contaminant or any Environmental matter in relation to, any of the UBC-Owned Lands, including the portion(s) of the UBC-Owned Lands on which the Infrastructure will be constructed and installed.

## **17.2 UBC Environmental Representation and Warranties**

UBC represents and warrants to Corix, as at the date of this Agreement that, to the knowledge of UBC:

- (a) the UBC-Owned Lands within the Development Areas are free of Contaminants, except in amounts that are permissible under Environmental Laws and which have been disclosed in writing to Corix;
- (b) no part of the UBC-Owned Lands within the Development Areas is a Contaminated Site; and
- (c) there are no actions, proceedings, investigations, claims (including remediation cost recovery claims) pending or threatened, that relate to the presence or Release of Contaminants on or from the UBC-Owned Lands within the Development Areas.

## **17.3 UBC Environmental Covenants**

- (a) UBC will comply with Environmental Laws in its use and occupancy of the UBC-Owned Lands within the Development Areas and will use commercially reasonable efforts to cause its tenants, contractors, subcontractors and other occupants and users of any of the UBC-Owned Lands within the Development Areas to comply with Environmental Laws in their respective use and occupancy of such lands. Without limiting the generality of the foregoing, UBC will not, except in compliance with Environmental Laws:
  - (i) install or use or allow to be installed or used on, in or under any of the UBC-Owned Lands within the Development Areas any materials, equipment or apparatus, the installation, use or storage of which is likely to cause the generation, accumulation or migration of any Contaminant; or
  - (ii) use or allow to be used any of the UBC-Owned Lands within the Development Areas to dispose of, handle or treat any Contaminant in a manner in whole or in part that violates Environmental Laws or causes any of the UBC-Owned Lands within the Development Areas to become a Contaminated Site.
- (b) UBC will remediate, and will be responsible for the remediation of, in accordance with Environmental Laws, any and all Contaminants relating to any of the UBC-Owned Lands within the Development Areas, except to the extent such remediation is Corix's responsibility pursuant to Section 17.6.

## **17.4 UBC Environmental Liability**

UBC:

- (a) will be liable for, and acknowledges that Corix is not and will not under any circumstances be liable for any and all liabilities, actions, damages, claims (including remediation cost recovery claims), losses, costs, orders, fines, penalties and expenses (including all consulting and legal fees and expenses on a solicitor-client basis and the costs of removal, treatment, storage and disposal of Contaminants and remediation of any UBC-Owned Lands within the Development Areas or any portions thereof and any affected adjacent property) which may be paid by, incurred by or asserted against any member of the Corix Group arising from or in connection with:
  - (i) any breach of or non-compliance with the provisions of Section 17.2 or 17.3 by UBC;
  - (ii) the presence or any Release or alleged Release of any Contaminant at or from any of the lands within or adjacent to the UBC-Owned Lands within the Development Areas, other than

Contaminants brought onto, or adjacent to the UBC-Owned Lands within the Development Areas by Corix or by any act or omission of Corix or any Person for whom Corix is at law responsible; and

- (b) releases, forever discharges and will indemnify, defend and save harmless the Corix Group from and against any and all claims, claims for remediation costs, demands, actions, causes of action and suits which UBC or any of the members of its Board of Governors, or its officers, employees, agents or contractors has or may hereafter have or bring against any member of the Corix Group for or by reason of, or arising from, breach or non-compliance by UBC of any of its obligations under Section 17.2 or 17.3.

#### **17.5 Corix Environmental Covenants**

- (a) Corix will comply with Environmental Laws in its performance of the Infrastructure Work and the Energy Services and, without limiting the generality of the foregoing, Corix will not, except in compliance with Environmental Laws:
  - (i) install or use in the Infrastructure or on, in or under any of the UBC-Owned Lands within the Development Areas or any adjacent property any materials, equipment or apparatus, the installation, use or storage of which is likely to cause the generation, accumulation or migration of any Contaminant; or
  - (ii) dispose of, handle or treat any Contaminant in a manner in whole or in part that violates Environmental Laws or causes any of the UBC-Owned Lands within the Development Areas or any adjacent property to become a Contaminated Site.
- (b) Corix will remediate, and will be responsible for the remediation of, in accordance with Environmental Laws, any and all Contaminants relating to any of the UBC-Owned Lands within the Development Areas to the extent that Corix, or any Person for whom Corix is at law responsible, has caused or contributed to the Release of such Contaminants.

#### **17.6 Corix Environmental Liability**

Corix:

- (a) will be liable for, and acknowledges that UBC is not and will not under any circumstances be liable for, any and all liabilities, actions, damages, claims (including remediation cost recovery claims), losses, costs, orders, fines, penalties and expenses (including all consulting and legal fees and expenses on a solicitor-client basis and the costs of removal, treatment, storage and disposal of Contaminants and remediation of any UBC-Owned Lands within the Development Areas or any portions thereof and any affected adjacent property) which may be paid by, incurred by or asserted against UBC or any of the members of its Board of Governors, its officers, employees, agents or contractors arising from or in connection with:
  - (i) any breach of or non-compliance with the provisions of Section 17.5 by Corix;
  - (ii) any Release or alleged Release of any Contaminant at or from any of the UBC-Owned Lands within the Development Areas related to or as a result of the operations of Corix or any act or omission of Corix or any Person for whom Corix is at law responsible; and
- (b) hereby releases, forever discharges and will indemnify, defend and save harmless UBC from and against

any and all claims, claims for remediation costs, demands, actions, causes of action and suits which any member of UBC has or any Person has or may hereafter have or bring against any member of the Corix Group for or by reason of, or arising from, breach or non-compliance by Corix of any of its obligations under Section 17.5.

### **17.7 Survival**

Notwithstanding any other provision in this Agreement, the indemnities granted in Sections 17.4 and 17.6 will survive the expiry or termination of this Agreement.

## **18. ENCUMBRANCES**

### **18.1 No Encumbrances.**

Neither Party will, without the prior written consent of the other Party, such consent not to be unreasonably withheld or delayed, create, incur, assume or permit to exist any Encumbrance on or in respect of the UBC Lands within the Development Areas or any part that may adversely affect the operation of the Infrastructure as contemplated by this Agreement or the interests of such other Party (a “**Conflicting Encumbrance**”). Notwithstanding the foregoing, Corix acknowledges and agrees that Developers may grant to their respective lenders security in respect of their interests in certain UBC Lands within the Development Areas. Corix acknowledges that UBC may from time to time enter into leases or subleases with Developers or other Persons for the use of occupation of portions of the UBC Lands within the Development Areas, and such lease or subleases will not be or be deemed to be Conflicting Encumbrances so long as they have no adverse effect on Corix’s rights with respect to the construction, ownership or operation of the Infrastructure.

### **18.2 Removal of Encumbrances**

If any of the UBC Lands within the Development Areas becomes subject to any Conflicting Encumbrance (other than a Conflicting Encumbrance that has been consented to by the other Party under Section 18.1) as a result of an act or omission of either Party (the “**Encumbering Party**”), then the Encumbering Party will immediately take all necessary steps to remove or to assist the other Party in the removal of such Conflicting Encumbrance. If the Encumbering Party fails to remove such Conflicting Encumbrance within ten Business Days after notice from the other Party to remove the Conflicting Encumbrance, the other Party may take whatever steps it deems necessary to remove the Conflicting Encumbrance at the cost of the Encumbering Party.

## **19. INSURANCE**

### **19.1 UBC Insurance**

UBC will obtain and maintain at its own expense throughout this Agreement the following insurance coverage:

- (a) Comprehensive General Liability Insurance against claims for personal injury, death or property damage arising out of its operations, in amounts it deems adequate but in any event, not less than \$5 million per occurrence;
- (b) Property Insurance insuring the property of UBC or owned by others but for which UBC is legally responsible against perils normally included in a standard “all risk” policy, in an amount equal to 100% of the current replacement cost of such property, and adjusted at least annually to reflect changes in replacement value due to inflation or other factors; and
- (c) a standard automobile policy including standard contractual liability endorsement against claims for

bodily injury, death and damage to property, in an amount of not less than \$2 million per occurrence.

## **19.2 Responsibility**

UBC will be responsible for the full amount of all premiums and deductibles required under Section 19.1. All policies required must be effective at the Commencement Date and must, to the extent obtainable, provide that the insurance will not be cancelled without the insurer giving at least 30 days' written notice to Corix. Insurance will be purchased from reputable insurers registered and licensed to underwrite insurance in British Columbia. Where UBC fails to comply with the requirements of Section 19.1 or Section 19.2, Corix may take all necessary steps to effect and maintain the required insurance coverage at UBC's expense.

## **19.3 Evidence of Insurance**

If requested by Corix, UBC will deliver or cause to be delivered to Corix evidence of all insurance policies required to be obtained and maintained by UBC under Section 19.1 and any amendments, modifications or replacements thereof.

## **19.4 Corix Insurance**

Corix will obtain and maintain at its own expense throughout the term of this Agreement the following insurance coverage:

- (a) Comprehensive General Liability Insurance against claims for personal injury, death or property damage, covering its operations, in an amount not less than \$5 million per occurrence;
- (b) All Risks Builder's Risk policy covering the Infrastructure during construction against fire and other perils from time to time included in such policies affecting similar properties in British Columbia with extended or additional perils supplemental coverage as would be insured against by a prudent owner in an amount not less than 100% of the replacement cost;
- (c) Property Insurance insuring the Infrastructure post-construction against perils normally included in a standard "all risk" policy, in an amount equal to 100% of the current replacement cost of the Infrastructure, and adjusted at least annually to reflect changes in replacement value due to inflation or other factors;
- (d) a standard automobile policy including standard contractual liability endorsement against claims for bodily injury, death and damage to property, in an amount of not less than \$2 million per occurrence; and
- (e) Corix and/or its prime engineering consultant will provide errors and omissions liability insurance for a value of not less than \$2 million in the aggregate.

## **19.5 Responsibility**

Corix will be responsible for the full amount of all premiums and deductibles required under Section 19.4. All policies required must be effective at the Commencement Date and must, to the extent obtainable, provide that the insurance will not be cancelled without the insurer giving at least 30 days' written notice to UBC. Insurance will be purchased from reputable insurers registered and licensed to underwrite insurance in British Columbia. Where Corix fails to comply with the requirements of Section 19.4 or Section 19.5, UBC may take all necessary steps to effect and maintain the required insurance coverage at Corix's expense.

## **19.6 Evidence of Insurance**

If requested by UBC, Corix will deliver or cause to be delivered to UBC evidence of all insurance policies required to be obtained and maintained by Corix under Section 19.4 and any amendments, modifications or replacements thereof.

## **19.7 Additional Insured**

Each Party will ensure that the other Party will be added as additional insured party as applicable and where permitted under the insurance to be obtained and maintained pursuant to Section 19.1 and Section 19.4 and in the event of a claim the insurance carried by the Party responsible for actions which give rise to such claim will be the primary insurance with respect to such claim.

## **20. INDEMNITY AND LIABILITY**

### **20.1 Corix Indemnity**

Without limiting any other obligation of Corix provided herein, Corix will indemnify, defend, and save harmless UBC, the members of its Board of Governors, its officers, employees, agents and contractors (collectively the “**UBC Indemnitees**”) from any and all liabilities, actions, damages, claims, losses, costs, orders, fines, penalties, and expenses (including the full amount of all legal fees and expenses on a solicitor and own-client basis) which may be paid by, incurred by, or asserted against the UBC Indemnitees or any one or more of them, arising from or in connection with any negligence or wilful misconduct perpetrated by Corix or any Person for whom it is in law responsible.

### **20.2 UBC Indemnity**

Without limiting any other obligation of UBC provided herein, UBC will indemnify, defend, and save harmless the Corix Group from any and all liabilities, actions, damages, claims, losses, costs, orders, fines, penalties, and expenses (including the full amount of all legal fees and expenses on a solicitor and own-client basis) which may be paid or incurred by, or asserted against the Corix Group or any one or more of them, arising from or in connection with any negligence or wilful misconduct perpetrated by UBC or any Person for whom it is in law responsible.

### **20.3 Liability**

Notwithstanding anything to the contrary in this Agreement, none of the Corix Group is responsible or liable for any loss, injury (including death), damage or expense incurred by UBC or any other Person caused by or resulting from, directly or indirectly, any discontinuance, suspension, or interruption of, or failure or defect in the supply of Thermal Energy or the Energy Services, or in the construction, operation or maintenance of the Infrastructure, except to the extent the loss, injury (including death), damage or expense is directly attributable to the negligence or wilful misconduct of a member or members of the Corix Group.

### **20.4 Consequential Loss**

Notwithstanding any other provision of this Agreement, in no event will either Party be liable to the other Party for any indirect or consequential loss, cost or expense suffered by the other Party or its Affiliates or their respective governors, directors, officers, shareholders, employees, contractors, agents, successors or permitted assigns.

## **20.5 Survival**

Notwithstanding any other provision in this Agreement, the indemnities set out in this Section 20 will survive the termination or expiry of this Agreement.

## **21. TERMINATION AND PAYMENTS DUE ON TERMINATION**

### **21.1 Termination if Phase I Not Commenced**

If a condition precedent set out in Section 2.1 has not been satisfied or waived in writing by the applicable Party by the date specified in the relevant paragraph, this Agreement will thereupon be terminated and thereafter neither Party will have any further obligation to the other Party under this Agreement, except with respect to those terms which expressly or by their nature survive termination.

### **21.2 Termination for Corix Default**

Corix will be in default under this Agreement (a “**Corix Default**”) if:

- (a) it passes a resolution for its winding-up or dissolution and its right, title and interest in this Agreement are not assigned to another Person, or it is adjudged bankrupt or insolvent by a court of competent jurisdiction, commences or consents to the institution of bankruptcy proceedings, proposes a compromise or an arrangement, files any petition seeking reorganization, arrangement, composition, liquidation or similar relief for itself, has a receiver or a receiver-manager appointed with respect to its affairs, or makes a general assignment for the benefit of its creditors under any Law relating to bankruptcy, insolvency or other relief for or against debtors generally; or
- (b) it is in breach of Section 3.2, Section 3.4, Section 4.2(c) or any other material term, covenant, agreement, condition or obligation under this Agreement, or is in breach of multiple terms, covenants, agreements, conditions or obligations under this Agreement which in the aggregate are material, and fails to cure such default within 30 days after receipt of written notice thereof from UBC or, if such default is not capable of being cured within such 30 day notice period, fails to commence in good faith the curing of such default forthwith upon receipt of written notice thereof from UBC or, having so commenced, fails to diligently pursue the curing of such default until cured; or
- (c) it is in breach of any material term, covenant, agreement, condition or obligation under any other agreement between the Parties or is in breach of multiple terms, covenants, agreements, conditions or obligations thereunder which in the aggregate are material, and fails to cure such default within 30 days after receipt of written notice thereof from UBC or, if such default is not capable of being cured within such 30 day notice period, fails to commence in good faith the curing of such default forthwith upon receipt of written notice thereof from UBC, or, having so commenced, fails to diligently pursue the curing of such default until cured.

In the event of a Corix Default, UBC may, at its option and without liability therefor or prejudice to any other right or remedy it may have, terminate this Agreement by further written notice to Corix.

### **21.3 Termination for UBC Default**

UBC will be in default under this Agreement (a “**UBC Default**”) if:

- (a) it passes a resolution for its winding-up or dissolution and its right, title and interest in this Agreement



are not assigned to another Person, or it is adjudged bankrupt or insolvent by a court of competent jurisdiction, commences or consents to the institution of bankruptcy proceedings, proposes a compromise or an arrangement, files any petition seeking reorganization, arrangement, composition, liquidation or similar relief for itself, has a receiver or a receiver-manager appointed with respect to its affairs, or makes a general assignment for the benefit of its creditors under any Law relating to bankruptcy, insolvency or other relief for or against debtors generally;

- (b) it is in breach of Section 5.1, 5.2, 5.3, 5.4(a) or any other material term, covenant, agreement, condition or obligation under this Agreement, or is in breach of multiple terms, covenants, agreements, conditions or obligations under this Agreement which in the aggregate are material, and fails to cure such default within 30 days after receipt of written notice thereof from Corix or, if such default is not capable of being cured within such 30 day notice period, fails to commence in good faith the curing of such default forthwith upon receipt of written notice thereof from Corix, or, having so commenced, fails to diligently pursue the curing of such default until cured; or
- (c) it is in breach of any material term, covenant, agreement, condition or obligation under any other agreement between the Parties or is in breach of multiple terms, covenants, agreements, conditions or obligations thereunder which in the aggregate are material, and fails to cure such default within 30 days after receipt of written notice thereof from Corix or, if such default is not capable of being cured within such 30 day notice period, fails to commence in good faith the curing of such default forthwith upon receipt of written notice thereof from Corix, or, having so commenced, fails to diligently pursue the curing of such default until cured.

In the event of a UBC Default, Corix may, at its option and without liability therefor or prejudice to any other right or remedy it may have:

- (a) suspend its work hereunder until the default has been fully remedied, and no such suspension will relieve UBC from any of its obligations under this Agreement, provided that Corix will not suspend or interrupt Energy Services to NDES Customers; or
- (b) terminate this Agreement by further written notice to UBC, and exercise the Required Purchase as provided in Section 7.2.

## **22. TREATMENT OF PARTIES' RESPECTIVE COSTS**

### **22.1 Caps on Cost Recovery**

Subject as hereinafter provided, each Party agrees to the following limits on the amounts for costs and expenses incurred for which they may claim reimbursement from the other Party in the event this Agreement is terminated pursuant to Article 21:

- (a) for UBC, for the period from the effective date of the MOU (being September 30, 2013) to the date on which the BCUC issues the Phase I CPCN, a limit of \$365,000.00 (excluding applicable Taxes) (the "**UBC Cap**");
- (b) for Corix, for the period from the date of the RFI (being February 25, 2013) to the date on which the BCUC issues the Phase I CPCN, a limit of \$515,000.00 (excluding applicable Taxes) (the "**Corix Cap**"); and
- (c) for clarity, the Corix Cap includes a cap on costs for additional work commenced in respect of the initial

connection to the Prodigy Building (the “**Additional Work**”), recovery of which costs were agreed by the Parties under the MOU to be subject to an additional work cap of \$225,000 (the “**Additional Work Cap**”);

recognizing that each such Cap is an estimate based partly on projected expenditures, and therefore may be modified from time to time, as agreed by the Parties in writing, acting reasonably, to reflect actual expenditures.

## **22.2 Costs Recoverable by Corix in Rates**

Subject to the approval of the BCUC, Corix will recover the following costs and expenses through rates chargeable to NDES Customers:

- (a) all costs and expenses incurred by Corix in connection with the Due Diligence, including all costs associated with Due Diligence Consultants; and
- (b) all external costs reasonably incurred by UBC in connection with the NDES
  - (i) prior to September 30, 2013 (including: (A) the cost of pre-feasibility studies, (B) the Feasibility Study referred to in the RFI, and (C) costs paid by UBC to any unsuccessful RFI proponent(s) to a maximum of \$75,000 in connection with their respective due diligence-related activities), provided that such amount shall not in any event exceed \$300,000.00; and
  - (ii) during the period commencing on September 30, 2013 and ending on the date on which the BCUC issues the Phase I CPCN, provided that such amount shall not in any event exceed the UBC Cap;

and reimbursed by Corix, if such reimbursement is approved by the BCUC.

## **22.3 Treatment of Costs in event of Corix Default**

If:

- (a) at any time before the BCUC issues the Phase I CPCN, Corix commits a Corix Default and UBC terminates this Agreement pursuant to Section 21.2; or
- (b) except in the circumstances described in Section 22.5, the BCUC issues the Phase I CPCN on terms that Corix (acting unreasonably) considers unacceptable and this Agreement terminates pursuant to Section 21.1;

then:

- (c) UBC may deliver to Corix an invoice for 100% of the external fees, costs and expenses incurred by UBC in connection with NDES, provided that the amount of such invoice will not in any event exceed an amount equal to the UBC Cap, and Corix will pay such invoice within 30 days after its delivery by UBC; and
- (d) Corix will bear responsibility for 100% of its own costs, fees and expenses both external and internal incurred in connection with the NDES up to the date of termination of this Agreement, and UBC will have no liability for paying or reimbursing Corix therefor.

## **22.4 Treatment of Costs in event of UBC Default**

If, at any time before the BCUC issues the Phase I CPCN, UBC commits a UBC Default and Corix terminates

this Agreement pursuant to Section 21.3, then:

- (a) Corix may deliver to UBC an invoice for 100% of the fees, costs and expenses paid or owing by Corix to Due Diligence Consultants, provided that the amount of such invoice will not in any event exceed an amount equal to the Corix Cap, and UBC will pay such invoice within 30 days after its delivery by Corix; and
- (b) UBC will bear responsibility for 100% of its own costs, fees and expenses, both external and internal incurred in connection with the NDES up to the date of termination of this Agreement, and Corix will have no liability for paying or reimbursing UBC therefor.

## **22.5 Cost Sharing in event of Unacceptable BCUC Decision**

If the BCUC issues the Phase I CPCN, but on terms that Corix (acting reasonably) considers unacceptable and this Agreement terminates pursuant to Section 21.1, then:

- (a) each Party will bear responsibility for 100% of its own costs, fees and expenses, both external and internal incurred in connection with the NDES up to the date of termination of this Agreement and neither Party will have any liability for payment or reimbursing the other Party for such costs, fees or expenses of that other Party,
- (b) notwithstanding Section 22.5(a), Corix may deliver to UBC an invoice for 100% of the fees, costs and expenses paid or owing by Corix to Due Diligence Consultants in respect of the Additional Work (subject to the Additional Work Cap) and UBC will pay such invoice within 60 days of delivery by Corix; and
- (c) if, in the circumstances described in this Section 22.5, UBC determines in its sole discretion to acquire the Proponent Work Product and Consultant Work Product pursuant to Section 22.7, then notwithstanding Section 22.5(a):
  - (i) UBC will so notify Corix in writing and Corix will deliver to UBC within 60 days after delivery of such notice an invoice for 100% of the fees, costs and expenses paid or owing by Corix to Due Diligence Consultants, provided that the amount of such invoice will not in any event exceed an amount equal to the Corix Cap, taking into account any amount previously paid by UBC in respect of the Additional Work Cap under Section 22.5(b), and UBC will pay such invoice within 30 days after its delivery by Corix; and
  - (ii) UBC will bear responsibility for 100% of its own costs, fees and expenses, both external and internal incurred in connection with the NDES up to the date of termination of this Agreement, and Corix shall have no liability for paying or reimbursing UBC therefor.

## **22.6 Costs in event BCUC Rejects Phase I Application**

If the BCUC does not approve the Phase I Application and this Agreement terminates pursuant to Section 21.1, then each Party will bear responsibility for 100% of its own costs, fees and expenses, both external and internal incurred in connection with the NDES up to the date of termination of this Agreement and neither Party will have any liability for payment or reimbursing the other Party for such costs, fees or expenses of that other Party, except that Corix may deliver to UBC an invoice for 100% of the fees, costs and expenses paid or owing by Corix to Due Diligence consultants in respect of the Additional Work (subject to the Additional Work Cap) and UBC will pay such invoice within 60 days of delivery by Corix.

## 22.7 Work Product

- (a) Subject only to the exceptions set out in this Section 22.7, Corix will own and hold title to all Work Product (as defined below) prepared, produced or developed by Corix pursuant to the MOU (the “**Proponent Work Product**”).
- (b) Upon payment of an invoice delivered pursuant to Section 22.4 or 22.5, Corix will:
  - (i) immediately transfer to UBC title to all Proponent Work Product; and
  - (ii) use commercially reasonable efforts to transfer to UBC title to all Work Product related to the Due Diligence that is prepared, produced or developed for Corix by Due Diligence Consultants pursuant to the MOU (the “**Consultant Work Product**”) promptly thereafter. UBC grants to Corix an irrevocable, non-exclusive, royalty-free and perpetual license to use and copy the Consultant Work Product.
- (c) Upon the occurrence of the circumstances set out in Section 22.3 or 22.6, if UBC wishes to share in ownership of the Proponent Work Product and Consultant Work Product, then UBC will so notify Corix in writing and Corix will, without any additional payment from UBC:
  - (i) immediately transfer to UBC a 50% interest in title to all of the Proponent Work Product; and
  - (ii) use commercially reasonable efforts to transfer to UBC a 50% interest in title to all of the Consultant Work Product promptly thereafter.

The Parties will also grant each other any necessary licenses for the Proponent Work Product and Consultant Work Product promptly thereafter.

- (d) In this Section 22.7, “**Work Product**” means all data and information, as well as final studies and reports prepared, produced or developed by or for Corix in connection with the Due Diligence and related directly and exclusively to the NDES, whether in written or electronic form, and all copies of same. For clarity, “**Work Product**” does not include any calculation, proprietary information, model (financial, engineering or otherwise) or methodology which may be of a proprietary or commercially valuable nature or otherwise used in the generation of the Due Diligence final studies and reports, or the generation of data or information comprising Work Product.

## 23. FORCE MAJEURE

### 23.1 Suspension

Subject to the other provisions of this Section 23, if either Party is unable or fails by reason of Force Majeure to perform in whole or in part any of its obligations or covenants set forth in this Agreement (except an obligation or covenant to pay), such inability or failure will be deemed not to be a breach of such obligation or covenant and the obligations of both Parties under this Agreement will be suspended to the extent necessary during the continuation of any inability or failure so caused by such Force Majeure.

### 23.2 Definition of Force Majeure

For purposes of this Agreement, “**Force Majeure**” means any event or occurrence not within the control of the Party claiming Force Majeure, and which by the exercise of reasonable diligence such Party is unable to prevent

or overcome, including any acts of nature such as lightning, earthquakes, storms, washouts, landslides, avalanches, epidemics and floods; strikes, lockouts or other industrial disturbances; acts of the Queen's or public enemies, sabotage, wars, blockades, insurrections, riots or civil disturbances, fires, explosions, breakages of or accidents to machinery or lines of pipe; any delay by or actions of Governmental Authorities; and Changes of Law. For the purposes of this Section 23.2, a party is deemed to have control over the actions or omissions of those Persons to which it, its agents, contractors or employees, have delegated, assigned or subcontracted its obligations and responsibilities.

### **23.3 Exceptions**

Neither Party will be entitled to the benefit of Section 23.1 under any of the following circumstances:

- (a) to the extent that the inability or failure was caused by the negligence or contributory negligence of the Party claiming Force Majeure;
- (b) to the extent that the inability or failure was caused by the Party claiming Force Majeure having failed to diligently attempt to remedy the condition and/or to resume the performance of such covenants and obligations with reasonable dispatch;
- (c) if the inability or failure was caused by lack of funds or is for any amount due hereunder; or
- (d) unless, as soon as possible after the happening of the occurrence relied upon or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming Party's ability to observe or perform any of its covenants or obligations under this Agreement, the claiming Party will have given to the other Party notice to the effect that the claiming Party is unable by reason of Force Majeure (the nature whereof will be therein specified) to perform the particular covenants or obligations.

### **23.4 Resumption of Obligations**

As soon as possible after the Force Majeure condition is remedied or discontinued, the Party claiming Force Majeure will give notice to the other Party of such remedy, and that such Party has resumed, or is then in a position to resume, the performance of its suspended covenants and obligations hereunder either in whole or in part.

### **23.5 Settlement of Labour Disputes**

Notwithstanding any of the provisions of this Section 23, but subject to Section 23.3, the settlement of labour disputes or industrial disturbances in which a Party is involved is entirely within the discretion of that Party, which Party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the Party of the benefit of Section 23.1.

### **23.6 No Exemption for Payments**

Force Majeure will not in any event relieve or release either Party from its obligations to make payments to the other Party under this Agreement.

## **24. DISPUTE RESOLUTION**

### **24.1 Informal Dispute Resolution**

The Parties will make a *bona fide* attempt to settle all disputes that may arise under, out of, in connection with or in relation to this Agreement by amicable negotiations and will provide frank and timely disclosure to one another of all relevant facts and information to facilitate such discussions. Failing such resolution, and except for those matters for which the BCUC has exclusive jurisdiction, the British Columbia courts will have jurisdiction to resolve all disputes between the Parties.

### **24.2 Continuation of Services**

Except as otherwise expressly provided, each of the Parties will perform all of its respective obligations under this Agreement notwithstanding the existence of any dispute that arises from time to time between the Parties with regard to any matter related to this Agreement or during the resolution of any dispute in accordance with this Section 24.2 except where to do so would threaten public health and safety or the environment.

### **24.3 Injunctive Relief**

Nothing in this Section 24 will preclude either Party from applying to a court of competent jurisdiction for interlocutory or interim relief (including relief by way of a mandatory injunction).

## **25. GENERAL**

### **25.1 Notices**

Any notice or other communication required or permitted to be given under this Agreement will be effective only if in writing and when it is actually delivered (which delivery may be by facsimile or other telecommunications device) to the party for whom it is intended at the following address or such other address in British Columbia as such Party may designate to the other Party by notice in writing delivered in accordance with this Section 25.1:

(a) if to Corix:

Corix Multi-Utility Services Inc.  
Suite 1160, 1188 West Georgia Street  
Vancouver, British Columbia V6E 4A2

Attention: Eric van Roon  
Fax: 604.697.6703  
Email: [eric.vanRoon@corix.com](mailto:eric.vanRoon@corix.com)

With a copy to:

Corix Group of Companies  
Suite 1160, 1188 West Georgia Street  
Vancouver, British Columbia V6E 4A2

Attention: General Counsel  
Fax: 604.697-6703  
Email: [Hamish.cumming@corix.com](mailto:Hamish.cumming@corix.com)

(b) if to UBC:

Finance Leadership Office, Koerner Library 6<sup>th</sup> Floor  
1958 Main Mall  
Vancouver, British Columbia V6T 1Z2

Attention: Vice President, Finance, Resources and Operations  
Email: [Pierre.ouillet@ubc.ca](mailto:Pierre.ouillet@ubc.ca)

With a copy to:

University Counsel  
6328 Memorial Road, Vancouver, BC V6T 1Z2

Tel: 604.822.4306  
Fax: 604.822.8731  
Email: [University.counsel@ubc.ca](mailto:University.counsel@ubc.ca)

As an alternative to the methods of giving notice described above in this Section 25.1, a Party may give notices, directions and other instruments required or permitted to be given under this Agreement by electronic mail to the other Party's representative(s) identified in this Section 25.1 who continues to be employed by the other Party and is not to the knowledge of the sending Party unavailable; provided (i) the notice, direction or other instrument is stated to be a notice, direction or other instrument required or permitted to be given under this Agreement, and (ii) the notice, direction or other instrument is concurrently also given by electronic mail to the General Counsel (in the case of Corix) or to the University Counsel (in the case of UBC), as applicable. Any notice, direction or other instrument given by electronic mail will be deemed to have been received on the Business Day next following the date of sending, provided that no such notice will be effective unless such notice is actually received by the representative(s).

## 25.2 Confidentiality

Each Party (the "**Receiving Party**") will treat as confidential the terms of this Agreement and all Confidential Information (as defined below) of the other Party (the "**Disclosing Party**") and will at all times during the term of this Agreement and for a period of two years thereafter hold the same in confidence and will not, without the prior written consent of the Disclosing Party, disclose or divulge to any Person the terms of this Agreement or any Confidential Information of the Disclosing Party, provided that nothing in this Section 25.2 will restrict or prevent either Party from making any disclosure of such terms or any Confidential Information:

- (a) that is reasonably necessary or desirable for the Receiving Party to carry out and give full effect to the terms, conditions and intent of this Agreement;
- (b) that is required by any Law or Governmental Authority;
- (c) to an Affiliate of the Receiving Party or to the governors, directors, officers or employees of such Party or its Affiliates;
- (d) to the professional advisors of the Receiving Party;

- (e) that the Receiving Party, in its sole discretion determines is required, prudent or necessary to be disclosed by that Party in connection with any prospectus filing, public securities offering or other applicable securities matters or laws; or
- (f) that is already in the public domain, that was in the possession of the Receiving Party prior to its receipt of the information from the Disclosing Party or that was disclosed to the Receiving Party by a third party free of any obligation of confidentiality.

Without limiting the generality of the foregoing, UBC may disclose Confidential Information:

- (g) pursuant to Section 14.1(c)(i);
- (h) pursuant to Section 14.1(c)(iii), to UBC students or other Persons who are subject to the direction of the UBC employee responsible for conducting the relevant academic research; and
- (i) pursuant to and in accordance with Section 14.2.

For the purposes of this Section 25.2, “**Confidential Information**” means proprietary information of the Disclosing Party such as data, plans, drawings, manuals, or specifications which have been provided by the Disclosing Party or its employees, contractors, agents, subcontractors or Affiliates to the Receiving Party pursuant to this Agreement, or proprietary information conceived or developed by or for the Disclosing Party concerning construction practices, operation and maintenance practices, agreements, marketing plans and strategies, profits, costs, pricing and systems of procedure, but excluding information developed or conceived by the Receiving Party without using the Confidential Information of the Disclosing Party.

### **25.3 Governing Law**

This Agreement and each of the documents contemplated by or delivered under or in connection with this Agreement are governed exclusively by, and are to be enforced, construed and interpreted exclusively in accordance with, the laws of British Columbia and the laws of Canada applicable in British Columbia which will be deemed to be the proper law of the Agreement.

### **25.4 Time of Essence**

Time is of the essence of this Agreement.

### **25.5 Severability**

Each provision of this Agreement is severable. If any provision of this Agreement is or becomes illegal, invalid or unenforceable in any jurisdiction, the illegality, invalidity or unenforceability of that provision will not affect:

- (a) the legality, validity or enforceability of the remaining provisions of this Agreement, or
- (b) the legality, validity or enforceability of that provision in any other jurisdiction,

except that if:

- (c) on the reasonable construction of this Agreement as a whole, the applicability of the other provision presumes the validity and enforceability of the particular provision, the other provision will be deemed also to be invalid or unenforceable, and



- (d) as a result of the determination by a court of competent jurisdiction that any part of this Agreement is unenforceable or invalid and, as a result of this section, the basic intentions of the Parties in this Agreement are entirely frustrated,

the Parties will use all reasonable efforts to amend, supplement or otherwise vary this Agreement to confirm their mutual intention in entering into this Agreement.

#### **25.6 No Waiver**

No waiver by either Party of any default by the other in the performance of any of the provisions of this Agreement will operate or be construed as a waiver of any other or future default or defaults hereunder, whether of a like or different character.

#### **25.7 Enurement**

This Agreement will enure to the benefit of and be binding upon the Parties and their respective successors and assigns.

#### **25.8 Further Assurances**

Each Party will execute and deliver all such further documents and do all such further things as may be reasonably requested by the other Party to give full effect to the intent and meaning of this Agreement.

#### **25.9 Subcontracting and Assignment**

- (a) Either Party may assign this Agreement or any of its rights or obligations hereunder with the consent of the other Party, such consent not to be unreasonably withheld, and in the case of Corix, subject to the requirements of the *Utilities Commission Act* (British Columbia).
- (b) Notwithstanding the foregoing, Corix may, without the consent of UBC, assign this Agreement or any of its rights or obligations hereunder to, or sell the majority of its shares or business or its material assets to, or amalgamate with, any of its Affiliates, subject to the requirements of the *Utilities Commission Act* (British Columbia) and any necessary approval of BCUC.
- (c) Corix may subcontract to any Person any of its rights or obligations hereunder for the Infrastructure, provided that each such subcontractor and its subcontractors will be subject to the prior approval of UBC, which approval will not be unreasonably withheld or delayed.

#### **25.10 Relationship**

Nothing in this Agreement will create a partnership or joint venture, or a relationship of landlord and tenant between UBC and Corix.

#### **25.11 Counterparts**

This Agreement may be executed in counterparts and transmitted by electronic means with the same effect as if the Parties had signed the same original document. All counterparts will be construed together and will constitute one and the same agreement and, if transmitted by electronic means, each Party will promptly dispatch an original to the other Party.

**IN WITNESS WHEREOF** the Parties hereto have executed this Agreement as of the day and year first above written.

**THE UNIVERSITY OF BRITISH  
COLUMBIA**

**CORIX MULTI-UTILITY SERVICES INC.**

Per: \_\_\_\_\_  
Name:  
Title:

Per: \_\_\_\_\_  
Name:  
Title:

**SCHEDULES FOLLOWING:**

**SCHEDULE A**

Map of Development Areas

**SCHEDULE B**

Project Plan

**SCHEDULE C**

Community Energy Covenants and Chart of Applicability

**SCHEDULE D**

Land Use Plan and Development Forecast

**SCHEDULE E**

Material Permits

**SCHEDULE F**

Form of Statutory Right of Way

**SCHEDULE G**

Form of Licence Agreement – Temporary CEP Site

**SCHEDULE H**

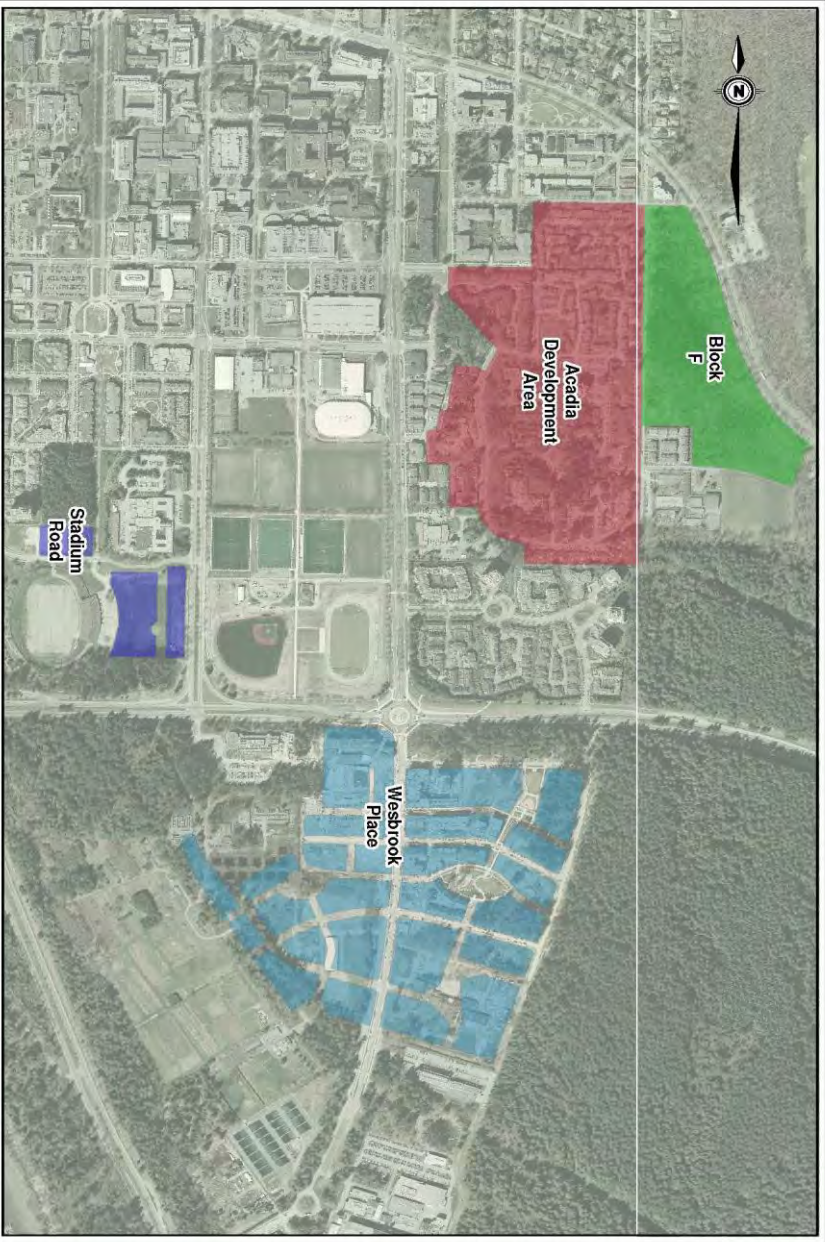
Form of Lease Agreement – Permanent CEP Site

**SCHEDULE I**

Form of Energy Services Contract

# SCHEDULE A Map of Development Areas

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 <b>KERR WOOD LEIDAL</b> <small>consulting engineers</small> <small>5000 HWY 100, SUITE 100</small>	Project No. 2897-005	Date March 2014	
Scale: 1:10,000 			<p style="margin: 0;">Cortx Utilities</p> <p style="margin: 0;">UBC Neighbourhood DES Detailed Due Diligence Study</p> <p style="margin: 0; font-weight: bold; font-size: 1.2em;">Neighbourhood DES Service Areas</p>

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## 1 INTRODUCTION

The Project Plan is the plan for carrying out the Infrastructure Work, the operation of the NDES and the provision of Energy Services, and includes:

- (i) an indicative development and load forecast;
- (ii) technical design specifications, including DPS layout, and current and future energy sources;
- (iii) a capital plan reflecting the indicative development and load forecast and technical specifications;
- (iv) operating assumptions, including equipment efficiencies, labour requirements and all costs to provide the Energy Services;
- (v) input fuel price assumptions;
- (vi) the Project Plan Pro Forma;
- (vii) rate design and rate setting principles;
- (viii) extension tests

## 2 INDICATIVE DEVELOPMENT AND LOAD FORECAST

### 2.1 OVERALL PROJECT PLAN

It is intended that that all portions of the NDES will physically be interconnected, whether directly through the NDES itself or indirectly through the ADES, although:

- the Development Areas to be served by the NDES may not all be contiguous;
- the NDES will be developed in stages, with extensions to serve one or more of the Development Areas being constructed from time to time.
- Phase 1 will utilize temporary infrastructure bridge early development of loads and the interconnection of loads with the permanent Infrastructure.

The proposed service area is represented in Figure 1 below.

**Figure 1: Proposed NDES Service Area**





At build-out, the NDES will serve approximately 1,078,800 m<sup>2</sup> of built space, consisting of primarily residential units, with the possibility of having commercial and institutional customers in the Development Area.

The NDES will serve all new loads and district energy ready buildings (when existing systems reach the end of their current life) in the following neighbourhoods (collectively Development Areas):

- Wesbrook Place
- Stadium Road neighbourhood
- East Campus neighbourhood
- Acadia East neighbourhood
- Block F (potential)

The Project Plan has been developed with the understanding that all new buildings constructed in the service area will connect to the NDES for all heating needs, including domestic hot water, ventilation air and space heating within suites. Under the Infrastructure Agreement, UBC has agreed to ensure that UBC Properties will require all developers who want to lease in the Development Areas to enter into a Community Energy Covenant with Corix. The Community Energy Covenants will require entry into an Energy Services Contract between developers and Corix, enforceable against future NDES customers. The Design Guide for Compatibility with District Energy, a set of guidelines for NDES-compliant design, will be attached as a schedule to each Energy Services Contract, enabling and ensuring Developer compliance with system design and connection requirements.

Development of the NDES will be phased and is designed to coincide with growth of the new developments at UBC. The NDES Project Plan proposes that the NDES approach be implemented in two phases, with Phase 1 being a temporary natural gas solution serving early loads and Phase 2 being the implementation of the Alternate Energy Source, which is currently contemplated to be waste heat recovery from TRIUMF and/or the interconnection of the Wesbrook Place portion of the NDES and ADES, which is assumed to occur in 2024. The NDES will provide heating and domestic hot water to buildings located within the Development Areas at UBC.

Depending upon the availability of sites for temporary plants, the rate of load growth, and the economics of low carbon energy, Phase 1 contemplates the construction of the gas-fired portion of permanent energy centre. The proposed NDES approach is described below:

### 2.1.1 Phase 1

Phase 1 of the NDES will provide DES service to new buildings in Wesbrook Place that are scheduled for completion between 2014 and 2023 and for Acadia East and Block F buildings to be built between 2020 and 2023. Thermal energy for Wesbrook Place will be provided by two natural gas temporary energy centres (TEC) located within Wesbrook Place. In 2022, it is anticipated that the boiler portion of the Wesbrook EC/ETS will be installed. The Wesbrook EC/ETS, which is a component of the permanent system, will provide an addition 5MW of thermal energy necessary prior to TRIUMF installation. Acadia East and Block F loads may be served from the ADES through a direct connection to the ADES peaking plant, or through temporary plants depending upon the actual location and timing of initial development. The current Project Plan assumes a direct connection to the ADES peaking plant.

Drawing G002 in Appendix One depicts anticipated locations of the temporary and permanent energy centres as well as the interconnection to the ADES.

### 2.1.2 Phase 2

Phase 2 is currently contemplated to occur in 2024 when thermal load can support the installation of the alternate energy source, which will be the utilization of waste heat from TRIUMF cooling towers. UBC has a Letter of Intent (LOI) with TRIUMF supporting the project.

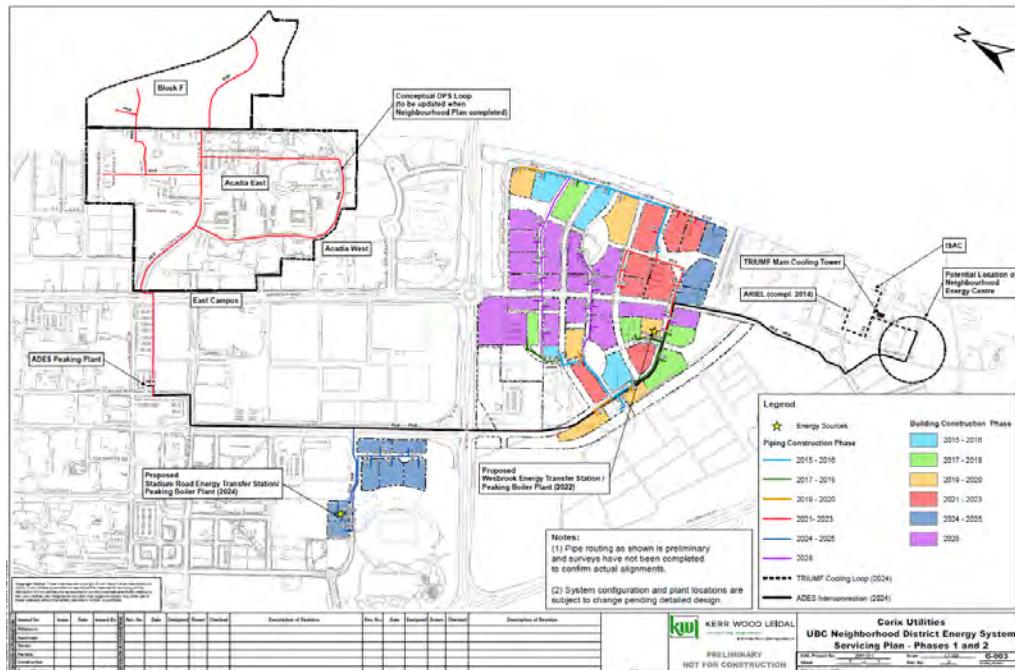
The trigger to initiate Phase 2 of the NDES is either or both of the following events:



- the interconnection of the Wesbrook portion of the NDES and the ADES; and/or
- the connection of a permanent CEP to an Alternate Energy Source

Phase 2 of the NDES Project Plan outlines the interconnection of Wesbrook Place, Stadium Road, the ADES and Acadia East/Block F with a main trunk supply-return pipeline. A permanent Central Energy Plant (CEP) will be constructed to the south of Wesbrook Place, as close as possible to the TRIUMF research facility. Figure 2 below outlines the overall Project Plan.

Figure 2: NDES Phases 1 and 2



## 2.2 PROJECT BUILD-OUT SCHEDULE

Development projections for the Wesbrook Place and Stadium Road neighbourhoods are based on information provided by UBC Properties Trust<sup>1</sup>. As the Land Use Plan and Development Forecast located in Schedule D of the Infrastructure agreement is updated, the project plan will be updated accordingly. This information included projected occupancy dates and building floor area forecasts for planned developments by parcel. Floor area estimates for three lots (4/1, 3W and 11W) and two existing buildings (Sail and Academy) in Wesbrook Place, are based on the lot size and maximum Floor Area Ratio (FAR) allowed for in the Wesbrook Place Neighbourhood Plan. The floor areas of existing buildings were obtained from UBC Properties Trust’s lists of properties published on their website, and complemented with as-built drawings and developer information (where available).

The load forecast for the Wesbrook Place and Stadium Road neighbourhoods is based on UBC’s annual floor area projections for these neighbourhoods, updated as of May 2014<sup>2</sup>. In total, the Project Plan outlines that the new UBC development including Block F, will include approximately 1,078,800 m<sup>2</sup>.

<sup>1</sup> Projected development map. Appendix One. June 2013.

<sup>2</sup> Source Nick Maile, UBCPT email dated May 2nd, 2014.

Table 1 summarizes the expected gross heated floor areas in the four neighbourhoods. The load forecast for the Acadia East and Block F neighbourhoods is based on UBC's load analysis for NDES and cogeneration<sup>3</sup> and Block F's recent rezoning application package.

**Table 1: Projected Building Gross Floor Area (m<sup>2</sup>) – Full Build Out**

NEIGHBOURHOOD	HIGH RISE EXISTING BUILDINGS	HIGH RISE NEW BUILDINGS	LOW RISE EXISTING BUILDINGS	LOW RISE NEW BUILDINGS	COMMERCIAL EXISTING BUILDINGS	COMMERCIAL NEW BUILDINGS	TOTAL GROSS FLOOR AREA
Wesbrook Place	50,200	255,400	103,600	138,700	10,000	0	557,900
Stadium Road	0	0	0	75,900	0	0	75,900
Acadia East and East Campus	0	0	0	323,000	0	0	323,000
Block F	0	122,000	0	0	0	0	122,000
Total Gross Floor Area	50,200	377,400	103,600	537,600	10,000	0	1,078,800

### 2.3 ENERGY USE INTENSITY (EUI)

The EUIs summarized in Table 2 below are based on the values used in the 2013 Feasibility Study<sup>4</sup> and projected EUIs provided from UBC, and validated by UBC in analyses of recently completed projects.<sup>5</sup> The 2013 Feasibility Study applied a declining peak EUI over time, based on the assumption that energy efficiency requirements in the BC building code would result in lower peak energy consumption in the future. The peak demand EUIs applied in the Due Diligence Study are an area-weighted average of the declining EUI scheme. An annual EUI of 100 kWh/m<sup>2</sup> was applied to all buildings with full DES servicing; this is based on an annual Domestic Hot Water (DHW) EUI of 29 kWh/m<sup>2</sup> and a space heating EUI of 71 kWh/m<sup>2</sup>. In buildings with partial hydronic servicing, the annual EUI is adjusted to account for reduced space heating provided through the DES. EUIs will be reviewed as buildings come online.

**Table 2: EUI Summary**

BUILDING TYPE	PEAK HEATING EUI (W/M <sup>2</sup> )	ANNUAL SPACE HEATING EUI (KWH/M <sup>2</sup> )	ANNUAL DHW EUI (KWH/M <sup>2</sup> )	TOTAL ANNUAL EUI (KWH/M <sup>2</sup> )
High Rise	47.5	71	29	100

<sup>3</sup> UBC NDES and Cogen schedules, received May, 2013

<sup>4</sup> UBC NDES Technical Feasibility Study Report FVB Energy. March 20, 2013.

<sup>5</sup> Personal communication. Orion Henderson via email. December 5, 2013.

BUILDING TYPE	PEAK HEATING EUI (W/M <sup>2</sup> )	ANNUAL SPACE HEATING EUI (KWH/M <sup>2</sup> )	ANNUAL DHW EUI (KWH/M <sup>2</sup> )	TOTAL ANNUAL EUI (KWH/M <sup>2</sup> )
Low Rise	46.5	71	29	100
High Rise – Partial Hydronic Service	15	37.5	29	66.5
Low Rise – Partial Hydronic Service	15	32.5	29	61.5
Commercial	29	34	13	47

The EUI assumptions are consistent with actual values reported by other DES or modeled values used in other DES studies in the Lower Mainland. The following table shows a range of other published EUIs. As shown, the selected EUIs in this study are within the range of the published values.

**Table 3: Energy Use Intensity Benchmark Data**

PARAMETER	VALUE	SOURCE
Wesbrook Place-UBC <sup>6</sup>	100-105 kwh/m <sup>2</sup>	UBC Campus Sustainability
Southeast False Creek NEU <sup>7</sup>	109 kwh/ m <sup>2</sup>	City of Vancouver
Annual Space Heating – New High-Rise Residential (> 5 stories)	84 kWh/m <sup>2</sup>	City of Vancouver Sustainable Large Site Rezoning Guidelines
	60 kWh/m <sup>2</sup> to 140 kWh/m <sup>2</sup> (input basis)	“The Path toward Net-Zero High-Rise Residential Buildings: Lessons Learned from Current Practice” <sup>8</sup>
	73 kWh/m <sup>2</sup>	River District Energy CPCN Application
Annual Space Heating – New Low-Rise Residential (5 stories or less)	67 kWh/m <sup>2</sup>	City of Vancouver Sustainable Large Site Rezoning Guidelines
	62 kWh/m <sup>2</sup>	River District Energy CPCN Application
Annual Domestic Hot Water – Residential	24 kWh/m <sup>2</sup>	City of Vancouver Sustainable Large Site Rezoning Guidelines
	30 kWh/m <sup>2</sup>	River District Energy CPCN Application

<sup>6</sup> Actual data for nine buildings based on BC Hydro and Fortis BC data

<sup>7</sup> Actual data

<sup>8</sup> Finch, Ricketts, Knowles. ASHRAE 2010.

Total Heating – Residential	118 kWh/m <sup>2</sup>	UBC REAP Gold minimum requirement (Version 3)
	102 kWh/m <sup>2</sup>	UBC REAP Gold Plus (Version 3)
Space Heating – Retail	34 kWh/m <sup>2</sup>	River District Energy CPCN Application

## 2.4 LOAD FORECAST

The load forecast for the NDES is summarized in **Table 4** below.

**Table 4: NDES Load Forecast**

Year	Cumulative Connected Floor Space (m <sup>2</sup> )	Cumulative Peak Load - Undiversified (kW)	Cumulative Peak Load - 85% Diversified (kW)	Cumulative Annual Energy Consumption (MWh/yr)	Cumulative # ETS	# Temporary Energy Centres	# Permanent Energy Centres	Cumulative Energy Capacity (kW)	Energy Centre Description (AEC supplies peaking to NDES after 2020)
2015	16,295	244	208	1,002	1	1	0	5,858	W-TEC
2016	58,889	2,330	1,981	5,262	4	2	0	11,716	W-TEC, E-TEC
2017	84,916	3,561	3,027	7,864	7	2	0	11,716	W-TEC, E-TEC
2018	125,677	5,558	4,725	11,940	9	2	0	11,716	W-TEC, E-TEC
2019	179,197	8,095	6,881	17,292	12	2	0	11,716	W-TEC, E-TEC
2020	322,194	14,846	12,619	31,592	27	2	0	11,716	W-TEC, E-TEC
2021	372,209	17,236	14,651	36,594	31	2	0	11,716	W-TEC, E-TEC, Wesbrook EC/ETS
2022	426,662	19,865	16,885	42,039	34	2	1	16,716	W-TEC, E-TEC, Wesbrook EC/ETS
2023	493,050	22,871	19,440	48,678	38	2	1	16,716	W-TEC, E-TEC, Wesbrook EC/ETS

## 3 TECHNICAL DESIGN SPECIFICATIONS

### 3.1 PHASE 1

Phase 1 involves the construction of two initially separate district heating loops, one for Wesbrook Place and one for Acadia East and Block F, with further extensions as required. The Wesbrook Place loop would be fed initially by two approximately 6.0 MW temporary gas boiler plants, supplemented with the installation of the Wesbrook EC/ETS (1- 5 MW boiler) in Wesbrook Place in 2022. The Acadia East/Block F loop would be fed from the ADES through a direct connection to the ADES peaking plant (although temporary plants may also be used depending on location and timings of loads). Phase 1 includes each loop's energy supply capacity or connection, associated distribution piping and energy transfer stations. These loops will eventually be interconnected (via the ADES) to allow sharing of TRIUMF waste heat across the entire NDES.

Drawing G002 in [Appendix X](#) summarizes Phase 1 of the Project Plan.

In Drawing G002, TECs are labelled TEC-W and TEC-E. TEC-W will be the first natural gas plant and will be constructed to deliver energy to the first building (Prodigy) on the west side of Wesbrook Place in 2015. TEC-E will be constructed to serve new buildings beginning in 2016. Between 2016 and 2020, the two TECs will serve ongoing development as itemized in [Table 4](#). In 2020, the first buildings in the Acadia East and Block F development will be connected as NDES customers, however, until the CEP is built and the DPS extension to the ADES is made in 2024, it is contemplated that the NDES will purchase energy from the UBC ADES to serve the buildings in Acadia East and Block F.

In 2022, the peak demand in Wesbrook Place is forecasted to exceed the capacity of TEC-W and TEC-E. At this time, the two temporary energy systems will be connected together through an extension of the DPS, and a portion of the Wesbrook EC/ETS will come into service. Ultimately it is anticipated that the Wesbrook EC/ETS will comprise two 5 MW boilers which will be installed within the building on Lot #27. In 2022, only 1-5MW boiler will be installed to provide additional thermal energy for remaining Wesbrook Place development from 2021 to 2024 (the second boiler will be installed in Phase 2 in 2028). Subsequent to implementation of the alternate energy source (likely TRIUMF), the Wesbrook EC/ETS will have two functions: 1) transfer heat from the main transmission lines between permanent CEP and the ADES to the neighbourhoods, and 2) provide local peaking to the neighbourhood. In 2024, the ETS for the Wesbrook EC/ETS will be installed.

#### 3.1.1 Phase 1 System Components

##### 3.1.1.1 Temporary Energy Centres

The TEC concept is shown on Drawing G002, and general arrangement drawings for the TEC-E and TEC-W locations are shown on Drawings C101 and C102, all in [Appendix One](#). Each TEC consists of two 2.9 MW<sup>9</sup> non-condensing boilers housed within a standard 53 foot shipping container. In addition to the boilers, the TEC will house circulation pumps, an expansion tank and all necessary communications and controls.

The TECs will require a concrete pad for seismic anchoring and electrical and gas connections.

The temporary energy centre design is based on the following criteria:

- Peak heating loads of 4 MW in both the eastern and western branches of the Phase 1 NDES
- Required turndown ratio of 10:1 to meet base load conditions

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<sup>9</sup> The current concept is based on a boiler selection at 2.9 MW, but this may vary (3 MW to 3.5 MW) depending upon final equipment selections.

- Minimum of 70% of peak load redundancy
- Containerized plant to be assembled off-site
- Supply temperatures of up to 90°C
- Return temperatures as low as 50°C
- Thermal efficiency of 84% and
- Maximum fireside heating surface area of less than 150 m<sup>2</sup> to allow for unsupervised operation.

### 3.1.1.2 Distribution Piping

Phase 1 of the NDES distribution piping system (DPS) is designed to accommodate the higher flow rates present at full build out demand of Wesbrook Place, including the connection of existing buildings later in Phase 2. However, the construction of the DPS will be phased to match the development in Wesbrook Place, Acadia East and Block F such that the DPS will reach new buildings just as they are reaching completion.

The DPS design is based on the following criteria:

- DPS routing is designed to follow roadways wherever possible and to avoid Wesbrook Mall, which has many existing underground utilities,
- Pipes are sized to meet projected diversified peak heating demand in the Project Plan with a supply temperature of 90°C and a return temperature of 50°C,
- During off-peak periods, the outdoor air temperature reset schedule will adjust the supply temperature and flow rate of the NDES to maximize overall system efficiency,
- Pipe sizes are based on a maximum head loss of 2.05 m/100 m and a maximum flow velocity of 3.4 m/s, and
- The DPS design pressure is 16 bar for Series 1 Logstor pre-insulated piping and components.

### 3.1.1.3 Energy Transfer Stations

Energy transfer stations in Phase 1 NDES will be designed based on the concept shown on Drawing M07 in Appendix Six. Generally, there will be one ETS per building consisting of one space heating heat exchanger and one domestic hot water heat exchanger, however the exact number of heat exchangers will depend on the individual building load.

The ETS design will be based on the following criteria:

- Building heating systems return temperature of 45°C to enable low return temperatures to the energy centre. This is an important design requirement that must be met in Phase 1 so that buildings provide suitable return temperatures for the heat pumps in the CEP in Phase 2.
- Domestic hot water may be cascaded with the return on the space heating heat exchanger in buildings if needed to meet required return temperatures to the energy centre. The design of the ETS will be done on a building by building basis, including whether or not to use cascading.

Additional considerations for designing buildings to be connected to the NDES are provided as part of the DES Compatibility Guide in [Appendix Seven](#).

#### 3.1.1.4 Nodal Energy Centre/Energy Transfer Stations (Phase 1)

The energy centres/energy transfer stations (EC/ETS) at Wesbrook Place and Stadium Road perform two functions; they transfer heat from the main transmission lines between the CEP and the ADES to the neighbourhoods, and they provide local peaking to the neighbourhoods.

Between 2022 and 2024, the nodal Wesbrook EC/ETS peaking plant provides additional thermal energy to the Wesbrook DES loop via one 5 MW natural gas boiler. This boiler is required to meet the heat demand in the Wesbrook Place neighbourhood, in excess of what the two temporary energy centres are able to provide. A second 5 MW natural gas boiler will be added in Phase 2 to serve additional loads.

#### 3.1.1.5 Acadia and Block F Servicing Plan

During Phase 1 in 2020, the first buildings in the Acadia East and Block F development will be connected as NDES customers, however, until the CEP is built and the DPS extension to the ADES is made in 2024, it is contemplated that the NDES will purchase energy from the UBC ADES to serve the buildings in Acadia East and Block F.

### 3.2 PHASE 2

Phase 2 is currently contemplated to occur in 2024 when thermal load can support the installation of the alternate energy source, which will be the utilization of waste heat from TRIUMF cooling towers.

The trigger to initiate Phase 2 of the NDES is either or both of the following events:

- the interconnection of the Wesbrook portion of the NDES and the ADES; and/or
- the connection of a permanent CEP to an Alternate Energy Source

Phase 2 will also be subject to BCUC approval and the Phase 2 CPCN as described in the Infrastructure agreement.

Phase 2 of the NDES Project Plan outlines the interconnection of Wesbrook Place, Stadium Road, the ADES and Acadia East/Block F with a main trunk supply-return pipeline. A permanent Central Energy Plant (CEP) will be constructed to the south of Wesbrook Place, as close as possible to the TRIUMF research facility. The alternate energy source will be provided by low-grade heat at 25°C recovered from the TRIUMF cooling plant and upgraded by heat pumps in the CEP to 80°C. The heat pumps will be assisted by natural gas boilers to raise the supply temperature to 90°C during peak demand periods, which is needed to meet anticipated ADES temperatures. The long term servicing plan for Wesbrook Village, including the connection of existing buildings is shown in the general arrangement **Drawing G04, in Appendix One**. Service to existing buildings will be provided by connecting the eastern and western branches at the northern end of the Wesbrook DPS, thus minimizing the required pipe sizes. The NDES design is based on providing DES service to all DE compatible buildings in Wesbrook, and to extend service to the Stadium Road neighbourhood when it develops. As Phase 2 is implemented, alternate energy thermal heating provided by the CEP is also anticipated to supply Acadia and Block F neighbourhoods via interconnection with the ADES as shown in drawing **G05, Appendix One**.

It is expected that the alternate energy from the CEP to the ADES will occur via the direct connection of the two district energy systems. However, the load profile on the ADES is fundamentally different to the load on the NDES due to the fact that the majority of the buildings served by the ADES were originally designed to be heated with steam and the supply temperature on the ADES ranges between 80°C and 117°C. Therefore, during periods of peak demand when the ADES supply temperature exceeds 90°C, the CEP will not supply any heat to the ADES and all thermal energy produced at the CEP will be supplied to the NDES. If the CEP is not feeding the ADES it should not be necessary to run the CEP boilers unless additional peak heating capacity is needed.



The ADES return temperature ranges from 60-75°C, which is higher than the required return temperature for the heat pumps at the CEP, therefore the Wesbrook and Stadium Road heating loads will be cascaded off of the hot return from the ADES via neighbourhood nodal energy transfer stations.

Each nodal ETS will also include local peaking boilers; this approach will enable the NDES to meet the higher supply temperatures required during peak demand periods. This arrangement is illustrated schematically in **Drawing M06** with the nodal ETS concepts illustrated in drawings M03 and M04 in **Appendix One**.

### 3.2.1 Design Criteria

Since the NDES will be directly connected to the ADES (no hydraulic separation via a heat exchanger), the NDES must meet the following design criteria:

- Supply temperatures from the CEP up to 90°C;
- Provide a minimum of 60% renewable energy to the NDES;
- Static pressure at the interconnection point of 67 psi to match the static pressure of the ADES;
- Return temperature to the CEP between 55°C and 60°C to enable efficient heat pump operation;
- Sufficient pumping power to overcome the elevation change between the CEP and the Academic, Energy Centre (AEC) and the frictional losses between the two points;
- Supply temperature from the nodal ETS to the neighbourhood buildings at 65°C; and
- Return temperature from the neighbourhood buildings to the nodal ETS of 50°C.

### 3.2.2 TRIUMF Heat Recovery

The TRIUMF facility currently has two major cooling plants, with an additional plant expected to come online in 2014. An existing central cooling tower farm handles the cooling for the Accelerator Building and new Electron Hall, while an independent cooling tower serves the existing ISAC facility, and a new cooling tower will serve the ARIEL facility, which is currently under construction. The Project Plan is based on the initial Waste Energy Recovery Study that was prepared by Stantec<sup>10</sup> which detailed the availability of waste heat and technical considerations for waste heat capture. The analysis conducted for Detailed Due Diligence is primarily based on this study. As the project proceeds and the Phase 2 triggers for the phase 2 CPCN are getting closer to commercial viability (as per section 3.2 in the Infrastructure Agreement), more detailed engineering will be conducted to determine the method to practically implement TRIUMF was heat recovery. Based on the final due diligence, it was determined that the project plan permanent CEP will be a 10 MW heat pump system. The heat pump configurations are in multiples of 2.5 MW, and the Base Case energy building would allow for four 2.5 MW heat pumps

#### 3.2.2.1 Current TRIUMF Heat Recovery Assumptions

It is currently assumed that a heat recovery piping loop will need to be constructed to transfer cooling water from TRIUMF to the future permanent CEP. Depending upon how much waste heat is to be captured by the NDES, the heat recovery loop will need to at minimum connect to the central cooling plant, but also ISAC and ARIEL. The production of waste heat from these facilities varies throughout the year, and in the summer months, tends to increase due to building space cooling in addition to waste heat generated from accelerator operations. The Accelerator Building and E-Hall are the largest sources of waste heat, averaging approximately 5.5 MW to 6.5 MW of output during operation, and minimal output during shutdown. ISAC and ARIEL produce smaller quantities of waste heat, but on a more steady output basis, at approximately 1.0 MW to 1.8 MW for ISAC and 1.8 MW to 2.5 MW for ARIEL. The Waste Energy Recovery Study showed a high and low range for waste heat production, and the basis of the Project Plan

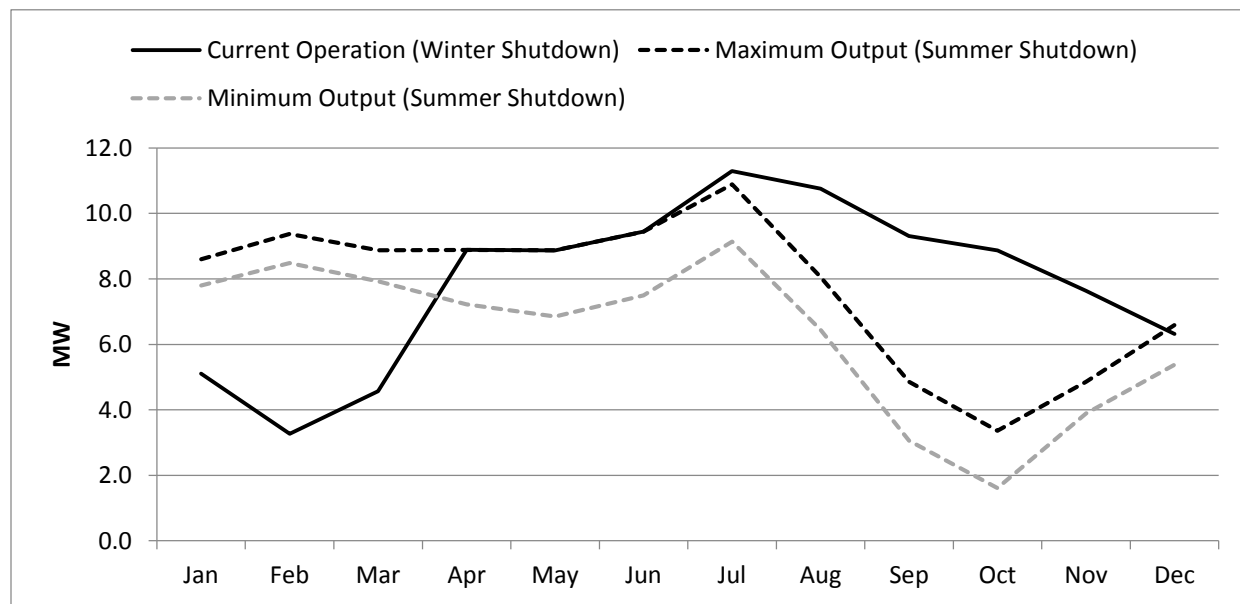
<sup>10</sup> TRIUMF – Waste Energy Recovery Study. Stantec, 2012.



uses the low range as a conservative assumption, and the high range is about 15% greater. The Accelerator building currently shuts down for approximately three months in winter (January to March) for maintenance and research project adjustments, which the ARIEL and ISAC facilities tend to operate continuously. Further analysis will be required during Phase 2 design phase.

As noted in the Waste Energy Recovery Study, the sizing of the heat recovery plant and the availability of demand will affect production of district heating from the TRIUMF waste heat sources. The timing of the shutdown period also affects the energy output depending upon the size of the heat recovery plant and which sources are included. The Project Plan assumes that TRIUMF shut down occurs during the shoulder months to enhance available waste heat for recovery. Corix will have discussions with TRIUMF about possibilities to change shutdown to summer to maximize waste heat recovery, although TRIUMF has indicated that this is not currently possible.

**Figure 3: Projected Waste Heat Availability for TRIUMF**



For the Project Plan (10MW), either of the ARIEL or ISAC cooling towers will need to be connected to supply heat to the NEC, and for the 5 MW case only the central cooling tower is needed. Having all three sources connected would improve the energy production during the shutdown period for both the 10 MW and 5 MW cases as ARIEL and ISAC both provide additional base loading during the shutdown of the Accelerator and E-Hall. All cases assume a seasonal COP of 3.4 for the heat pumps<sup>11</sup>.

The amount of available heat demand is an important factor in the recovery of waste heat from TRIUMF. Energy that is not consumed by the NDES loads is assumed to be utilized by the ADES, but this is also limited by summer demand from the ADES. The ADES is currently operating the Bioenergy Research and Demonstration Facility (BRDF) as a heating-only plant, which generates approximately 7 MW<sup>12</sup> of output year-round. Generally, the fall shutdown would result in more energy being available to both the NDES and ADES. The Project Plan assumes that TRIUMF will have all facilities operating by 2024, with steady output over the lifespan of the NDES project.

<sup>11</sup> Based on materials supplied from Trane for selection of TECSIR heat pumps for the TRIUMF application.

<sup>12</sup> Assuming gasifiers and cogeneration units are operating in parallel.

### 3.2.3 Academic DES Interconnection

For the Project Plan, The permanent CEP has been conceptualized in a manner that allows the heat pumps to deliver energy to both the NDES and ADES. In order to do so, the hydraulic conditions in the ADES need to be addressed. The design philosophy for interconnecting includes the following considerations:

- The NDES neighbourhoods will not need to operate at supply and return temperatures as high as temperatures required for the ADES,
- Wesbrook Place and the Stadium Road are at considerably lower elevations than the ADES, which if directly-connected, the pressures would be higher than otherwise, and
- The interconnection pipe will run adjacent to the ADES Peaking Plant, but there is no requirement to route heat through the ADES network. The ADES may send or receive heat to and from the NDES via the interconnection line.

The resulting interconnection concept involves directly-connecting the permanent CEP to the ADES via a 2.5 km supply-return loop ranging from 250 mm dia. to 300 mm dia. (nominal). The Wesbrook Place and Stadium Road neighbourhoods will be hydraulically-separated using “nodal energy transfer stations” (see Section 3.9.3), which will include local peaking boilers. The connection to the ADES will also serve as the feeder to Acadia/East Campus/Block F, and will be used to transmit both renewable energy from the NEC and peaking energy from the Academic Peaking Plant and assumes capacity is available.

**Drawing M06 in Appendix One** shows the proposed ADES interconnection detail.

### 3.2.4 Acadia Servicing Plan

The Acadia neighbourhood is closer to the ADES peaking plant than it is to the NDES and CEP, therefore it is logical to provide heating to this neighbourhood via the ADES. Under the current Project Plan. Acadia will receive Alternative Energy from the CEP via the ADES direct connection, with the CEP providing base load heating and the ADES providing heating during peak demand periods.

### 3.2.5 Block F Servicing Plan

Block F is owned by the Musqueam. Block F was considered in feasibility studies and forms part of the current Project Plan. However, service is contingent on an agreement with the Musqueam. Block F is adjacent to Acadia and would ultimately be interconnected with Acadia and served in the same manner as Acadia. However, depending upon the timing of development, temporary infrastructure may also be considered in Block F.

### 3.2.6 Permanent Central Energy Plant Concept

The permanent central energy plant (CEP), located near TRIUMF will be designed to meet the following criteria:

- Heat from TRIUMF cooling system supplied at 25°C and returned at 21°C,
- Heat recovery from TRIUMF and heat pumps sized to supply 10 MW or 23% of NDES base load demand (including Acadia and Block F) with any residual heating sold to the ADES,
- Heat pump supply temperature of 80°C to maximize low carbon energy sales to ADES,
- Natural gas non-condensing boilers sized to increase the NEC supply temperature from 80°C at the heat pump outlet to 90°C for supply to the ADES, a requirement of 4 MW,
- Gas boiler efficiency of 84%, and
- Heat pump coefficient of performance of 3.4 based on 80°C supply temperature.

A mechanical room layout of the CEP is provided in drawing **M02 in Appendix One**. The CEP concept includes four 2.5 MW heat pumps arranged as 5 MW pairs to produce 10 MW of heating at a supply temperature of 80°C, and a coefficient of performance of 3.4. The heat pumps may also be operated in parallel during periods of low demand, producing 10 MW of heating at 65°C with a coefficient of performance of 3.4.

The NEC also includes two 2.9 MW non-condensing natural gas boilers to raise the CEP supply temperature to 90°C for supply to the ADES.

### 3.2.7 Nodal Energy Transfer Stations/Energy Centres

During Phase 2, the nodal energy transfer stations at Wesbrook and Stadium Road perform two functions; transfer heat from the main transmission lines between CEP and the ADES to the neighbourhoods, and they provide local peaking to the neighbourhoods. As shown in the layouts **M03 and M04**, each nodal has a minimum of two heat exchangers, termed the pre-heater and the post-heater.

The preheater is supplied with water from the hot return from the ADES at 60-75°C, in order to extract the residual heat and lower the return temperature to the NEC to 55°C. The post heater is supplied with heat from the supply at 80-90°C in order to raise the supply temperature to the neighbourhoods to 65°C.

The designs of the nodal ETS/Energy Centres are based on the following criteria:

- Stadium Road pre-heater capacity of 1.5 MW,
- Stadium Road post-heater capacity of 3 MW,
- Wesbrook pre-heater capacity of 1.8 MW ,
- Wesbrook post-heater capacity of 14 MW,
- Stadium Road peaking boiler capacity of 70% of peak or 2.1 MW at 90°C,
- Wesbrook peaking boiler capacity combined with NEC boiler capacity to provide 70% of Wesbrook peak demand or 13.9 MW at 90°C,
- Wesbrook DPS pumps selected to provide peak heating flows to the neighbourhood and
- Stadium Road DPS pumps selected to provide peak heating flows to the neighbourhood.

### 3.2.8 Distribution Piping System

The DPS routing and sizing for the base case long term servicing plan is show in Drawing G05 in **Appendix One**.

## 4 FINANCIAL MODELLING GENERAL ASSUMPTIONS

The project plan outlines the full build-out of the UBC NDES project, all relevant capital costs, operating costs, and other facts and assumptions for the full 30-year project term.

There are a number of assumptions regarding future prices and rates that have a global bearing on the results of the financial model. Table 5 below shows the commodity price and other cost escalation rates used in the model.

**Table 5: Escalation: Facts and Assumptions**

<b>ESCALATION (NOMINAL)</b>	
Base year	2014
Forecast CPI (for O&M)	2.0%
Capital costs	2.0%
Natural gas	Sproule
Electricity (2014 to 2023)	Hydro
Electricity (2024 onwards)	2.0%
Heat purchased from ADES	Sproule
Waste heat from TRIUMF	0.0%

Further information regarding the items in Table 5 above:

- The base year for the model is 2014, although construction is not expected to commence until early 2015. The model also indicates a project year, with 2014 being year 0. No adjustment to the NPV calculations has been made for the short initial year because the costs incurred are proportionately small and no customer connections are made until the second quarter of 2015.
- Operating costs (non-fuel) and capital costs have been escalated at 2% per annum as an estimate of inflation. A sensitivity comparison for +/- 1% on this amount has been prepared and is shown in Section 2.10.3.
- The commodity cost of natural gas is assumed to escalate in proportion to the Sproule forecast for domestic natural gas at Huntington/Sumas. The commodity forecast used is as of June 30, 2014, and after two years of mild decline, followed by two years of increase moderately in excess of CPI, the forecast assumes 1.5% per annum escalation until 2024, which is the limit of the Sproule forecast. Thereafter, the financial model assumes that commodity cost of natural gas will escalate at 2% per annum, in line with the estimated CPI. Gas delivery and demand charges are assumed to escalate at CPI.
- The cost of electricity is assumed to escalate according to BC Hydro's most recent 10 year rate plan. The escalation factor used is moderately in excess of CPI until 2018, and thereafter is assumed to be 2% per annum, in line with the estimated CPI.

#### **4.1 CARBON EMISSIONS RIDER**

Subject to BCUC approval, the Infrastructure Agreement provides that a temporary surcharge (the "Carbon Emissions Rider") will be applied to the monthly invoice for all NDES customers until the Alternate Energy Source is operational in 2024. The Carbon Emissions Rider will reflect a charge of \$25 per tonne of carbon emissions resulting from the operation of natural gas boilers during Phase 1. The rider is intended to ensure that initial customers served by temporary natural gas boilers contribute to the cost of future Alternate Energy Sources and to help mitigate potential changes in rates with the implementation of the Alternate Energy Sources. It is also intended to ensure that Corix has appropriate incentives to implement low carbon energy sources in the event natural gas prices stay low. In the year that the Alternate Energy Source is utilized, the accumulated balance (with an interest amount in favour of the customers, reflecting Corix's after-tax weighted average cost of capital) of the Carbon Emissions Rider will be applied against the finished construction cost of the CEP in calculating the plant in service amount for rate-setting purposes. In the financial model, the accumulated balance of the Carbon

Emissions Rider is expected to be about \$0.9 million in 2024. It is intended that the revenues from the Carbon Emissions Rider will effectively be held in trust to be applied to a future low carbon energy source, or in the event a low carbon energy source is not available or feasible within the timeframe contemplated in the Project Plan, Corix may use the funds to acquire external offsets as necessary.

## 4.2 CONNECTION CREDIT

Subject to BCUC approval, the Infrastructure Agreement requires Corix to offer a connection incentive (the “Connection Credit”) to identified developers of new low-rise buildings in Wesbrook Place to offset the incremental cost of fully hydronic-capable buildings over the benchmark approach of using electric baseboards for in-suite heating. As shown in Table 6 below, the incentive will be at a rate of \$4.50 per square foot of completed floor space through 2017, and then declining by \$0.90 per square foot each year thereafter (i.e., \$nil by 2022). The accumulated amount of the Connection Credit will be added to rate base to permit Corix to earn its allowed return, and the balance will be amortized over a period of no less than 10 years. In the Base Case, the aggregate Connection Credit is expected to be approximately \$2.9 million, which will have only a modest impact on the balance of rate base. The Connection Credit will be in place only until 2021. Subject to BCUC approval, the temporary Connection Credit account will be amortized over 10 years, which is considered a reasonable duration in order to smooth the impact on revenue requirement. The aggregate amount of the Connection Credit is forecast to be less than \$3 million

The proposed Connection Credit is based on an analysis by UBC of the net incremental costs of hydronic heating for a recent low rise project, and is also consistent with information from industry participants. No premium was found in high rise construction. The declining credit is intended to reflect expected cost reductions from developer learning, experience and innovation, as well as the effects of changes in building code and certification requirements that are expected to increase the prevalence of hydronic heating and also the value of future low carbon energy from the NDES.

**Table 6: Connection Credit**

CONNECTION CREDIT	
Deferral a/c amortization, years	10
Connection Credit per sq. foot	
Year 2014 & 2015	\$ 4.50
Year 2016	\$ 4.50
Year 2017	\$ 4.50
Year 2018	\$ 3.60
Year 2019	\$ 2.70
Year 2020	\$ 1.80
Year 2021	\$ 0.90

## 5 CAPITAL

The following Capital plan is based on the previously described development, load forecasts and technical specifications.

## 5.1 CAPITAL COST ASSUMPTIONS

### 5.1.1 Capital Cost Estimate

#### 5.1.1.1 Project Cost Assumptions

##### 5.1.1.1.1 General Assumptions

The overall cost estimate of the UBC Neighbourhood District Energy System (NDES) is a Class C estimate, which the Association of Consulting Engineering Companies British Columbia (ACEC-BC) defines in the following way:

“An estimate prepared with limited site information, based on probable conditions affecting the project. It represents the summation of all identifiable project elemental costs and is used for program planning, to establish a more specific definition of client needs and to obtain preliminary project approval. Class C estimates typically have an accuracy of +/- 25-40%.”

However, some elements of this cost estimate have a higher degree of accuracy and can be classified as Class B, defined by ACEC-BC in the following way:

“Class B estimate (+/- 15-25%): this is prepared after site investigations and studies have been completed and the major systems defined. It is based on a project brief and preliminary design.”

##### 5.1.1.1.2 Temporary Energy Centres Containerized Plants – Class B

The cost estimate for the TEC is based on 2014 tender pricing received for a similar containerized boiler plant for another lower mainland district energy project that KWL is leading. The tender price was for two (2) (2.5 MW) non-condensing boilers installed inside a 53' shipping container complete with expansion tanks, piping, valves, pumps, controls and a 58 kW boiler for meeting turndown requirements in the early years of the DES.

The price has been adjusted to allow for higher capacity boilers by the same manufacturer (2.9 MW), and the feasibility of installing larger boilers within the same layout has been confirmed with the contractor.

General conditions have been estimated at 4.5% of the contract value.

Engineering costs have been estimated at 6% of the contract value (for design and specifications, tendering, contract administration and construction support).

A contingency of 10% has been applied to the TEC cost estimate, given that the estimate is based on recent tender pricing.

##### 5.1.1.1.3 Temporary Energy Centre Installation – Class C

The cost estimate for the TEC installation is based on averaged unit pricing received for the installation of similar containerized plants in the Lower Mainland.

The installation cost of the TEC includes the following:

- reinforced concrete foundation and seismic anchoring of the container;
- sanitary sewer connection;
- water service connection;
- gas service connection;
- electrical service connection; and
- supply and return piping for the district energy system.

TEC locations have not been finalized, but will be under the UBC permit process. Storm sewer connections have not been included in the estimates as the TEC-W is expected to be installed on an existing asphalt surface, and runoff for the TEC-E can likely be infiltrated on-site.

The cost to tie the TEC into the distribution piping system (DPS) was also based on averaged tender pricing on recent projects administered by KWL.

Service agreements, including any connection costs have not been finalized with BC Hydro, FortisBC or UBC Utilities. An allowance of \$25,000 has been made for the electrical and gas service connections. The cost estimate for the water and sanitary service connections are based on averaged unit rate pricing for similar work. It was assumed that 20 m of pipe would be required to tie into the water and sanitary mains in Wesbrook Place.

Demolition and site restoration costs for the TECs are included in the estimate at \$25,000 per TEC.

General conditions were estimated at 7% of capital cost, engineering at 15% and a contingency of 20% has been added.

#### 5.1.1.1.4 Central Energy Plant – Class C

The cost estimates of the CEP are based on the following:

- 2013 supplier quotations for 4 x 2.5 MW Heat Recovery Heat Pumps and 3.4 MW Non-condensing Natural Gas Boiler;
- Electrical consultant estimate for the Electrical Balance of Plant;
- KWL expertise for the Mechanical Balance of Plant; and
- Scaling of the 85% design cost estimate of the UBC Combined Heat and Power Plant for Mechanical and Electrical Services as well as Building, Structure and Site Work.

General conditions have been estimated between 3% and 7% of capital costs, engineering between 10% and 15%, and contingency between 10% and 20%, depending on the level of detail and uncertainty of the associated capital cost. The higher rates apply to all Building, Structure and Site Work costs, since the location for the CEP has not been finalized.

Site Work costs include 250 m of supply and return HDPE piping to connect the TRIUMF Cooling Towers to the CEP.

#### 5.1.1.1.5 Nodal Energy Centres / Energy Transfer Stations & Pump Station– Class C

The cost estimates of the Wesbrook and Stadium Road EC's and of the Heat Pump Station are based on the following:

- 2013 supplier quotation for the 5 MW Non-condensing Natural Gas Boiler;
- Recent tender unit pricing for similar projects for Electrical & Control; and
- KWL expertise for the Mechanical Balance of Plant and the Heat Pump Station.

It is assumed that the Wesbrook EC/ETS and the Stadium EC/ETS will be integrated into future residential buildings (i.e., they will not be in standalone buildings). As a result, the cost estimate does not include building costs, but only space allowance provisions.

The locations of the plants have not been finalized. General conditions have been estimated at 3% of Mechanical, Electrical and Equipment capital costs and 7% of Building, Structure and Site Work costs; engineering at 15%; and contingency at 20%.



#### 5.1.1.1.6 Distribution Piping System – Class C

KWL has extensive experience with the design and installation of pre-insulated piping for hot water district energy systems in the Lower Mainland, particularly at UBC. The per-linear-meter cost factors for individual pipe diameters are based on actual installed costs of DPS in the Lower Mainland. The quantities and sizing of pipe in the cost estimate are based on the DPS layout shown in drawing G-002, which was developed using a WaterCAD model to optimize the pipe sizing and the pipe lengths were determined using GIS.

DPS alignments and locations have not been finalized. General routing has been identified, however major utility conflicts have not been identified or included in the cost estimates.

DPS service connection allowances are included for all building and energy centre connections.

General conditions were estimated at 7% of capital cost, engineering at 15%, and a contingency of 20% of capital has been added.

#### 5.1.1.1.7 Energy Transfer Stations – Class C

KWL has extensive experience with the design and installation of energy transfer stations (ETS) in both new and existing buildings in the Lower Mainland. In KWL's experience, an ETS installed in a new high-rise or low-rise building will cost approximately \$115,000, including general conditions, engineering and contingencies. KWL has found that the design capacity of the ETS is a relatively insignificant factor in the overall cost of an ETS for Multi-Unit Residential Buildings in the Lower Mainland.

The ETS cost for existing buildings is generally higher than that of new buildings because of additional constraints and demolition costs in existing mechanical rooms. In KWL's experience, an ETS installed in an existing high-rise or low-rise residential building will cost approximately \$155,000, including general conditions, engineering and contingencies, and the cost of an ETS in an existing commercial building \$65,000.

General conditions have been estimated at 3% of total capital cost for the ETS, while engineering has been estimated at 6% for design, specification, tendering and construction support. A contingency of 10% has been added to the capital cost.

#### 5.1.1.1.8 Exclusions

The following specific items are excluded from the cost estimates:

- Land acquisition costs associated with the temporary and permanent energy facilities, including the TECs, Wesbrook and Stadium EC/ETs, CEP, DPS and ETs.
  - Geotechnical work required to assess foundation requirements for any buildings or structures;
  - Contaminated site investigations or remediation;
  - Environmental impact mitigation;
  - Allowances for utility conflicts;
- Cost premiums due to critical shortages of labour and/or materials; and Goods and Services Tax (GST).



5.1.1.2 Project Capital Cost and Budget

Table 7: Project Capital Cost and Budget

NDES Element	Base Cost	General Conditions, Engineering	Total
<b>Temporary Energy Centres (W-TEC &amp; E-TEC)</b>	\$1,636,460	\$397,394	<b>\$2,033,854</b>
<b>Wesbrook EC/ETS</b>	\$1,968,000	\$766,920	<b>\$2,734,920</b>
<b>Stadium EC/ETS</b>	\$721,800	\$282,684	<b>\$1,004,484</b>
<b>Central Energy Plant (CEP)</b>	\$20,108,233	\$5,947,794	<b>\$26,056,027</b>
<b>Distribution Piping System (DPS)</b>	\$16,959,427	\$7,122,959	<b>\$24,082,386</b>
<i>DPS Unit Cost (\$/per trench meter)</i>	<i>\$2,207</i>	<i>\$927</i>	<i>\$3,134</i>
<b>DPS 2015 - 2023</b>	\$8,197,783	\$3,443,069	<b>\$11,640,852</b>
<i>2015-2023 DPS Unit Cost</i>	<i>\$2,108</i>	<i>\$886</i>	<i>\$2,994</i>
<b>DPS 2023 - 2044</b>	\$8,761,644	\$3,679,890	<b>\$12,441,534</b>
<i>2024 - 2044 DPS Unit Cost</i>	<i>\$2,308</i>	<i>\$969</i>	<i>\$3,277</i>
<b>Energy Transfer Stations (ETS)</b>	\$10,153,462	\$1,929,158	<b>\$12,082,620</b>
<b>No. of ETS</b>	103	n/a	n/a
<i>2015-2023 No. of ETS</i>	38	n/a	n/a
<i>2024-2044 No. of ETS</i>	65	n/a	n/a
<b>ETS Unit Cost</b>	<b>\$98,577</b>	<b>\$18,730</b>	<b>\$117,307</b>
<b>Total</b>	<b>\$51,547,383</b>	<b>\$16,446,909</b>	<b>\$67,994,292</b>

Figure 4 and Figure 5 show the annual incremental capital costs and cumulative capital costs, segregated by asset category, in nominal dollars.

**Figure 4: Incremental Capital Costs (2014 \$)**

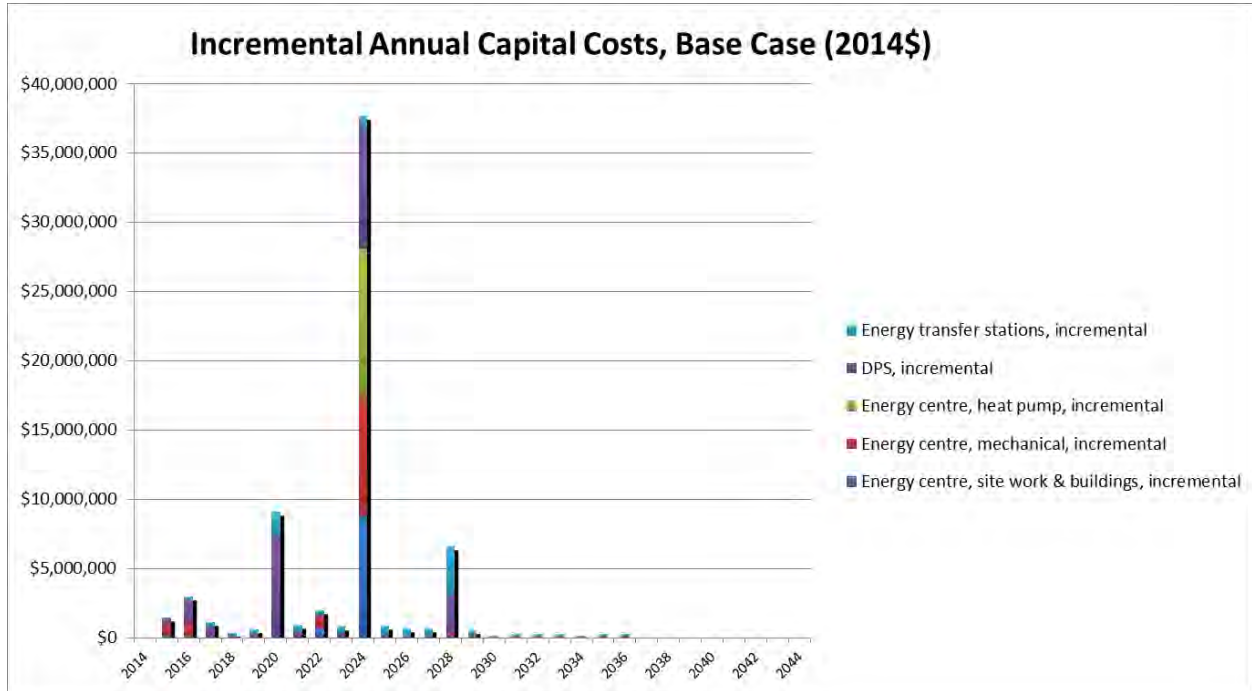
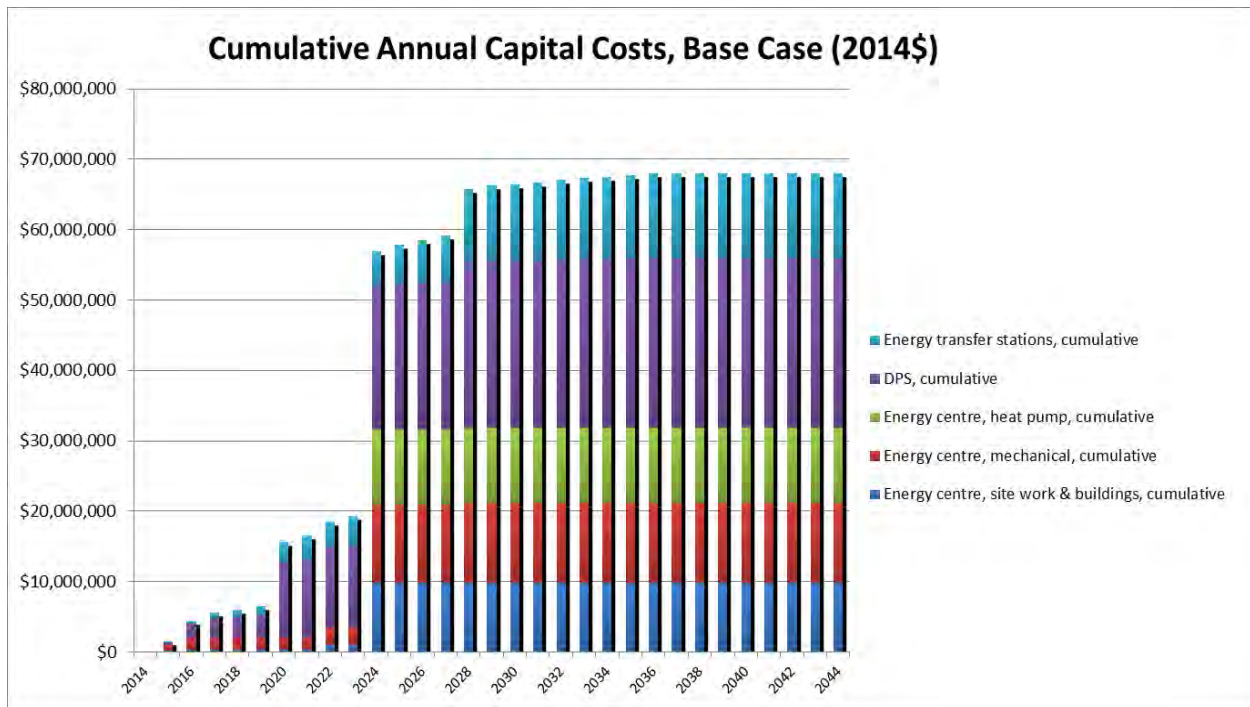


Figure 5: Cumulative Capital Costs (2014\$)



### 5.1.1.3 PST

Provincial sales tax of 7% has been added to the capital costs assuming a factor of approximately 45% hard-goods and 55% non-taxable labour.

### 5.1.1.4 AFDUC

Allowance for Funds Used During Construction is negligible in the current financial model, but will be calculated and added to the capital cost of the infrastructure once a specific construction timetable is available, and will reflect the same combined interest and return on equity cost as applied to the rate base amount at the particular time. Given small capital incremental capital expenditures in Phase 1, AFUDC is not expected to have a material impact on revenue requirement and rates.

### 5.1.1.5 Grants and CIAC

Although no grants or other contributions in aid of construction have been assumed in the Base Case, Corix and UBC will cooperate to seek all grant and other capital contribution opportunities in order to provide the greatest possible benefit to the DES customers. The implementation of an Alternate Energy Source solution contemplated for Phase 2 in 2024 should allow Corix to apply for special environmental programs, such as NRCan federal funding, and this will be investigated and pursued.

### 5.1.1.6 Salvage Value

It is expected that the two temporary energy centres will be removed once Phase 2 begins. Corix will attempt to sell or otherwise re-deploy for value the temporary boilers, to the benefit of ratepayers, but recent experience indicates that the expected salvage value is sufficiently indeterminable that no estimate has been included in the financial model.

### 5.1.1.7 Project Development Costs

UBC and Corix have developed an Infrastructure Agreement to define the roles and responsibilities of relevant parties. As a part of the financial submission, Corix and UBC will submit each of their project development costs. These include engineering, financial, legal, consultation and regulatory costs spent by both to move the project to the implementation and construction stage. These project development costs are approximately 1.5% of total project capital costs. The project development costs have been capitalized and amortized over 30 years, being the contract term to which they relate.

### 5.1.1.8 Depreciation and Amortization

Depreciation charges are shown in Table 8: above. The charges reflect common DES utility accounting practice and estimated useful life of each asset group. The 30-year forecast period for the financial model is, on balance, in line with the end of the useful life of the plant and equipment, although it is reasonable that actual asset life will vary and replacement of plant and equipment might need to occur before the end of 30 years. (Also, the 30-year forecasted period was chosen because the terms of the Infrastructure Agreement allow UBC to purchase the NDES at that point.) Notwithstanding, the useful life assumptions for accounting depreciation, and the capital maintenance program is intended to allow plant, equipment and other infrastructure to meet or surpass the expected useful life.

### 5.1.1.9 Income Taxes

Income tax assumptions are shown in Table 8: The combined federal and provincial corporate tax rate on general income in British Columbia is 26%. The CEP is assumed to qualify for the UCC Class 43.1 renewable energy accelerated capital cost allowance rate of 30% (declining balance). In the Base Case, the CEP is not built until 2024, which is after the cut-off date for the enhanced UCC Class 43.2 50% CCA rate. Regardless, for purposes of calculating the Annual Revenue Requirement, the Base Case forecasts that tax will be not be payable in a material amount until year 2040. The Connection Credit and the Project Development Costs are each amortized for tax purposes as a Cumulative Eligible Capital amount (i.e., 75% of the incurred cost is added to the CEC account; 7% of CEC

**Table 8: Financing, Depreciation and Tax Assumptions**

FINANCING & TAX	
Debt ratio	57.5%
Equity ratio	42.5%
Debt rate	4.0%
Equity rate	9.5%
Tax rate	26.0%
Weighted after tax average cost of capital	5.7%
Pre tax WACC	6.3%
Depreciation - buildings	1.5%
Depreciation - plant	3.0%
Depreciation - distribution	1.5%
Depreciation - ETS and other	3.0%
CCA - buildings	4.0%
CCA - natural gas	8.0%
CCA - renewable energy (before 2020)	50.0%
CCA - renewable energy (after 2019)	30.0%

### 5.1.1.10 Capital Cost Summary

Table 9 below shows the cumulative plant in service cost for each asset category, as well as the aggregate accumulated depreciation balance and the net book value of the Project Development Costs and the Connection Credit.

**Table 9: Plant in Service (thousands, nominal \$)**

Plant in service (thousands, nominal \$)	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
	1	2	3	4	5	6	7	8	10	30
Original cost										
Buildings	0	0	0	0	0	0	0	0	10,236	10,236
Renewable energy, plant	0	0	0	0	0	0	0	0	19,720	19,720
Non-renewable energy, plant	1,033	2,086	2,086	2,086	2,086	2,086	2,086	3,135	6,840	7,233
ADES distribution pipe	0	0	0	0	0	0	0	0	6,280	6,280
ADES mechanical equipment	0	0	0	0	0	0	0	0	0	0
NDES distribution pipe	412	2,186	3,090	3,225	3,529	12,169	12,743	12,887	18,117	23,068
NDES mechanical equipment	116	472	834	1,081	1,458	3,383	3,906	5,125	7,318	17,110
Total cost	1,560	4,743	6,010	6,392	7,073	17,638	18,735	21,148	68,510	83,647
Accumulated depreciation	0	(41)	(150)	(284)	(427)	(587)	(933)	(1,304)	(2,209)	(38,788)
Net book value, PP&E	1,560	4,703	5,860	6,107	6,646	17,051	17,801	19,844	66,301	44,859
Net book value, project development costs	880	851	821	792	763	733	704	675	616	29
Net book value, lowrise connection credit account	0	190	1,432	2,070	2,259	2,284	1,990	1,696	1,109	0
Total, plant in service, net book value	2,440	5,743	8,113	8,969	9,668	20,068	20,495	22,215	68,026	44,889

## 6 OPERATING ASSUMPTIONS (INCLUDING FUEL INPUT ASSUMPTIONS)

NDES operating costs under the project plan include all fuel, wages, maintenance, insurance, administration, land leases, water and sewer, UBC service levy, UBC franchise fee, property taxes and all other taxes, fees and levies. The temporary Carbon Emissions Rider charged to customers is added to the cost of fuel.

Table 10 below shows the price for each category of fuel consumed.

**Table 10: Fuel Prices (nominal \$)**

Fuel prices (nominal \$)	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
	1	2	3	4	5	6	7	8	10	30
Renewable, waste heat (TRIUMF), \$ / MWh	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Heat purchased from UBC, \$ / MWh	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 47.80	\$ 48.46	\$ 49.13	\$ 51.42	\$ 71.54
Natural gas, commercial, fully-loaded cost + carbon tax, \$ / GJ	\$ 10.05	\$ 9.80	\$ 10.26	\$ 10.61	\$ 10.74	\$ 10.89	\$ 11.04	\$ 11.19	\$ 11.71	\$ 16.30
Electricity, commercial, fully-loaded, \$ / MWh	\$ 78.33	\$ 79.92	\$ 82.80	\$ 85.36	\$ 87.11	\$ 94.34	\$ 95.28	\$ 97.20	\$ 102.49	\$ 150.84

Further information about the items in Table 10 above:

- Based on current LOI and subject to agreement with TRIUMF, it is assumed that there will be no cost associated with waste heat captured at the TRIUMF facility.
- The cost of heat purchased from UBC to satisfy periodic NDES load requirements will be a function of the cost of natural gas (but minus the carbon offset amount otherwise included in the cost), being the FortisBC Large Commercial Service rate (i.e., Rate Schedule 3, as of April 1, 2014) including commodity, delivery, basic charge, riders and carbon tax.
- In the ordinary course of operations, the NDES will purchase natural gas from FortisBC at the Large Commercial Service rate (i.e., Rate Schedule 3, as of April 1, 2014) including commodity, delivery, basic charge, riders and carbon tax.
- Electricity will be purchased from UBC or BC Hydro at the Medium General Service Rate or Large General Service Rate as applicable according to the demand of the DES system as it grows (i.e., Schedule 1500 and 1600 respectively, although in the initial years the demand may be below the

applicable demand for Schedule 1500; any difference in cost is nominal, however). The BC Hydro 5% Schedule 1901 Deferral Account Rate Rider is added to the cost of electricity each year and is assumed to continue indefinitely. Electricity consumption is modest until 2024 when the CEP heat pump is operational.

Table 11 below shows the forecast consumption for each category of fuel.

**Table 11: Fuel Consumption**

Fuel consumption	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
	1	2	3	4	5	6	7	8	10	30
Renewable, waste heat (TRIUMF), MWh's	-	-	-	-	-	-	-	-	52,459	54,731
Heat purchased from UBC, MWh's	-	-	-	-	-	11,211	12,502	13,793	-	6,367
Natural gas, GJ's	4,589	24,235	36,066	53,794	77,082	94,964	111,339	129,356	8,826	97,305
Electricity, large general, MWh's	94	126	124	122	121	171	187	186	24,335	25,336

Table 12 shows the nominal dollar cost for each category of fuel on an annual and 30-year NPV basis. Figure 6 also shows the fuel costs by category.

**Table 12: Fuel Costs (nominal \$)**

Fuel costs (thousands, nominal \$)	NPV, 30 yrs	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
		1	2	3	4	5	6	7	8	10	30
Renewable, waste heat (TRIUMF)	0	0	0	0	0	0	0	0	0	0	0
Heat purchased from UBC	2,779	0	0	0	0	0	536	606	678	0	456
Natural gas	11,763	46	238	370	571	828	1,034	1,229	1,448	103	1,586
Electricity	20,824	7	10	10	10	11	16	18	18	2,494	3,822
Carbon emissions rider	586	6	32	47	70	100	123	145	168	0	0
Total	35,366	59	279	427	651	939	1,710	1,997	2,312	2,598	5,863

**Figure 6: Fuel Costs (nominal \$)**

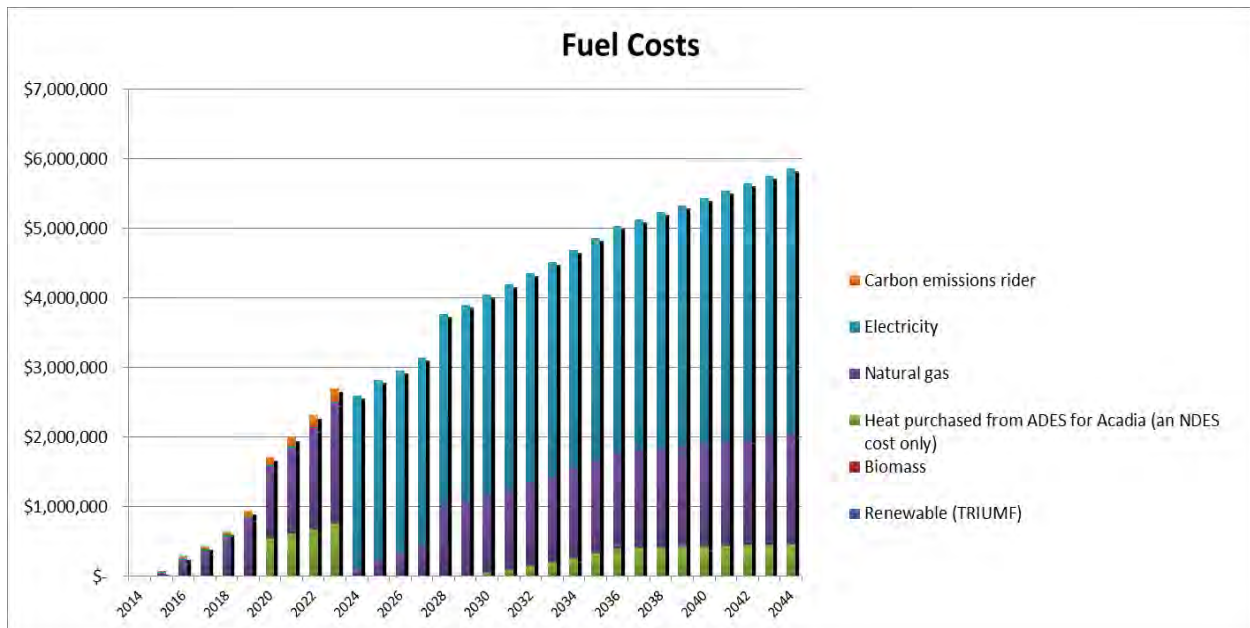


Table 13 shows the operator cost and maintenance cost for the DES.

**Table 13: Direct Operating Costs (nominal \$)**

Operator FTE's, operator cost, maintenance cost	At build-out	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
		1	2	3	4	5	6	7	8	10	30
Operator FTE's	4.9	0.1	0.5	0.6	0.7	0.9	1.6	2.8	2.8	4.9	4.9
Operator cost, thousands 2014\$	490	10	45	60	70	85	160	280	280	490	490
Maintenance cost, thousands 2014\$	444	0	8	20	24	25	28	55	58	71	444

Further information about the items in Table 13:

- Operator FTE's have been determined by KWL and Corix, with input from UBC. The Base Case assumes that less than 1 FTE is required to operate the two temporary energy centres and 4.9 FTE's will be required to operate the CEP when it is connected to the Alternative Energy Source in 2024.
- Each qualified operator FTE is assumed to cost \$100,000 per annum in year 2014 dollars.
- Annual maintenance costs for each category of equipment have been estimated by KWL and Corix, with input from UBC, and are calculated as follows:
  - Mechanical, non-renewable energy equipment – 0.75% of cumulative capital
  - Site work and structures (civil) – 0.25% of cumulative capital
  - Mechanical, renewable energy equipment – 2.0% of cumulative capital
  - Distribution pipe system – 0.25% of cumulative capital
  - Energy transfer station – 0.50% of cumulative capital

Table 14 below shows the indirect operating costs for the NDES. There are assumptions about the allocation of indirect costs between the NDES and the ADES. For example, fees paid to UBC will be charged only to NDES customers. The details of these apportionment calculations are included in the financial model but only have an impact beginning in 2024 when the CEP becomes operational and the ADES receives heat energy. The costs shown in Table 15 are aggregate amounts and have not been apportioned between the NDES and ADES.

**Table 14: Indirect Operating Costs (thousands, nominal \$)**

Indirect operating costs (thousands, nominal \$)	NPV, 30 yrs	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
		1	2	3	4	5	6	7	8	10	30
Insurance	985	2	5	9	12	14	17	34	37	45	132
Corix admin	2,385	143	146	149	152	155	158	161	164	171	254
Land leases	901	0	0	0	0	0	0	0	0	111	165
Water & sewer	443	27	27	28	28	29	29	30	30	32	47
UBC service levy	3,308	0	3	14	19	20	22	75	79	82	439
UBC franchise fee	1,705	0	0	0	0	0	0	0	0	0	434
Property tax on buildings, land and DPS	2,284	0	2	9	13	14	15	52	54	57	303
Total	12,011	171	182	208	224	231	240	352	365	497	1,774



**Table 15: Indirect Costs: Facts and Assumptions**

INDIRECT COSTS	
Portion of capital costs attracting PST	45.0%
Rural property tax paid to Province (Metro Van.)	2.13%
Land value for property tax (\$ per sq. metre)	\$ 560.00
UBC service levy	3.09%
Insurance, owner (\$ per \$100 of nbv)	\$ 0.11
Insurance, general commercial liability (% of rev.)	0.25%
Water & Sewer (\$ annual)	\$ 26,000
Corix admin (average year)	\$ 140,000
UBC franchise fee (% of PYNDES rev.)	3.0%
UBC franchise fee to begin in project year	16
UBC land lease rate per m2	\$ 50.00

Further information about the items in Table 14 and Table 15:

- Insurance includes an amount for (a) commercial general liability, and (b) operational insurance on the value of the property, being the buildings, pipe and equipment. General commercial liability insurance is assumed to be 0.25% per dollar of revenue, subject to a \$2000 per annum minimum. Operational (property) insurance is assumed to be \$0.11 per \$100 of value, being the net book value of the buildings and equipment, plus an estimated 20% of the cost of the pipe system. These estimates are based on internally provided information from Corix's insurance administrator. Construction insurance during construction and wrap-up is already included in KWL's capital cost estimates.
- Corix administration and overhead charge is an internal estimate based on Corix's broad experience operating similar district energy systems. The bundled charge of \$140,000 per annum (in 2014 dollars) is for an average year and includes separately determined estimates for legal, accounting, regulatory, administration, human resources, I/T support and maintenance, telephones, office supplies, and vehicle costs. Corix makes every effort to minimize its administrative and overhead costs, but it is reasonable to assume that costs in the early phase of a project will be higher, if viewed on a per megawatt hour basis, than in later years.
- The CEP will be situated on land leased from UBC. Final site determination and the lease agreement have not been concluded, but provisional discussion between Corix and UBC indicates that the lease rate will be a market rate of approximately \$50 per square meter. KWL has estimated that the CEP will require 1820 square meters of land.
- Annual water and sewer charges from UBC have been estimated based on provisional discussions between Corix and UBC.
- A Service Levy, intended to emulate a municipal tax, is charged by UBC at a rate of 3.09% (2014 rate) of the value of leased land, buildings and pipes. Property owners on UBC's campus pay a Rural Property Tax to the Province of BC (i.e., 2.13%, 2014 rate for jurisdiction 739 Lower Mainland Rural) and the Services Levy to UBC. The two added together are substantially the same as the City of Vancouver municipal tax due on a property with the same assessed value. Although property assessment will be determined by the BC Assessment Authority, for purposes of the calculation, land value has been estimated at an indicative market rate of \$560 per square meter based on input from UBC, buildings have been valued at net book value, and the pipes at 20% of their capital cost.
- A UBC Franchise Fee on revenues has been agreed to between Corix and UBC and is included in the Infrastructure Agreement. The rate is 3% of revenue, but will not begin until after the 15th year of operation.



## 7 PROJECT PLAN PRO FORMA

Please refer to **Appendix X** for the Pro Forma model.

## 8 RATES DESIGN AND RATE SETTING PRINCIPLES

This Project Plan includes an indicative financial Model based on the technical and cost details described above.

### 8.1 RATE DESIGN PRINCIPLES

Annual revenue requirements, levelized rates and levelized costs are provided in the indicative model. Revenue requirements include fuel, annual maintenance and contributions to reserves for future equipment replacement. The NDES rate design is expected to include up to four rate classes, as follows:

- residential or mixed use
- commercial for Buildings dedicated solely to commercial use
- institutional for academic Buildings
- ADES for provision of Energy Services to the ADES.<sup>13</sup>

For Phase 1, only residential/mixed use rates have been developed.

The rate structure for each rate class described will include:

- (i) a “**Consumption Charge**”, being the metered charge (\$/MWh) for Thermal Energy supplied to NDES Customers; and
- (ii) a “**Fixed Charge**”, being the fixed charge, per m<sup>2</sup> of built area (in the case of residential or mixed use rate class) or MW of nominated capacity (in the case of commercial, academic and ADES rate classes).

It is possible that a levy for excess demand fee on NDES Customers occupying Buildings with consumption of Thermal Energy that exceeds a high estimate of peak demand.

#### 8.1.1 Fixed Charge for Non Residential Rate Classes

Non-residential customers will nominate required capacity (MW) required from the NDES at the commencement of service. If there is a request to increase the nominated capacity, Corix, at its sole discretion, may elect to expand the CEP in order to make such capacity available. Furthermore, Corix may increase the Fixed Charge chargeable to that NDES Customer by an amount equal to Corix’s costs associated with increasing the NDES Customer’s Nominated Capacity.

If an NDES Customer desires a decrease in its Nominated Capacity, it shall notify Corix. If Corix, using commercially reasonable efforts, is able to reallocate to other NDES Customers the surplus capacity of which the NDES Customer has notified Corix, Corix shall decrease the NDES Customer’s Nominated Capacity and the NDES Customer shall pay Corix an amount equal to the costs and expenses incurred by

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<sup>13</sup> In the event the ADES provides energy to the NDES, rates for energy purchases from the ADES will be reflected in an Energy Supply Contract with the ADES.

Corix in respect thereof, including but not limited to any administrative or capital costs attributable to the reallocation. However, if Corix is unable to reallocate surplus capacity to other NDES Customers, Corix will decrease the Nominated Capacity and the NDES Customer will pay Corix an amount equal to the difference between:

- (i) the costs incurred by Corix in connection with the supply of Thermal Energy to the NDES Customer (including all costs and expenses incurred by it in connection with any ADES Interconnection and such portion of costs and expenses incurred by it in connection with the CEP that are reasonably attributable to the supply of Thermal Energy to the NDES Customer) and based on the Nominated Capacity immediately prior to such decrease; and
- (ii) the costs that Corix would have incurred in connection with the supply of Thermal Energy to the NDES Customer based on the decreased Nominated Capacity.

## 8.2 DEBT AND EQUITY FINANCING

The project plan balance sheet used to calculate annual revenue requirement is shown below in Table 16. Total depreciated rate base assets for this purpose include the residential revenue deferral account balance, and is net of the Carbon Emissions Rider account balance that benefits the NDES customers and is expected to be used to offset the capital cost of the CEP in year 2024.

**Table 16: Balance Sheet (thousands, nominal \$)**

Balance sheet (thousands, nominal \$)	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
	1	2	3	4	5	6	7	8	10	30
Plant in service	2,440	5,813	8,341	9,505	10,600	21,453	22,550	24,964	72,325	87,463
Accumulated depreciation	0	(70)	(228)	(536)	(932)	(1,385)	(2,055)	(2,749)	(4,299)	(42,574)
Carbon emissions rider account owing to NDES	(6)	(37)	(84)	(154)	(254)	(378)	(523)	(691)	0	0
Residential deferral account	220	549	1,090	1,722	2,234	2,422	3,096	3,503	3,160	0
<b>Total assets</b>	<b>2,654</b>	<b>6,255</b>	<b>9,118</b>	<b>10,537</b>	<b>11,648</b>	<b>22,112</b>	<b>23,068</b>	<b>25,027</b>	<b>71,186</b>	<b>44,889</b>
Debt	1,526	3,597	5,243	6,059	6,697	12,714	13,264	14,391	40,932	25,811
Equity	1,128	2,658	3,875	4,478	4,950	9,398	9,804	10,636	30,254	19,078
<b>Total liabilities and equity</b>	<b>2,654</b>	<b>6,255</b>	<b>9,118</b>	<b>10,537</b>	<b>11,648</b>	<b>22,112</b>	<b>23,068</b>	<b>25,027</b>	<b>71,186</b>	<b>44,889</b>
Debt, mid-year	763	2,561	4,420	5,651	6,378	9,706	12,989	13,827	27,681	26,370
Equity, mid-year	564	1,893	3,267	4,177	4,714	7,174	9,601	10,220	20,460	19,491
<b>Total liabilities and equity, mid-year</b>	<b>1,327</b>	<b>4,455</b>	<b>7,687</b>	<b>9,828</b>	<b>11,092</b>	<b>16,880</b>	<b>22,590</b>	<b>24,048</b>	<b>48,141</b>	<b>45,861</b>

Corix is setting initial rates consistent with the GCOC Stage 2 “Minimum Default Capital Structure and Equity Risk Premium” for similar small thermal utilities to that contemplated for Phase 1 of the proposed NDES.

As indicated in Table 8:x below, Corix proposes a deemed capital structure of 57.5% debt and 42.5% equity and an equity risk premium of 75 basis points over the benchmark low risk utility. The project plan annual revenue requirement includes interest expense and return on equity (ROE) calculated on the mid-year debt and equity balances on a forward test year basis.

**Table 17: Financing, Depreciation and Tax Assumptions**

<b>FINANCING &amp; TAX</b>	
Debt ratio	57.5%
Equity ratio	42.5%
Debt rate	4.0%
Equity rate	9.5%
Tax rate	26.0%
Weighted after tax average cost of capital	5.7%
Pre tax WACC	6.3%
Depreciation - buildings	1.5%
Depreciation - plant	3.0%
Depreciation - distribution	1.5%
Depreciation - ETS and other	3.0%
CCA - buildings	4.0%
CCA - natural gas	8.0%
CCA - renewable energy (before 2020)	50.0%
CCA - renewable energy (after 2019)	30.0%

The interest rate on debt financing was determined using the credit spread between BBB and BBB (low) rated debt and the 10 year Government of Canada bond yield, consistent with approach outlined for calculating a “default debt” rate for TES utilities from the Commission’s GCOC Decision (Stage 1) and confirmed in the Commission’s Stage 2 decision<sup>14</sup>. The financing and tax assumptions applied are summarized in Table 17 above.

### 8.3 INDICATIVE REVENUE REQUIREMENTS

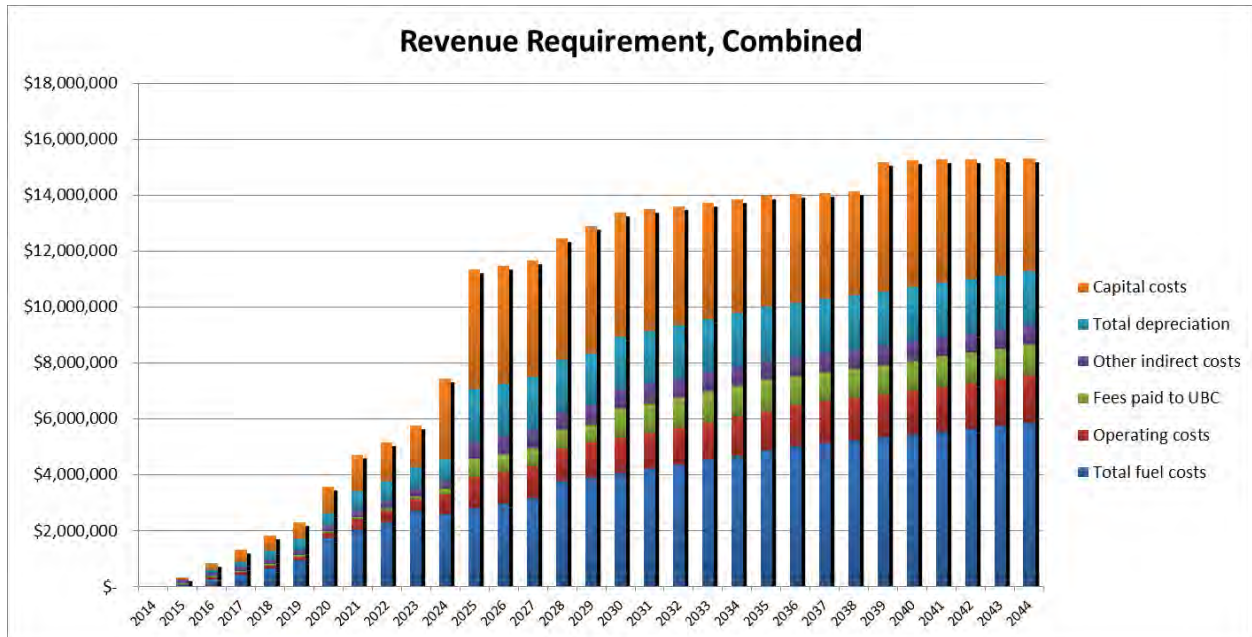
The forecasted annual revenue requirements until year 2022 (i.e., the year that the Wesbrook EC/ETS is in service), and thereafter as of 2024 (i.e., the year the CEP is constructed), and as of 2044 (i.e., the year in which UBC has an option to purchase the NDES from Corix under the terms of the Infrastructure Agreement), are shown in Table 18 and Figure 7 below.

**Table 18: Revenue Requirements (thousands, nominal \$)**

Revenue requirements, indicative (thousands, nominal \$)	2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
	1	2	3	4	5	6	7	8	10	30
Fuel costs										
Renewable, waste heat (TRIUMF)	0	0	0	0	0	0	0	0	0	0
Heat purchased from UBC	0	0	0	0	0	536	606	678	0	456
Natural gas	46	238	370	571	828	1,034	1,229	1,448	103	1,586
Electricity	7	10	10	10	11	16	18	18	2,494	3,822
Carbon emissions rider	6	32	47	70	100	123	145	168	0	0
Total fuel costs	59	279	427	651	939	1,710	1,997	2,312	2,598	5,863
Operating costs	0	0	0	0	0	0	0	0	0	0
Indirect costs	171	182	208	224	231	240	352	365	497	1,774
Depreciation & amortization	0	70	158	308	396	453	669	694	787	1,945
Income tax	0	0	0	0	9	10	27	41	0	1,135
Interest	28	94	159	196	214	342	466	491	1,040	1,055
Return on equity	49	165	280	345	376	600	819	862	1,826	1,852
Total revenue requirement, indicative	318	845	1,317	1,826	2,287	3,567	4,716	5,160	7,431	15,315

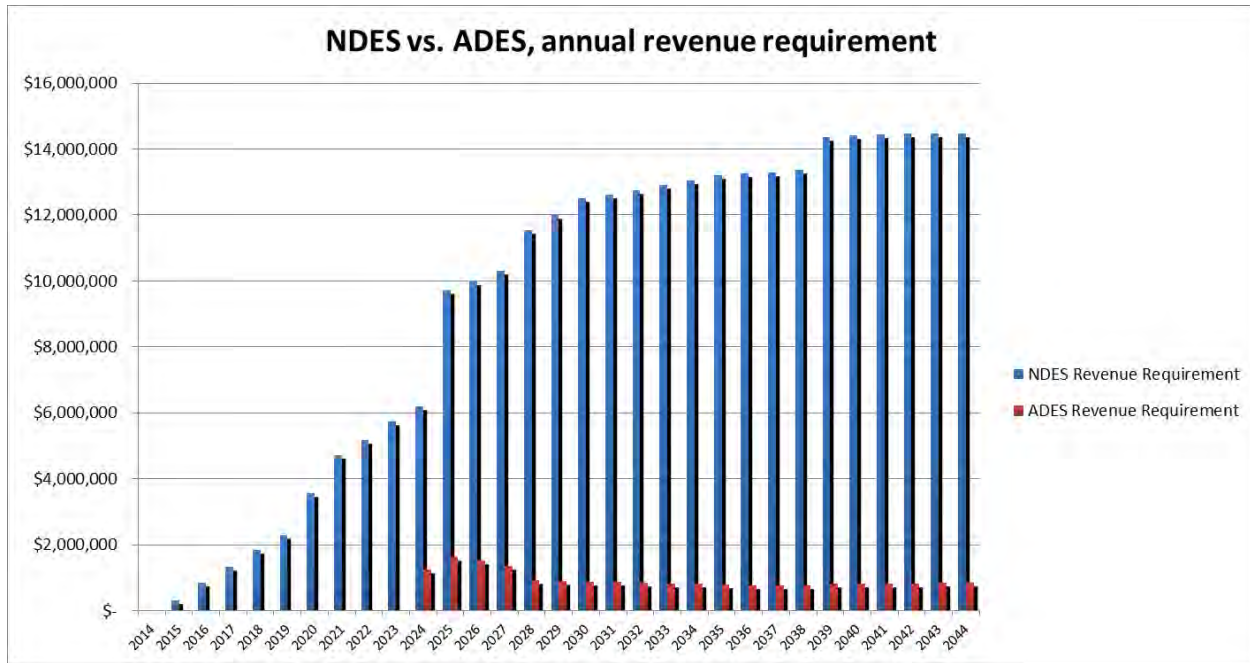
<sup>14</sup> BCUC Generic Cost of Capital Proceeding (Stage 2) Decision, March 25, 2014

Figure 7: Revenue Requirement (nominal \$)



Commencing in year 2024, it is assumed that UBC’s Academic District Energy System (ADES) will begin to purchase energy that is produced by the CEP. At this point, certain capital and operating costs included in the annual revenue calculation will be allocated between the NDES and the ADES. Since this occurs after Phase 1, it does not directly impact the near-term NDES rate proposal expressed in this application, although it is discussed in general terms below and forms part of the long-term levelized cost comparisons. Figure 8 below shows the allocated NDES and ADES annual revenue requirements.

**Figure 8: NDES vs. ADES Annual Revenue Requirement (nominal \$)**



Apportionment of the annual revenue requirement between the NDES and the ADES for years 2024 and forward is based on a principled allocation of capital, fuel and operating costs. Costs that are solely attributable to the NDES are allocated solely to the NDES, while costs for shared plant (e.g., the TRIUMF waste heat recovery equipment and the ADES interconnection) are allocated based on relative use of energy between the NDES and ADES.

The apportionment of property, plant and equipment between the NDES and the ADES is shown in Figure 9 below, and the apportionment of fuel costs based on annual relative energy load is shown in Figure 10 below.

**Figure 9: Allocation of Property, Plant and Equipment NBV between NDES and ADES**

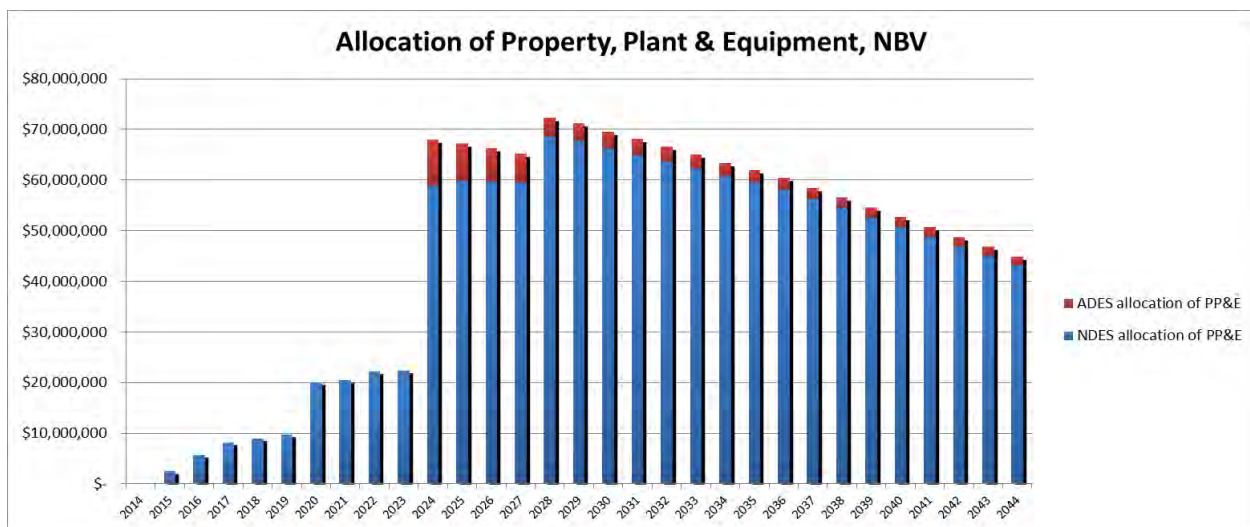
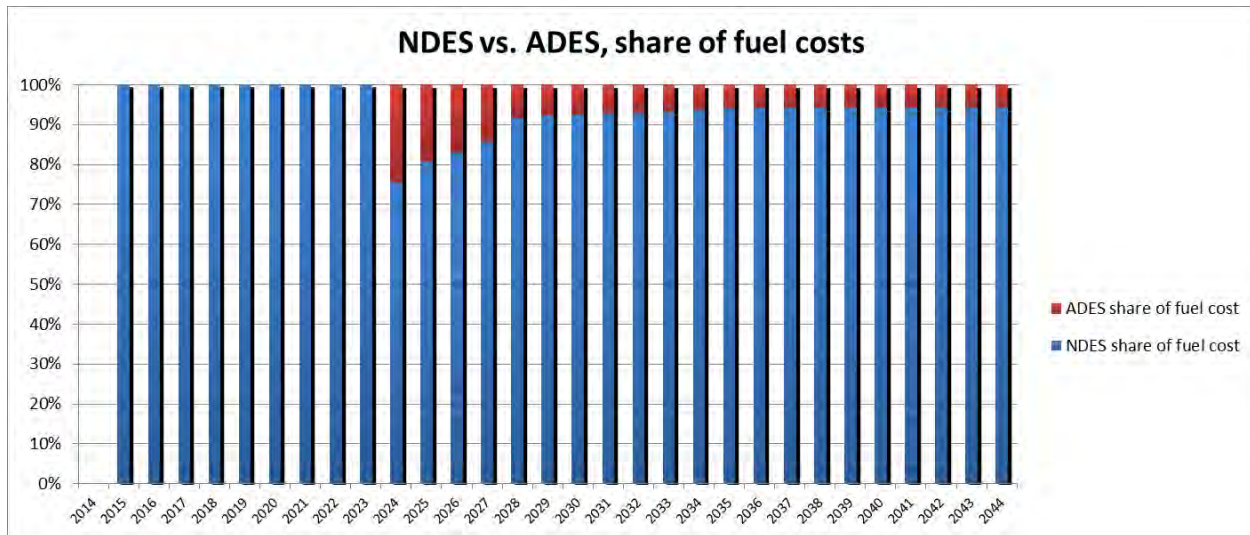




Figure 10: NDES vs. ADES Share of Fuel Costs (%)



#### 8.4 RATE PLAN PROPOSAL

The maximum sustained annual energy load occurs in project year 22 of the development (i.e., year 2036) at 102,835 MWh per annum. This is the result of 108 connections and 1,078,000 square meters of connected floor space. As shown previously in Figure 4 and Figure 5, there is a very large, sudden increase in capital expenditures in project year 10 (i.e., year 2024) as a consequence of the CEP construction. To a lesser extent, because of a large increase in connected floor space in project year 6 that will result in a significant expansion of distribution piping, and the subsequent construction of the Wesbrook EC/ETS in project year 8, there is also a significant step-up in revenue requirement in project year 6 and then again in project year 10. As shown below in Figure 11, the forecasted annual energy load in the Base Case lags these step changes in revenue requirement. The result is that annual revenue requirement per MWh of energy load increases suddenly in a manner that would be onerous to NDES customers, as shown in Figure 12.

Figure 11: Annual Consumption (MWh)

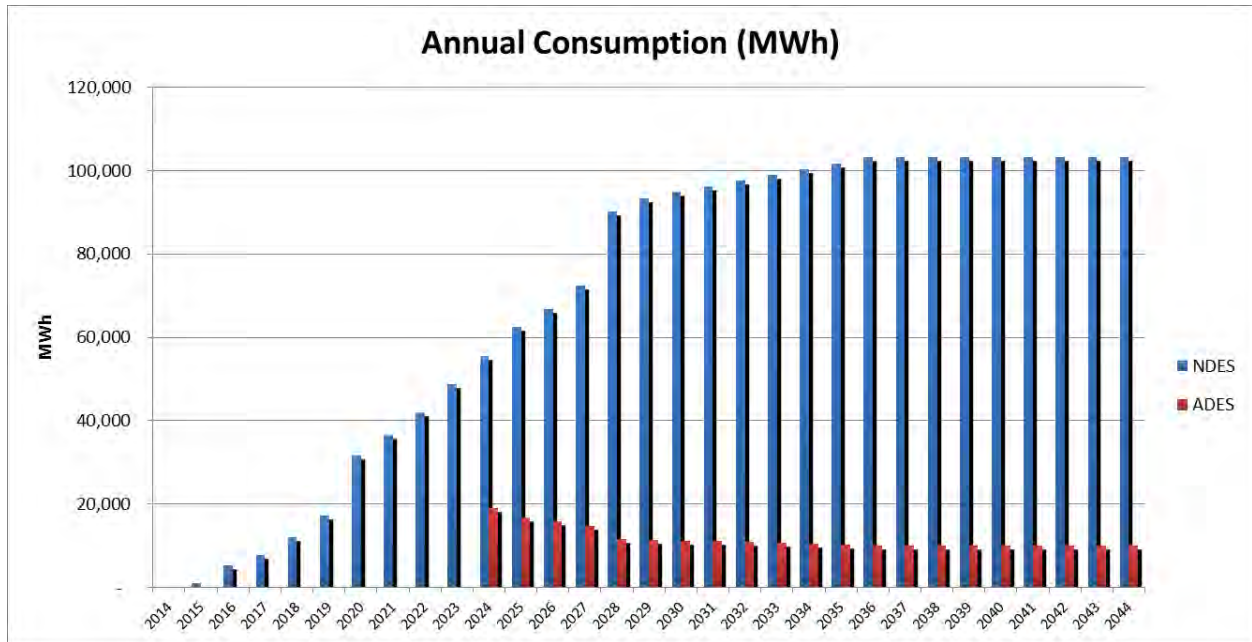
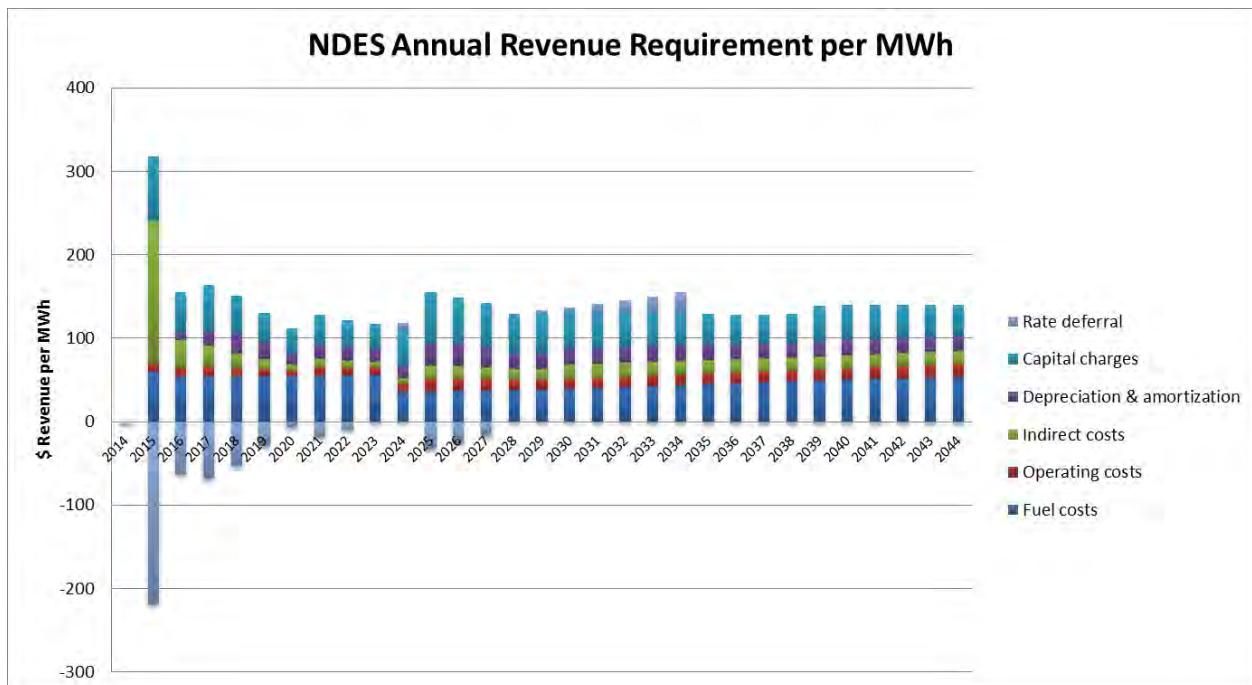


Figure 12: NDES Annual Revenue Requirement per MWh (nominal \$)



Corix is proposing an escalating rate plan for the NDES, beginning upon initial energy load delivery and continuing until year 20, to allow recovery of accumulated deferred revenues without escalating annual rates much above CPI, and in line with other energy costs such as residential electricity. The design of

the escalating rate smooths the impact of cost of service fluctuations and reflects the initial infrastructure cost at the beginning of Phase 1 and Phase 2.. For the Base Case, the initial rate per MWh (i.e., including proportionally both fixed and variable components of annual revenue requirement) is \$98.23 per MWh, escalating at 2.5% per annum. Including the remaining 10 years of the project term, the levelized rate on an NPV basis over 30 years is \$133.28 per MWh. (For this purpose, NPV is calculated using the after-tax WACC. Also, the annual cost to the customers is the annual rate per MWh multiplied by the total annual demand.) By comparison to a competitive carbon-neutral benchmark scenario assuming 100% residential electricity, the NDES levelized cost is about 10% lower and the initial rate is about equal, as shown in Table 19 below. Electricity is commonly cited by real estate developers as being a preferred heating alternative owing to the low installed cost of baseboard heaters.

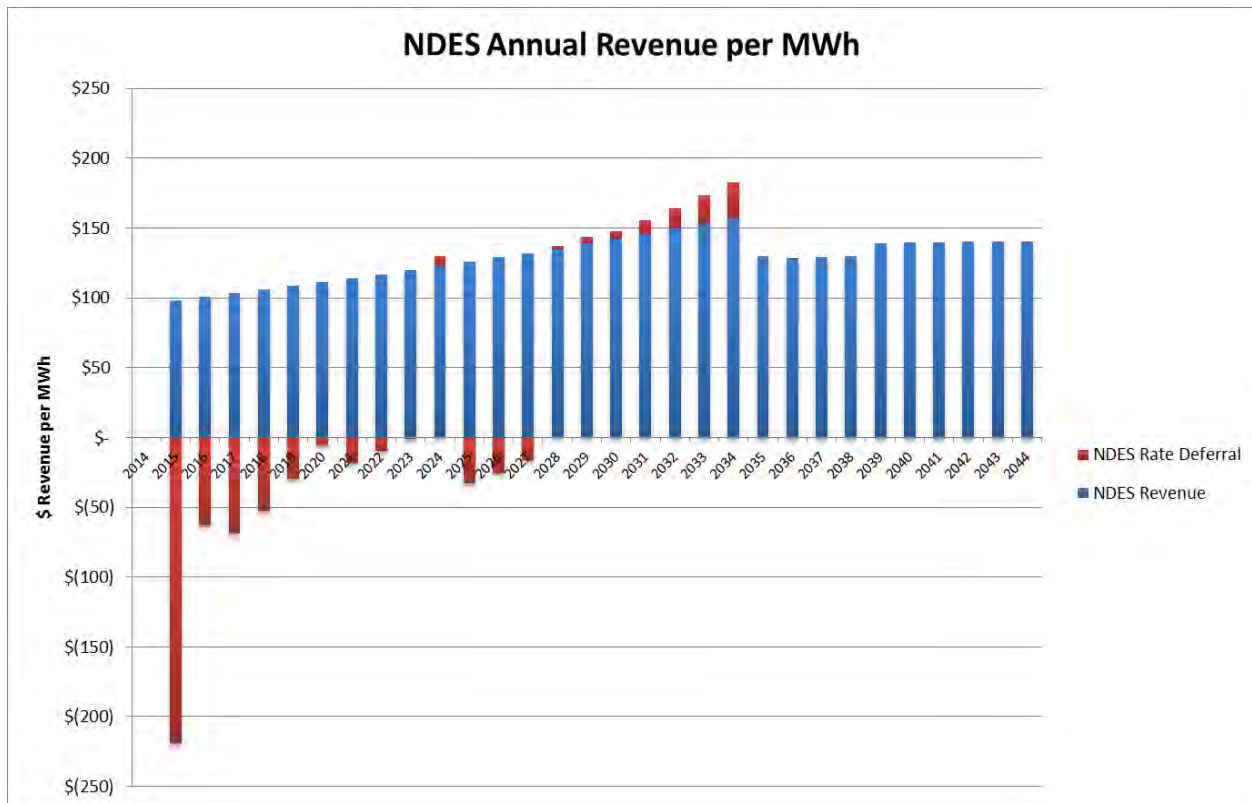
**Table 19: NDES Rate Design**

NDES rate design, indicative		2015	2016	2017	2018	2019	2020	2021	2022	2024	2044
		1	2	3	4	5	6	7	8	10	30
NDES	Levelized										
Utility revenue (thousands, nominal \$)		98	530	812	1,263	1,875	3,511	4,169	4,909	6,817	14,478
Utility revenue per MWh (\$)	\$ 133.28	\$ 98.23	\$ 100.68	\$ 103.20	\$ 105.78	\$ 108.43	\$ 111.14	\$ 113.91	\$ 116.76	\$ 122.67	\$ 140.32
Escalation			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	0.06%
Square metres		16,295	58,889	84,916	125,677	179,197	322,194	372,209	426,662	561,943	1,078,680
Annual basic charge per sq metre (\$)		\$ 4.002	\$ 5.960	\$ 6.332	\$ 6.659	\$ 6.932	\$ 7.220	\$ 7.420	\$ 7.622	\$ 8.037	\$ 8.893
Monthly basic charge per sq metre (\$)		\$ 0.667	\$ 0.497	\$ 0.528	\$ 0.555	\$ 0.578	\$ 0.602	\$ 0.618	\$ 0.635	\$ 0.670	\$ 0.741
Commodity charge per kWh (\$)		\$ 0.033	\$ 0.034	\$ 0.035	\$ 0.036	\$ 0.037	\$ 0.038	\$ 0.038	\$ 0.039	\$ 0.041	\$ 0.047
Carbon Neutral Benchmark, NDES	Levelized										
Status quo electricity cost (thousands, nominal \$)		99	550	855	1,344	2,005	3,736	4,414	5,172	7,112	19,624
Status quo electric rates per MWh (\$)	\$ 147.69	\$ 98.65	\$ 104.57	\$ 108.75	\$ 112.56	\$ 115.93	\$ 118.25	\$ 120.62	\$ 123.03	\$ 128.00	\$ 190.20
Escalation			6.00%	4.00%	3.50%	3.00%	2.00%	2.00%	2.00%	2.00%	2.00%

The NDES escalating rate plan is shown in Figure 13 below, and the annual over or under recovery of the annual cost of service is shown as well. Note that the revenue deferral is bi-modal, with rates that under-recover annual revenue requirement in project years 1 to 5 and 11 to 13, while over-recovering in all other years up to project year 20.

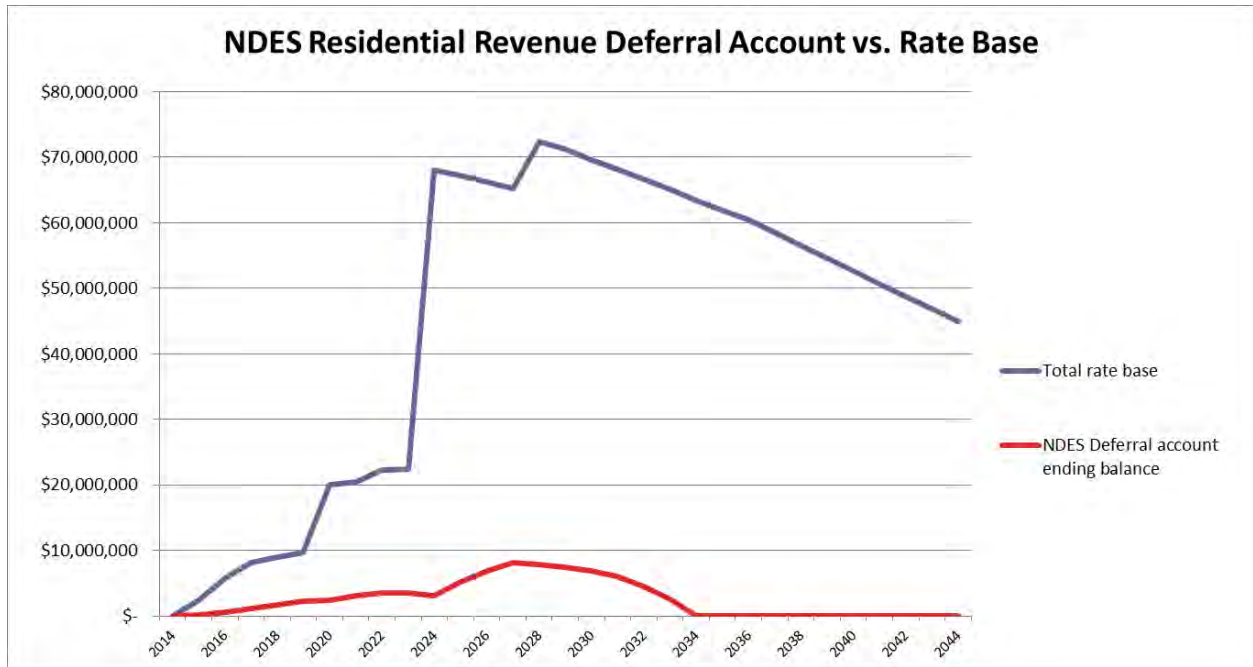


Figure 13: NDES Annual Rate per MWh (nominal \$)



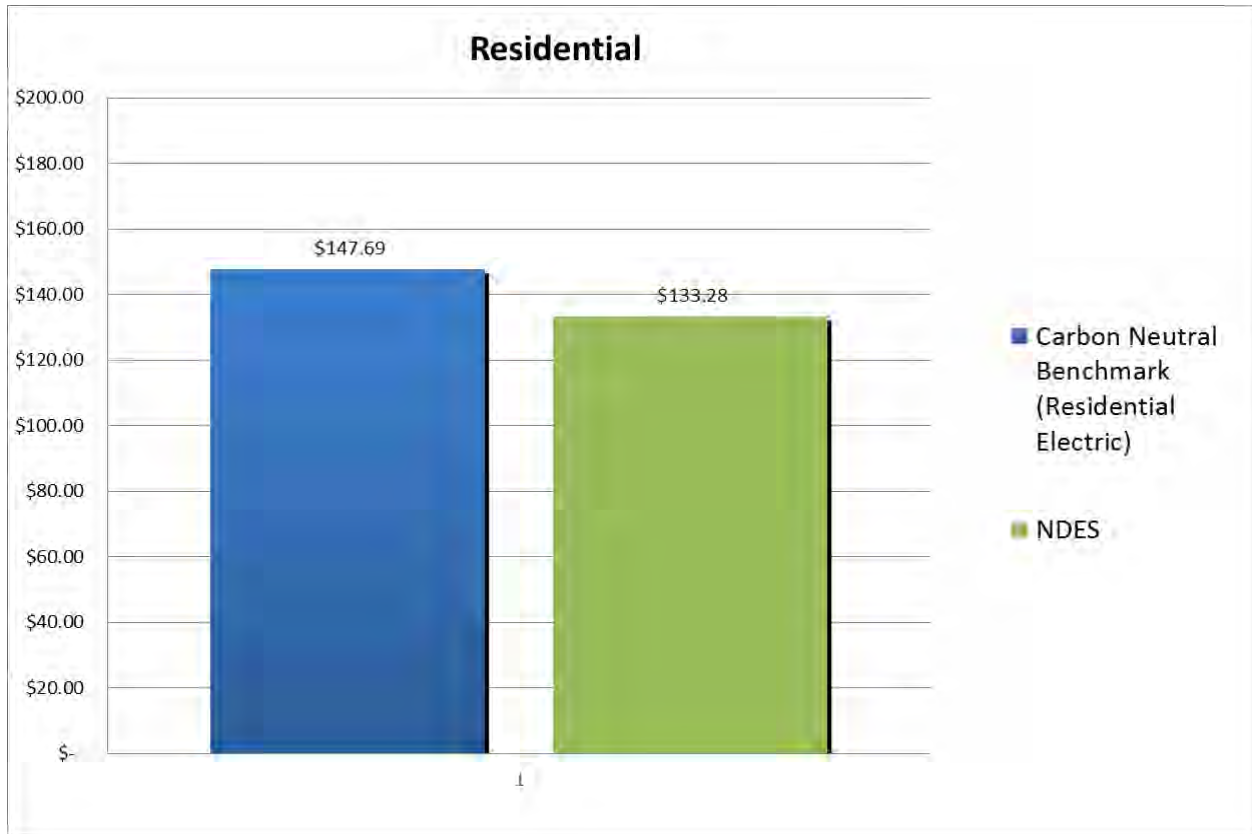
Corix proposes to accumulate the annual over or under recovery of the cost of service in a Residential Revenue Deferral Account to be included in annual rate base, earning a return at the after-tax weighted average cost of capital. The Base Case intends that the Residential Revenue Deferral Account will be reduced to \$nil by the end of 2034 (year 20), as shown in Figure 14 below.

Figure 14: NDES Residential Deferral Account Compared to Rate Base (nominal \$)



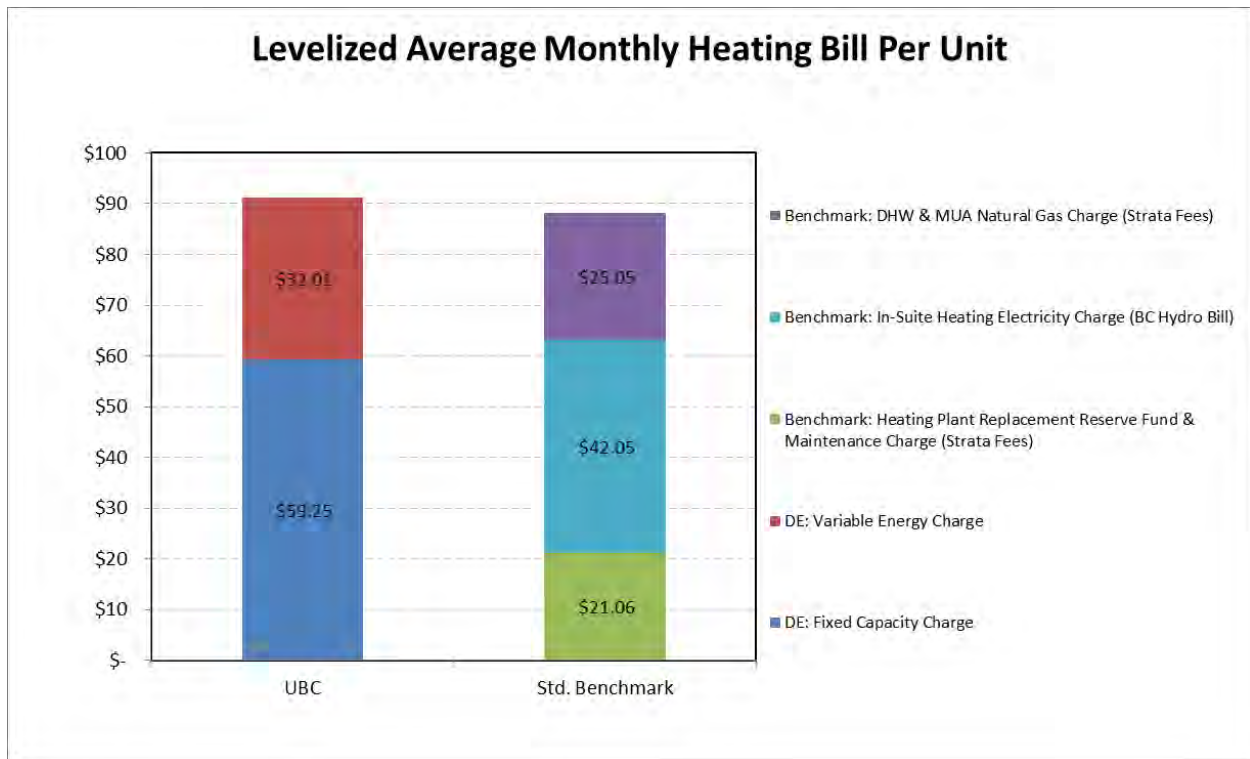
As stated above, the NDES competitive carbon neutral benchmark scenario reflects 100% electric energy, which is considered the cleanest energy source. On a net present value (NPV) basis, the NDES levelized cost over the 30-year forecast period is approximately \$133, which is favourable to the competitive benchmark levelized cost of \$147, as shown in Figure 15 below.

Figure 15: 30-year NPV Levelized NDES Rate vs. Competitive Carbon Neutral Benchmark



A comparison of the monthly heating bill for future residents is shown below in Figure 16. The DE bill is on a suite level and is comprised of a capacity charge and a variable charge. The standard benchmark bill consists of in-suite electric billed directly by BC Hydro, a heating plant reserve maintenance charge that would be in strata fees, plus the natural gas charge for domestic hot water and makeup air units, also billed in strata fees.

Figure 16: Monthly In-Suite Heating Bill (\$/MWh)



### 8.4.1 Fixed and Variable Charges

Table 20 below summarizes the principal facts and assumptions to determine the annual NDES rates per MWh and to allocate this rate between a fixed and variable (i.e., a Basic and Commodity) component.

Table 20: Residential Rate Design: Facts and Assumptions

RESIDENTIAL RATE DESIGN, INDICATIVE	
Annual escalation	2.50%
Rate per MWh (year 1)	\$ 98.23
Levelized rate per MWh	\$ 133.28
Basic charge %	66.3%
Commodity charge %	33.7%
Basic charge per sq. metre (partial year 1)	\$ 0.667
Commodity charge per kWh (year 1)	\$ 0.033

Corix proposes an initial allocation of the annual NDES rate per MWh shown in Table 20 above based on 67.5% fixed charges and 32.5% variable charges. For this purpose, the fixed charges in the annual revenue requirement include all capital charges (i.e., depreciation, amortization, interest, return on equity and taxes) and all indirect charges (i.e., insurance, administration and overhead, land leases, water and sewer fees, UBC service levy, UBC franchise fee, and property tax) as well as operating costs (i.e., labour and maintenance). Variable charges include fuel. The 66.3% / 33.7% allocation is supported by the relative fixed versus variable charges included in the NDES portion of annual revenue requirement, calculated on an NPV basis over the 30-year forecast period. The calculated NPV proportions are 67.5%

fixed and 32.5% variable. The annual rates, apportioned on a monthly basis, will reflect a 67.5% basic charge expressed as an amount per square meter of floor space for each connected building, and a 32.5% commodity charge expressed as an amount per MWh of energy provided to the customer building. Corix will meter Thermal Energy consumption by the NDES Customers who are strata lot owners in the Building on a collective basis, as a strata corporation

## 9 EXTENSION TESTS

Corix will undertake all extensions consistent with the capital plan and rates in the Project Plan, as approved by the BCUC (and updated from time to time to reflect changes in development forecast and projected changes in certain NDES operating costs that are a flow-through such as fuel costs). Where an extension of the Infrastructure (planned or unplanned) deviates significantly from the capital plan and such extensions would increase rates beyond the rates contemplated in the most current Project Plan (updated for development forecasts and changes in forecasts for certain flow-through), Corix will notify UBC and seek approval from the BCUC accordingly. In such cases, Corix may still seek such extensions if they can be deemed in the public interest, including the development objectives set out by UBC and/or undertake the extensions with an appropriate contribution in aid of construction from UBC and/or loads. These conditions are meant to function as an extension test that reflects the Project Plan and are not intended to supersede or replace normal BCUC review of capital and operating costs or rates. Corix will seek to formalize this extension test as part of its CPCN and rate application, and will also seek to establish an appropriate threshold for BCUC review of extensions (future CPCN applications) as may be required. The Project Plan notwithstanding, Corix will continue, as reasonable, to seek out and implement viable strategies that reduce rates and/or increase GHG savings relative to the approved Project Plan.

**SCHEDULE C**  
**Community Energy Covenants and Chart of Applicability**

<b>Project Name</b>	<b>Lot No.</b>	<b>Developer (parent company)</b>	<b>Strata Plan Number (if available)</b>
<b>Developments without a DE Covenant</b>			
Pathways	Lot 9	Pathways Adera Projects Ltd.	BCS2694
The Wesbrook	Lot 1	South Campus 2A Holdings Ltd. (ASPAC)	BCS3567
Tapestry- Seniors rental residence	Lot A	Concert Properties (UBC Seniors Residence) Ltd.	BCS3867
Tapestry – Seniors market housing	Airspace Parcel 1, Airspace Plan BCP 44718 of Part of Parcel A, Plan BCP 33333	Concert Properties (Tapestry West) Ltd.	BCS3915
Sage	Lot 2	Kenstone-Rize Alliance (Wesbrook) Projects Inc.	BCS4265
Spirit	Lot 17	Spirit Co-Development Company (Wesbrook Place) Ltd.	BCS3970
Pacific	Lot 42 (also known as Lot 3W)	Pacific Spirit Co-Development Company (Wesbrook Place) Ltd.	BCS 3736
Ultima	Lot 30	Pacific Spirit Ultima Adera Projects Ltd.	BCS4140
Crescent West	Lot 16	Wesbrook Place (South Campus Townhomes) Ltd.	BCS3362
Keenleyside	Lot 12	Keenleyside Co-Development Company	BCS2822
MBA House	Lot C	UBC Properties Investments Ltd. as Trustee for UBC Properties Trust	n/a
Larkspur	Lot 11	UBC Properties Investments Ltd. as Trustee for UBC Properties Trust	n/a

The Mews	Lot B	UBC Properties Investments Ltd. as Trustee for UBC Properties Trust	n/a
Dahlia & Magnolia	Lot 28	UBC Properties Investments Ltd. as Trustee for UBC Properties Trust	n/a
Granite Terrace 1, 2 and 3 (Commercial/office/residential)	Lot A	UBC Properties Investments Ltd. as Trustee for UBC Properties Trust	n/a
Village Green (under construction)	Lot 45	UBC Properties Investments Ltd. as Trustee for UBC Properties Trust	n/a
<b>Developments with a DE covenant:</b>			
Yu	Lot D	Modern Investment Group (Canada) Ltd.	EPS807
Faculty and Staff housing (Under construction)	Lot 22	UBC Properties Investments Ltd. as Trustee for UBC Properties Trust	n/a
Binning Tower (Under construction)	Lot 6	Wall Centre (Point Grey) Nominee Ltd.	(not yet filed)
Prodigy (under construction)	Lot 32	Prodigy Adera Projects Ltd.	(not yet filed)
The Laureates (Under construction)	Lot 13	Polygon	(not yet filed)
Sail	Lot 31	0912064 B.C. Ltd. (Adera)	EPS1525
Academy	Lot 3, sometimes called 3E to distinguish from Pacific site	Polygon Academy Homes Ltd.	EPS1813

**SCHEDULE D**  
**Land Use Plan and Development Forecast**

- The Land Use Plan is posted here: <http://planning.ubc.ca/sites/planning.ubc.ca/files/images/planning-services/policies-plans/LUP-2012.pdf>. The current version is dated August 27, 2012, which is the date of the Minister's Order under MEVA.
- Development Forecast

Updated Sep 12/14

Sale Date	Lot	Market Lease Concrete	Market Lease Wood	Market Rental Concrete	Market Rental Wood	Rest'd Rental Wood	Rest'd Own. Wood
2014	45						42,193
2015	23		110,910				
2015	27					83,787	
2016	29					101,567	
2016	25 (half)		108,801				
2016	1W		115,130				
2016	E				67,682		
2017	5	171,790					
2017	19		127,789				
2018	25 (half)		108,801				
2018	40	182,717					
2019	8	221,160					
2019	35					152,804	
2020	26			168,402			
2020	33		76,854				
2021	15 (half)	154,086					
2021	18				88,911		
2022	20	139,392					
2022	21	139,393					

Totals		1,008,538	648,285	168,402	156,593	338,158	42,193	2,362,169
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**SCHEDULE E**  
**Material Permits**

Permits required for the construction and operation of the NDES, including the following:

- Certificate of Public Convenience and Necessity from BCUC (*Utilities Commission Act*)
- UBC Development Permit for each temporary and permanent building structure, as required
- UBC Building Permit for each temporary and permanent building structure, as required
- UBC Streets and Landscaping Permits for all civil components of the project (DPS, Booster Pump Station, service connections) for each phase of work
- AVED approval of SRWs and 219 Covenants, as required
- Authorizations and permits from the Ministry of Transportation and Infrastructure for utilizing utility corridors and laying infrastructure within the roads, as required
- Authorization from the University Neighbourhood Association for accessing licensed lands, as required
- Authorization from UBC's tenants for accessing leased lands, as required
- BCSA Boiler Installation Permit for all boilers in WTEC, ETEC, Wesbrook Nodal ETS/EC, Stadium Road Nodal ETS/EC and CEP
- BCSA Boiler Operating Permit for all boilers in WTEC, ETEC, Wesbrook Nodal ETS/EC, Stadium Road Nodal ETS/EC and CEP
- Application to BC Hydro for electrical connection for each boiler plant and related permits
- Application to Fortis BC for gas connection for each boiler plant and related permits
- BCSA Registration of the DPS sections that will be pressurized over 160 PSI
- BCSA Registration of heat exchangers, if required
- Any further permits required

**SCHEDULE F**  
**Form of Statutory Right of Way**

**Next Page**

LAND TITLE ACT

**FORM C**

(Section 233)

**Province of  
British Columbia**

**GENERAL INSTRUMENT – PART 1**

*(This area for Land Title Office use)*

1. **APPLICATION:** (Name, address, phone number and signature of applicant, applicant's solicitor or agent)
- 

2. **PARCEL IDENTIFIER(S) AND LEGAL DESCRIPTION(S) OF LAND:**

(PID) (LEGAL DESCRIPTION)

[INSERT] [INSERT]

3. **NATURE OF INTEREST:**

DESCRIPTION	DOCUMENT REFERENCE	PERSON ENTITLED TO INTEREST
SEE SCHEDULE		

4. **TERMS:** Part 2 of this instrument consists of (select only one)

- |                                 |                                     |  |
|---------------------------------|-------------------------------------|--|
| (a) Filed Standard Charge Terms | <input type="checkbox"/>            | D.F. No.                               |
| (b) Express Charge Terms        | <input checked="" type="checkbox"/> | Annexed as Part 2                      |
| (c) Release instrument.         | <input type="checkbox"/>            | There is no Part 2 of this instrument. |

A selection of (a) includes any additional or modified terms referred to in Item 7 or in a schedule annexed to this instrument. If (c) is selected, the charge described in Item 3 is released or discharged as a charge on the land described in Item 2.

5. **TRANSFEROR(S):**

SEE SCHEDULE

6. **TRANSFeree(S):**

CORIX MULTI-UTILITY SERVICES INC. (Inc. No. BC0560353), 1160 – 1188 West Georgia Street, Vancouver, BC V6E 4A2

7. **ADDITIONAL OR MODIFIED TERMS:** N/A

8. **EXECUTIONS(S):** This instrument creates, assigns, modifies, enlarges, discharges or governs the priority of the interest(s) described in Item 3 and the Transferor(s) and every other signatory agree to be bound by this instrument, and acknowledge(s) receipt of a true copy of the filed standard charge terms, if any.

**Execution Date**

Officer

Signature

Y	M	D
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Party(ies)

Signature(s)

**[DEVELOPER/TENANT]**  
by its authorized signatory(ies)

\_\_\_\_\_

Name: \_\_\_\_\_

**OFFICER CERTIFICATION:**

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c. 124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

*LAND TITLE ACT*

**FORM D**

**EXECUTIONS CONTINUED**

---

**Execution Date**

Officer Signature

Y	M	D
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Party(ies) Signature(s)

**CORIX MULTI-UTILITY SERVICES INC.**  
**(Inc. No. BC0560353)**  
by its authorized signatory(ies)

\_\_\_\_\_

Name: \_\_\_\_\_

**OFFICER CERTIFICATION:**

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c. 124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

**LAND TITLE ACT  
FORM D  
EXECUTIONS CONTINUED**

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	<b>Execution Date</b>				
	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; text-align: center; vertical-align: top;">Y</td> <td style="width: 33%; text-align: center; vertical-align: top;">M</td> <td style="width: 33%; text-align: center; vertical-align: top;">D</td> </tr> </table>	Y	M	D	
Y	M	D			
Officer Signature  _____		Party(ies) Signature(s)  <b>As to Priority:</b> <b>[DEVELOPER'S/TENANT'S BANK]</b> by its authorized signatory(ies)  _____ Name:			
Officer Signature  _____		<b>As to Priority:</b> <b>[Such other parties that need to grant priority, if any]</b> by its authorized signatory(ies)  _____ Name:			

**OFFICER CERTIFICATION:**

Your signature constitutes a representation that you are a solicitor, notary public or other person authorized by the *Evidence Act*, R.S.B.C. 1996, c. 124, to take affidavits for use in British Columbia and certifies the matters set out in Part 5 of the *Land Title Act* as they pertain to the execution of this instrument.

**LAND TITLE ACT  
FORM E  
SCHEDULE**

---

ENTER THE REQUIRED INFORMATION IN THE SAME ORDER AS THE INFORMATION MUST APPEAR ON THE FREEHOLD TRANSFER FORM, MORTGAGE FORM OR GENERAL DOCUMENT FORM.

3. NATURE OF INTEREST:\*

*DESCRIPTION*

*DOCUMENT REFERENCE*  
*(page and paragraph)*

*PERSON ENTITLED TO*  
*INTEREST*

Statutory Right of Way over  
leased premises (see Lease No.  
\_\_\_\_\_)

Entire Instrument

Transferee

Section 219 Covenant over leased  
premises (see Lease No.  
\_\_\_\_\_)

Page \_\_\_\_\_, Paragraph \_\_\_\_\_

Transferee

Priority Agreement granting priority  
over Mortgage ▼ and Assignment  
of Rents ▼

Page \_\_\_\_\_, Paragraph \_\_\_\_\_

Transferee

[Additional Priority Agreement, if  
necessary]

Page \_\_\_\_\_, Paragraph \_\_\_\_\_

Transferee

5. TRANSFEROR(S):\*

**[insert name of Developer/Tenant under the applicable ground lease]** [address]

**[insert name of Developer's/Tenant's Bank, and such other parties that need to grant priority,  
if any]** [address]  
(as to Priority)

## STATUTORY RIGHT OF WAY and SECTION 219 COVENANT

- BETWEEN:

**[insert name/address of Developer/Tenant  
under the applicable ground lease]**

(the “**Grantor**”)

- AND:

**CORIX MULTI-UTILITY SERVICES INC.**

(Inc. No. BC0560353)  
1160 – 1188 West Georgia Street  
Vancouver, British Columbia  
V6E 4A2

(the “**Grantee**”)

AND:

**THE UNIVERSITY OF BRITISH COLUMBIA**

2017 Wesbrook Mall  
Vancouver, British Columbia  
V6E 4A2

(“**UBC**”)

- WHEREAS:

- A. The Grantor as lessee has entered into a ground lease (the “**Lease**”) with UBC as lessor in respect of the Grantor’s development of the Lands (as herein defined) which ground lease is registered in the Lower Mainland Land Title Office under No. **[insert]**;
- B. The Lands are located within the the Vancouver campus of The University of British Columbia (the “**UBC Campus**”);
- C. The Grantee owns and operates a centralized neighbourhood district energy service (the “**NDES**”) to provide thermal energy for space heating and domestic hot water (“**Thermal Energy**”) to, *inter alia*, the Grantor’s development on the Lands;
- D. The right of way granted under this Agreement is necessary for the operation and maintenance of the Infrastructure (as herein defined) and the provision of Energy Services (as herein defined) to, *inter alia*, the Grantor’s development on the Lands; and
- E. The Grantor has agreed to grant the Grantee a covenant against the Grantor’s leasehold interest in the Lands in respect of the provision of Energy Services (as herein defined) to the Grantor’s development on the Lands under Section 219 of the *Land Title Act* (British Columbia).

- THEREFORE in consideration of the premises, the terms and conditions herein contained, ONE DOLLAR (\$1.00) now paid by the Grantee to the Grantor and other good and valuable consideration, the receipt and sufficiency whereof are hereby acknowledged by the Grantor, the parties agree as follows:

1. Definitions. In this Agreement:

- (a) “**Building**” means the building(s) developed or to be developed by the Grantor on the Lands.
- (b) “**Business Day**” means any day that is not a Saturday, Sunday or a statutory holiday in British Columbia.
- (c) “**Energy Services**” means the provision of Thermal Energy via the Infrastructure.
- (d) “**Fees and Charges**” means all fees and charges established by the Grantee in accordance with Section 4 hereof, as amended and in effect from time to time and approved by the British Columbia Utilities Commission.
- (e) “**Grantee’s Representatives**” means any person who is a Related Person to the Grantee and includes any officer, director, employee, agent, contractor, subcontractor, consultant or advisor of either the Grantee or any person who is a Related Person to the Grantee.
- (f) “**Infrastructure**” means, collectively, the Distribution System, the Energy Transfer Station and the Service Connection, and for such purposes:
  - (i) “**Distribution System**” means, collectively, the system of water pipes, fittings and ancillary components connecting the Grantee’s physical, central thermal energy plant for certain developments within the UBC Campus (including without limitation, the Grantor’s development on the Lands) to the Service Connection;
  - (ii) “**Energy Transfer Station**” means the separate heat exchangers for space heating and domestic hot water (excluding domestic hot water storage tanks), energy meter including temperature sensors and flow meter, control panel and all pipes, fittings and other associated equipment which control the transfer, and measure Thermal Energy from the Distribution System, on the one hand, to the system of water pipes and heat and hot water delivery and storage equipment installed or to be installed by the Grantor in the Building; and
  - (iii) “**Service Connection**” means the system of water pipes and all ancillaries and fittings necessary to connect the Building to the Distribution System via the Energy Transfer Station.
- (g) “**Lands**” means those lands and premises defined in Item 2 of the Form C Instrument General Part 1 of which this Agreement forms part.
- (h) “**person**” means an individual, corporation, body corporate, partnership, joint venture, association, society or unincorporated organization or any trustee, executor, administrator or other legal representative.
- (i) “**Related Person**”, in respect of any person, means:



- (i) any affiliate of such person, within the meaning of the *Business Corporations Act* (British Columbia) or the *Canada Business Corporations Act* (Canada);
- (ii) any associate of such person, within the meaning of *Canada Business Corporations Act* (Canada) or the *Securities Act* (British Columbia); and
- (iii) any partnership, including a limited partnership, in which such person is a partner.

2.0 Statutory Right of Way. Pursuant to Section 218 of the *Land Title Act*, the Grantor hereby grants to the Grantee, for and until the expiry of the term of the Lease, a full and free uninterrupted statutory right of way over the Grantor's leasehold interest in the Lands (the "**Statutory Right of Way Area**"), for the Grantee and the Grantee's Representatives to enter onto the Statutory Right of Way Area at any time and from time to time to:

- (a) construct and install (including without limitation, excavate for such purposes), inspect, maintain, operate, repair, replace and remove the Infrastructure or any portion thereof within or on the Statutory Right of Way Area, including within the Building located on the Statutory Right of Way Area;
- (b) make and remove the Infrastructure service connections and connect and disconnect the Infrastructure service lines;
- (c) clear the Statutory Right of Way Area of any obstructions, including without limitation and to the extent applicable, trees or other vegetation, buildings, structures, foundations, pavements, improvements or obstructions which interfere with any of the rights granted to the Grantee herein;
- (d) install marking post(s) to mark the location of the Infrastructure or any portion thereof;
- (e) generally to do all acts necessary or incidental to the foregoing or to the business of providing Energy Services to the Building on the Lands and operating, maintaining and repairing the Infrastructure within or on the Statutory Right of Way Area; and
- (f) exercise any of the Grantee's other rights set out in this Agreement.

The Grantee agrees to act reasonably when exercising such rights and to use all reasonable efforts to minimize any disruption to the Grantor in connection with the exercise by the Grantee and the Grantee's Representatives of such rights.

2.1 Duties of Grantee. The Grantee covenants and agrees with the Grantor that:

- (a) the Grantee will undertake all activities in connection with the Infrastructure pursuant to this Agreement in a good and workmanlike manner and so as to cause no unnecessary damage or disturbance to the Lands or the Building;
- (b) when exercising its rights under this Agreement, the Grantee will minimize any interruption or disruption to the operations and activities of the Grantor on the Lands and in the Building; and
- (c) except in the case of an emergency situation (in which case no notice will be required), the Grantee will give the Grantor reasonable notice prior to commencing any work on the Lands in relation to the Infrastructure.

- 2.2 Covenants of the Grantor. The Grantor covenants and agrees with the Grantee that the Grantor will:
- (a) allow the Grantee to trim or, if necessary, cut down any tree or other growth on the Lands which in the opinion of the Grantee constitutes or may constitute a danger or obstruction to those using the Lands as permitted herein or to the Infrastructure;
  - (b) permit the Grantee to bring on to the Lands all material and equipment, including motor vehicles, it requires in order to exercise any of the rights granted to the Grantee in this Agreement;
  - (c) permit the Grantee for the period during which the Grantee accepts this grant but not beyond the day if ever on which the Grantee releases this grant, to peaceably hold and enjoy the rights hereby granted; and
  - (d) execute all further documents or things whatsoever for the better assuring unto the Grantee of the statutory right of way hereby granted.
3. Section 219 Covenant. The Grantor acknowledges, covenants and agrees, pursuant to Section 219 of the *Land Title Act*, with the Grantee:
- (a) not to do or knowingly permit to be done on or within the Statutory Right of Way Area, including within the Building or any portion thereof located on the Statutory Right of Way Area, anything which interferes with or damages the Infrastructure or impairs the operation or otherwise adversely impacts the Infrastructure and the provision of Energy Services or creates any hazard. Such acts include, but are not limited to, the acts referred to in this Section 3;
  - (b) not to make, place, erect, operate, use or maintain upon the Statutory Right of Way Area any building, structure, foundation, pavement, excavation, well, culvert, swimming pool, open drain or ditch, pond, pile or material, obstruction, equipment or thing, or to plant any vegetation which:
    - (i) interferes with or endangers the Infrastructure or the installation, construction, operation, maintenance, repair, removal, or replacement of the Infrastructure;
    - (ii) materially obstructs access by the Grantee or the Grantee's Representatives to the Infrastructure; or
    - (iii) creates any hazard by its operation, use, maintenance or existence on the Statutory Right of Way Area;
  - (c) not, and will not permit any other person to diminish nor increase the soil cover over the Infrastructure or any portion thereof installed on, under or across the Lands, including without limiting the foregoing, will not construct or permit the construction of any open drains or ditches above, alongside or across any of the Infrastructure installed on, under or across the Lands, without the prior written consent of the Grantee;
  - (d) not, and will not permit any other person to erect, place or install any pipe or other conduit within a distance of three (3) meters of the Infrastructure or any portion thereof, if such pipe or conduit or the material conveyed therein is reasonably likely to be vulnerable to damage or reduced operability or effectiveness from freezing, unless

measures reasonably satisfactory to the Grantee are taken to adequately protect the pipe or conduit;

- (e) not to carry out blasting on or next to the Statutory Right of Way Area without the prior written consent of the Grantee and if such consent is granted, only in accordance with the written requirements of the Grantee;
  - (f) not to itself supply or install or allow any other person to install works similar to the Infrastructure or any other system that would supply Energy Services or domestic hot water and/or space heating to the Building or any portion thereof located on the Lands; and
  - (g) to act reasonably and cooperate with the Grantee in connection with the provision by the Grantee of Energy Services to the building(s) on the Lands and, without limiting the generality of the foregoing, the Grantor will ensure that the Grantee has reasonable access to the Infrastructure and any part thereof on the Statutory Right of Way Area at all times.
4. Fees and Charges. The Grantee will establish a schedule of Fees and Charges which will be payable by the Grantor and others in connection with the Grantee's provision of Energy Services, as approved from time to time by the British Columbia Utilities Commission. The Grantor will pay all taxes and charges payable on all such Fees and Charges.
  5. Payment. The Grantor covenants and agrees with the Grantee that the Grantor and all persons deriving title from the Grantor will at all times pay to the Grantee the Fees and Charges (and any interest thereon) from time to time established by the Grantee and approved by the British Columbia Utilities Commission at the times and in the manner required for payment.
  6. Timing of Payment / Late Charges. The Fees and Charges will be payable by the Grantor in accordance with the servicing/customer agreement to be entered into between the Grantor and the Grantee . If any such amount is not paid when due, the Grantor will be required to pay any late payment charge established by the Grantee in accordance with such agreement.
  7. Certificate of Payment. Within 10 days of any written request by the Grantor, the Grantee will issue a written certificate to the Grantor or any lender to or purchaser from the Grantor, certifying the amount outstanding under this Agreement as of the date of the certificate. The Grantor will be required to pay in advance the Grantee's reasonable fee for the issuance of any such certificate.
  8. Application for Service. The Grantor will connect each Building to the Infrastructure and will apply in advance to the Grantee for any connection to the Grantee's Infrastructure, using the form established by the Grantee for such purpose, and the Grantor will provide the Grantee with any information and documentation required by the Grantee in connection therewith.
  9. Suspension of Service. The Grantee will have the right to temporarily suspend the provision of Energy Services to the Building in order to carry out any repairs or improvements in respect of the Grantee's Infrastructure, as determined by the Grantee in its absolute discretion, or in the event of fire, flood or other sudden emergency, provided that any interruption of service will be minimized as much as reasonably practicable. Whenever reasonably practicable, the Grantee will give notice of any such suspension and will restore service as soon as possible but in no event shall the Grantee be liable to the Grantor for any costs, losses or damages that the Grantor might suffer during the suspension of service.

10. No Requirement to do Works, pay Fees, etc. This Agreement does not in any way require the Grantee to provide any works or services whatsoever to the Lands or the Building, to construct, install, inspect, clean, maintain, repair, replace or remove any works or improvements whatsoever within or in respect of the Lands or the Building, or to pay any fee or other amount whatsoever in connection with this Agreement, unless the Grantee is expressly required to do so under the terms of this Agreement or under any other agreement in writing.
11. Subdivision / Effect of Agreement. This Agreement and the rights herein granted will run with the Grantor's leasehold interest in the Lands and each part into which the Lands may be subdivided, whether by subdivision plan, strata plan or otherwise howsoever, and the term "Grantor" includes the owner of each leasehold interest in each subdivided portion of the Lands and the successors in title thereof. Without limiting the foregoing, any amount payable hereunder will run with the Grantor's leasehold interest in the Lands and each part into which the Lands may be subdivided. Notwithstanding any other provision of this Agreement, in the event that the Lands are subdivided by means of a leasehold strata plan pursuant to the *Strata Property Act*:
  - (a) the "Grantor" under this Agreement shall be the strata corporation created by the filing of such strata plan and the individual owners of the strata lots created by such strata plan shall have no obligations or liabilities under this Agreement other than as members of the strata corporation;
  - (b) the statutory right of way and section 219 covenant granted pursuant to this Agreement are intended to apply to and burden only the common property created by such strata plan and not at any time to burden any strata lot or the owner of any strata lot; and
  - (c) upon the request of and at the expense of the Grantor or any strata lot owner, the Grantee will execute and deliver in registrable form a discharge of this Agreement from any such strata lot.
12. Application to Strata Corporation. Without limiting anything set out in this Agreement, any strata corporation created in respect of any portion of the Lands will be a "Grantor" and will be bound by all of the terms and conditions of this Agreement and any common property created by any leasehold strata plan in respect of any portion of the Lands will remain as part of the "Lands" and will be subject to this Agreement.
13. Assessment of Strata Corporation. If at any time the Lands or any portion thereof are stratified by a leasehold strata plan, the Grantee may levy the Fees and Charges to the strata corporation created in respect of such strata plan and the strata corporation will pay the Fees and Charges so levied.
14. Grantee's Remedies. The Grantor hereby agrees that:
  - (a) The Grantee may, after having given the Grantor 48 hours prior written notice, discontinue providing Energy Services to the Building and/or to the Grantor if the Grantor:
    - (i) fails to fully pay for any Energy Services provided to the Building on or before the due date for such payment; or
    - (ii) fails to provide or pay by the applicable date required any security deposit, equivalent form of security or guarantee or any requisite increase thereof;

- (b) The Grantee may, without having to give the Grantor notice, discontinue providing Energy Services to the Building and/or to the Grantor, if the Grantor:
- (i) refuses to provide reference information and identification acceptable to the Grantee when applying for service or at any subsequent time on request by the Grantee;
  - (ii) breaches the terms and conditions upon which service is provided by the Grantee, including without limitation, the terms and conditions of the applicable customer agreement;
  - (iii) breaches any material term or condition of this Agreement;
  - (iv) has defective pipes, appliances or service connections and fittings in any part or parts of the Building;
  - (v) uses the provided Thermal Energy in a manner that, in the opinion of the Grantee, may:
    - a. lead to a dangerous situation, or
    - b. cause undue or abnormal fluctuations in the temperature of the Infrastructure;
  - (vi) fails to make modifications or additions to the Grantor's equipment as required by the Grantee to prevent the danger or control the fluctuations described in sub-paragraph (v) above;
  - (vii) negligently or fraudulently misrepresents to the Grantee its use of Thermal Energy or the Thermal Energy load requirements of, or Thermal Energy volume consumed within and by, the Building;
  - (viii) terminates or causes the termination of the applicable customer agreement; or
  - (ix) stops consuming Thermal Energy in the Building,

and the Grantee will not be liable for any loss, injury or damage suffered by the Grantor by reason of the discontinuation of service as contemplated in Sections 14(a) and 14(b) above.

- (c) In addition to the above provisions for enforcement of the payments due under this Agreement, the Grantee may, at its option, bring or take legal action against the Grantor for payment in any court of competent jurisdiction.
- (d) The Grantor will be liable and pay for all of the Grantee's costs in connection with the enforcement of this Agreement, including, without limitation, all legal fees and disbursements on a solicitor and own client basis.

15. Injunctive Relief. The Grantor acknowledges and agrees that, without limiting any other right or remedy of the Grantee, the Grantee may obtain from a court of competent jurisdiction injunctive relief in respect of any breach or anticipated breach by the Grantor of any of the Grantor's duties or obligations under this Agreement.

16. Remedies Cumulative. All rights and remedies of the Grantee under this Agreement are cumulative and are in addition to and do not exclude any other right or remedy provided in this

Agreement or otherwise allowed by law. All rights and remedies of the Grantee may be exercised concurrently, without the Grantee making any election, but will not give rise to duplicative liability of the Grantor.

17. Amendment. Except as expressly set out herein, this Agreement may only be amended by an agreement in writing signed by the Grantee and the Grantor. No modification or amendment of any provision of this Agreement will be inferred from anything done or omitted by any of the parties except by an express agreement in writing duly executed and delivered by all of the parties.
18. No Waiver. No condoning, excusing or overlooking of any default nor any delay in proceeding or failure to proceed in the case of any default under this Agreement will operate as a waiver of or otherwise affect in any way any rights or remedies under this Agreement or at law. No waiver of any rights or remedies will be inferred from anything done or omitted to be done by any party except by an express waiver in writing. No waiver in respect of any matter or thing will operate as a waiver in respect of any other matter or thing.
19. Governing Law. This Agreement will be governed by and interpreted in accordance with the laws of in force in the Province of British Columbia, which is the proper law hereof, and the courts of British Columbia will have the exclusive jurisdiction with respect to all matters arising under or in respect of this Agreement.
20. Time of the Essence. Time is of the essence of this Agreement and will remain of the essence notwithstanding any extension of time given under or in connection with this Agreement.
21. Notices. All notices under this Agreement must be given in writing and delivered in accordance with this provision. The parties agree that:
  - (a) any notice to the Grantor may be sent to the Grantor's address according to Land Title Office records in respect of the Grantor's leasehold interest in the Lands or delivered to the Grantor; and
  - (b) all notices to the Grantee must be sent to the Grantee at the address set out above or such other address as the Grantee may notify the Grantor in accordance with the terms hereof at any time and from time to time.

If any portion of the Lands is stratified by a strata plan (including a bare land strata plan), any notice in respect of such stratified lands will be sufficiently given if given to the strata corporation and it will not be necessary to give notice to all of the owners of strata lots within the strata plan. Notices will be sent by personal delivery, electronic transmission (including by fax) or by registered mail. Notices will be deemed to have been delivered (i) upon delivery, if delivered by hand, (ii) upon receipt, if sent by electronic transmission, or (iii) on the fifth Business Day after the mailing thereof, if sent by registered mail from a post office in British Columbia. In any court proceedings, any notice may be given in accordance with any requirements for service provided for pursuant to the Supreme Court Rules of the Province of British Columbia.

22. Grantee's Licences and Authorizations. The Grantee may grant to any other person a licence or other agreement, authorizing such person to exercise any right granted to the Grantee pursuant to this Agreement.
23. Assignment by Grantee. The Grantee may assign this Agreement provided any such assignee satisfies any requirements set out in Sections 218 and 219 of the *Land Title Act* (British Columbia) and having first obtained any requisite ministerial approval. The Grantor

hereby consents to any such assignment and agrees that upon the assignment of this Agreement by the Grantee, the Grantee will be released from any and all further duties and obligations arising under this Agreement which arise after the time of such assignment.

24. Further Assurances. The Grantor will execute and deliver any further agreement, document or instrument and do and perform any further act or thing as may be required by the Grantee at any time and from time to time in order to evidence or give full force and effect to the terms, conditions and intent of this Agreement.
25. Ownership of Infrastructure. Notwithstanding any degree of annexation or affixation, or rule of law or equity to the contrary, all components of the Infrastructure and additions or extensions thereto will be and remain the property of and vest in the Grantee, and the Grantee may, but shall not be obligated to, remove any or all such all components of the Infrastructure and additions or extensions thereto on termination of this Agreement.
26. Release of Grantor. For greater certainty, no person who has been "Grantor" will be liable for any breach of this Agreement occurring after such person has ceased to be an owner of, or a strata corporation with respect to, a leasehold interest of any part of the Lands.

IN WITNESS WHEREOF the parties hereto have executed and delivered this Agreement by signing on the *Land Title Act* Form C and Form D attached hereto, and in the case of UBC, by signing below.

UBC as the registered owner of the Lands hereby consents to the statutory right of way and section 219 covenant granted pursuant to this Agreement (the "**Grantee's Charges**"). In addition, UBC agrees that the Grantee's Charges are derived from and in respect of the Grantor's leasehold interest in the Lands pursuant to the Lease and in this regard, if such Lease is terminated and/or released and discharged from title to the Lands prior to the expiry of the original term of such Lease, UBC covenants and agrees to:

- (a) use commercially reasonable efforts to cause any replacement ground lease tenant to grant to the Grantee a replacement statutory right of way and section 219 covenant on substantially the same terms and conditions as contained in this Agreement (the "**Replacement SRW**") over such tenant's leasehold interest; or
- (b) if there is no replacement ground lease tenant, to grant to the Grantee, subject to first obtaining any requisite ministerial approval, the Replacement SRW over the Lands,

in the event that the Grantee continues to own and operate the NDES at such time.

## THE UNIVERSITY OF BRITISH COLUMBIA

Per: \_\_\_\_\_  
Authorized Signatory

• **PRIORITY CONSENT**

- For One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged and agreed to by • [Bank] (the “**Chargeholder**”), being the holder of Mortgage • and Assignment of Rents • (collectively, the “**Charges**”), hereby approves and consents to the granting of the Statutory Right of Way and the Section 219 Covenant (collectively, the “**Encumbrances**”) attached, and consents and agrees that the Encumbrances shall be binding upon the Chargeholder’s interest in or charge upon the leasehold interest in the Lands evidenced by Lease No. \_\_\_\_\_ and shall be encumbrances upon such leasehold interest in the Lands in priority to the Charges in the same manner and to the same effect as if the Encumbrances had been granted and registered against such leasehold interest in the Lands prior to the dating, execution and registration of the Charges and the advance of any monies thereunder.

IN WITNESS WHEREOF the Chargeholder has executed this priority agreement by causing its proper officers to sign the *Land Title Act* Form D attached hereto.

• **- END OF DOCUMENT -**



**SCHEDULE G**  
**Form of Licence Agreement – Temporary CEP Site**

**Next Page**

## LICENCE AGREEMENT FOR TEMPORARY ENERGY PLANT

THIS LICENCE AGREEMENT, dated for reference the • day of •, 2014 (the “**Reference Date**”),

BETWEEN:

**THE UNIVERSITY OF BRITISH COLUMBIA**, Room 107, Old Administration Building, 6328 Memorial Road, Vancouver, British Columbia V6T 1Z2

(the “**Licensor**”)

AND:

**CORIX MULTI-UTILITY SERVICES INC.**, Suite 1160 – 1188 West Georgia Street, Vancouver, British Columbia V6E 4A2

(the “**Licensee**”)

WITNESSES THAT WHEREAS:

A. Pursuant to an Infrastructure Agreement made as of •, 2014 between the Licensor and the Licensee (the “**Infrastructure Agreement**”), the Licensee has agreed to develop a neighbourhood district energy utility system (the “**NDES**”) with the aim of phasing in the use of low carbon energy sources to provide thermal energy to customers in various areas of the UBC Campus (as hereinafter defined);

B. The Infrastructure Agreement contemplates that during the first phase of development of the NDES, the Licensee will construct the Temporary Improvements (as hereinafter defined), which will provide thermal energy to the customers of the NDES on a temporary basis pending later development of one or more permanent central energy plants;

C. The parties have identified the Site (as hereinafter defined) as the location within the UBC Campus on which the Temporary Improvements will be situated; and

D. The parties wish to set out the terms and conditions on which the Licensor, as owner of the Site, will permit the Licensee to use the Site for the development, construction, operation and maintenance of the Temporary Improvements;

NOW THEREFORE, in consideration of the mutual covenants herein contained, and other good and valuable consideration, the parties agree as follows:

### 1. DEFINITIONS

The following definitions apply in this Agreement:

- (a) “**BCUC**” means the British Columbia Utilities Commission, or a successor entity;
- (b) “**Business Day**” means any calendar day that is not a Saturday, Sunday or other day recognized as a statutory holiday in British Columbia;
- (c) “**Commencement Date**” means •, 2014;

- (d) “**Complementary Facilities**” means facilities on the UBC Campus such as roadways, parking areas and other improvements which are to be used in connection with the operations of the Licensee and others;
- (e) “**Development Guidelines**” means those guidelines identified from time to time as such by the Municipal Authority Having Jurisdiction for the orderly development and operation of buildings on the UBC Campus or any improvements thereon;
- (f) “**Lands**” means those lands forming a part of the UBC Campus and shown **[in bold outline on the reference plan filed in the Land Title Office under No. ●] [or: in bold black outline on the plan drawing attached as Schedule A]**. The entire parcel of which the Lands form a part is legally described as: ●;
- (g) “**Licence Fee**” means the licence fee payable by the Licensee under Section 4;
- (h) “**Licensee’s Taxes**” means all taxes, fees, levies, charges, assessments, rates, duties and excises which are now or may hereafter be levied, imposed, rated or assessed by any lawful authority relating to or in respect of the business of the Licensee or relating to or in respect of personal property and all business and trade fixtures, machinery and equipment owned or installed by the Licensee on, in or under the Lands including, without limitation, the Temporary Improvements, whether any such amounts are payable at law by the Licensee or by the Licensor and whether such amounts are included by the Taxing Authority in the Taxes;
- (i) “**Licensee’s Utility Services**” has the meaning given to it in Section 2(b)(i);
- (j) “**Municipal Authority Having Jurisdiction**” means The University of British Columbia's Department of Campus & Community Planning in its capacity as regulatory, inspection and permitting authority for the UBC Campus or such other department of The University of British Columbia as becomes responsible for this function from time to time. In the event that the Lands become part of a municipality or the UEL, or any other governing body acquires jurisdiction over the Lands similar to that of municipalities and assumes these functions, that governing body shall become the Municipal Authority Having Jurisdiction;
- (k) “**Municipal Taxes**” means all taxes, rates, and assessments, whether general or specially levied or assessed by the Surveyor of Taxes under the *Taxation (Rural Area) Act* (British Columbia), as amended from time to time, or any legislation substituted therefor, for municipal, rural, school, or other purposes, or levied or assessed by other lawful governmental authority for such purposes in respect of the Lands or the Temporary Improvements, whether therein referred to as “Property Taxes”, “Municipal Taxes”, “Taxes” or by some other term and which are attributable to the Lands or the Temporary Improvements, and shall also include any other taxes which are imposed in substitution of the foregoing Municipal Taxes, the whole as finally determined for each applicable period of time as a result of an assessment, appeal, or judicial review and shall include any legal fees or appraiser's fees incurred by the Licensee in respect of such final determination thereof;
- (l) “**NDES**” has the meaning given to it in Recital A;
- (m) “**Reference Date**” has the meaning given to it above on page 1 of this Agreement;
- (n) “**Sales Taxes**” means any and all taxes, fees, charges, assessments, rates, levies, duties and excises (whether characterized as sales taxes, purchase taxes, value added taxes, goods and services taxes, harmonized sales taxes or any other form of tax) which are imposed on the Licensee or the Licensor or for which the Licensor or Licensee is obliged to pay, or to collect

from the Licensee, and which are levied, rated or assessed on the act of entering into this Agreement or otherwise on account of this Agreement, on the use or the occupancy of the Lands or any portion thereof or the Temporary Improvements, on the Licence Fee or any portion of the Licence Fee and includes all such taxes, fees, charges, assessments, rates, levies, duties and excises with respect to:

- (i) any or all amounts paid or payable by the Licensor for goods and services, repairs, maintenance, real estate taxes, insurance, and all other outlays and expenditures (including capital expenditures) for and in connection with the Lands;
- (ii) any or all amounts paid or payable by the Licensee pursuant to this Agreement, including the Licence Fee; and
- (iii) this Agreement or services or goods supplied or provided or deemed to have been supplied or provided by the Licensor or which the Licensor is deemed responsible to provide in accordance with the terms of this Agreement or the consideration for such goods and services;

whether in each case characterized as goods and services tax, sales tax, multi-stage sales tax, value added tax, consumption tax, harmonized sales tax or any other tax, levy, duty or assessment; provided however, that Sales Taxes will exclude income tax under Part I of the *Income Tax Act* (Canada), the Licensee's Taxes and the Taxes;

- (o) "**Services Levy**" means the charge levied by the Taxing Authority against or in respect of that part of the Lands used by the Licensee pursuant to this Agreement or the Temporary Improvements, for the use, provision, maintenance and repair, from time to time, of certain services, sometimes provided by municipalities or other public authorities, such as connections and lines for water, sewer, telephone, electricity and gas, the use, provision, maintenance and repair, from time to time, of street lighting, sidewalks, curbs, gutters, roads, landscaping, etc.; and for the use of the Complementary Facilities, all of which are provided by The University of British Columbia to all tenants, licensees or other occupiers of UBC Campus lands;
- (p) "**Site**" means that part of the Lands shown in bold red outline on the plan drawing attached as Schedule A;
- (q) "**Taxes**" means all taxes, fees, levies, charges, assessments, rates, duties and excises which are or may hereafter be levied, imposed, rated or assessed upon or with respect to the Lands or any part of the Lands used by the Licensee pursuant to this Agreement or the Temporary Improvements, by the Taxing Authority. Without restricting the generality of the foregoing, Taxes will include all:
  - (i) Municipal Taxes, general and special assessments and capital taxes, and business taxes of the Licensee with respect to that part of the Lands used by the Licensee pursuant to this Agreement or the undertaking of the Licensee thereon;
  - (ii) taxes, fees, levies, charges, assessments, rates, duties and excises for transit, housing, schools, police, fire, sewer or other governmental services or for purported benefits to that part of the Lands used by the Licensee pursuant to this Agreement or the Temporary Improvements;
  - (iii) local improvement taxes, service payments in lieu of taxes, and taxes, fees, levies, charges, assessments, rates, duties and excises, however described, that may be levied, rated or assessed as a substitute for, or as an addition to, in whole or in part, any property taxes or local improvement taxes; and

- (iv) costs and expenses including legal fees and other professional fees and interest and penalties on deferred payments, incurred by the Licensee in contesting or appealing any taxes, assessments, rates, levies, duties, excises, charges or other amounts as aforesaid;

but Taxes will exclude income tax under Part I of the *Income Tax Act* (Canada), the Licensee's Taxes and the Sales Taxes;

- (r) "**Taxing Authority**" means any duly constituted federal, provincial, municipal or other authority that is authorized pursuant to statute or contract to impose taxes, rates, assessments, or charges, or other charges in lieu thereof, on, upon or in respect of the Lands or the Temporary Improvements and includes the Municipal Authority Having Jurisdiction, in its capacity as regulator of the Lands, with regard to the Services Levy, whether or not now customary or in the contemplation of the parties on the Reference Date;
- (s) "**Temporary Improvements**" has the meaning given to it in Section 2(a);
- (t) "**Term**" means the term of years and days as set out in Section 3, plus any extensions or renewals thereof in accordance with Section 19;
- (u) "**UBC Campus**" means the lands within the boundaries described in the Point Grey Campus Lands Regulation (195/2010);
- (v) "**UBC Land Use Rules**" means the plans, policies, handbooks, guidelines, rules, regulations, procedures and any other documents no matter how they are titled governing land use and the construction, renovation, maintenance, repair and replacement of structures and buildings on the UBC Campus in the form adopted by The University of British Columbia's Board of Governors from time to time, and all permits that are required to be issued by the Municipal Authority Having Jurisdiction in connection with the construction, renovation, maintenance, repair and replacement of the Temporary Improvements by the Licensee from time to time during the Term; and
- (w) "**UEL**" means the administration set up pursuant to the *University Endowment Land Act*, R.S.B.C., 1996, Ch. 496 and amendments thereto for the purpose of administering all land included within the definition of land set out in Section 1 of the *University Endowment Land Act*, which lands can be generally described as being situate in the areas east of Wesbrook Mall and north of Agronomy Road.

## 2. GRANT OF LICENCE

The Licensor hereby grants to the Licensee, and the Licensee hereby accepts from the Licensor:

- (a) an exclusive licence for the Licensee and its employees, contractors, invitees, licensees, permittees, servants and agents to use the Site during the Term for the purposes of constructing, maintaining, repairing, replacing and operating a temporary high efficiency natural gas boiler facility and all ancillary equipment and machinery required in connection therewith, including without limitation any gas, electrical, water and other utility and service connections, and connecting the same to the NDES (collectively, the "**Temporary Improvements**"); and
- (b) a non-exclusive license for the Licensee and its employees, contractors, invitees, licensees, permittees, servants and agents, subject to any rights over or in respect of the Lands granted by the Licensor prior to the Reference Date to any lessee, licensee or permittee of the Licensor, to use, enter and be on and pass and re-pass over and along such portions of the Lands as they reasonably require access to in connection with the exercise of the Licensee's rights under

Section 2(a) above at their will and pleasure at all times with or without vehicles, equipment and machinery for the purposes of:

- (i) constructing, installing, replacing, maintaining, repairing and operating any gas, electrical, water and other utility and service lines, pipes, conduits and connections on the Lands that are reasonably required by the Licensee in connection with the operation of the Temporary Improvements (collectively, the “**Licensee’s Utility Services**”) and in this regard, the Licensee agrees to obtain the approval of the Licensor, acting reasonably, to the location of the Licensee’s Utility Services prior to the installation thereof by the Licensee; and
- (ii) access to and egress from the Site to any of the Licensee’s Utility Services that are located on the Lands;

all subject to the terms and conditions set out in this Agreement.

The Licensee will also be entitled, in common with all others entitled thereto, to the enjoyment, for itself, its employees, contractors, invitees, licensees, permittees, servants and agents of the right, privilege and licence over the common roadways and walkways on the UBC Campus for the purposes of access and egress to and from the Lands. The Licensor may alter the boundaries or change the location of any of such roadways and walkways from time to time so long as reasonably adequate access to and egress from the Lands is provided.

### **3. TERM**

The term of this Agreement shall, subject to renewal in accordance with Section 19, be for a period of five (5) years commencing on the Commencement Date, unless earlier terminated in accordance with the terms of this Agreement.

The Licensor acknowledges and agrees that this Agreement shall not be effective unless all Material Permits (as that term is defined in the Infrastructure Agreement) have been issued to the satisfaction of the Licensee (acting reasonably). This condition is for the exclusive benefit of the Licensee and may be waived in whole or in part by the Licensee by notice to the Licensor.

### **4. LICENCE FEE**

The Licensee shall throughout the Term pay to the Licensor at the Licensor’s place of business, or at such other place as the Licensor may specify in writing from time to time, in the lawful money of Canada, a licence fee (the “**Licence Fee**”) in the amount of \$● per annum, plus applicable Sales Taxes. The Licence Fee shall be payable in advance on the first day of each and every year during the Term commencing on the Commencement Date.

### **5. TEMPORARY IMPROVEMENTS**

The Licensee acknowledges and agrees that the Licensee is responsible for constructing, installing, maintaining, repairing, replacing and removing, all at the Licensee’s sole cost and expense, the Temporary Improvements. The Temporary Improvements will at all times remain the property of the Licensee notwithstanding any rule of law or equity to the contrary.

### **6. UTILITIES**

The Licensee will be solely responsible, all at the Licensee’s sole cost and expense, for making all arrangements for, and for constructing, installing, maintaining, repairing, replacing and removing, all requisite Licensee’s Utility Services, and for paying all costs related to the use thereof and consumption of all applicable services. The Licensor shall have no responsibility whatsoever in respect of the Licensee’s Utility Services.

## **7. REPAIR**

The Licensee shall, all at the Licensee's sole cost and expense:

- (a) maintain the Site, the Temporary Improvements and the Licensee's Utility Services in good and substantial repair;
- (b) forthwith repair any damage to the Lands resulting from the exercise of the Licensee's rights under Section 2 such that the Lands are restored to the condition they were in prior to the exercise of such rights;
- (c) keep the Site and the Temporary Improvements clean, tidy and free of debris; and
- (d) install on the Site any landscaping and hoarding that is required by the Licensor, acting reasonably, to mitigate the visual impact of the Temporary Improvements.

## **8. NO OBLIGATION ON LICENSOR**

The Licensee acknowledges and agrees that the Licensor has no obligation to carry out any work whatsoever on or in respect of the Lands. Without limiting the generality of the foregoing, the Licensor shall not be required to provide any security of any sort whatsoever in respect of the Lands, the Temporary Improvements or the Licensee's Utility Services or to take any steps whatsoever, during any weather-related event, to ensure that the Licensee can gain access to the Lands, the Temporary Improvements or the Licensee's Utility Services.

## **9. INSURANCE**

- (a) The Licensee will obtain and keep in force throughout the Term All Risk property insurance including coverage for flood and earthquakes and such other coverage as the Licensor may reasonably require, on all the Temporary Improvements. The amount of such insurance will be the full replacement value of all the Temporary Improvements.
- (b) The policy(ies) of insurance provided for in Section 9(a) will name the Licensor as an additional named insured and will be payable to the Licensor and the Licensee, as their respective interests may appear, and any major loss adjustment will require the written consent of each of them with an interest therein. The parties hereto agree that the proceeds paid by any such insurance policies will be applied to reconstruct or replace the Temporary Improvements.
- (c) Throughout the Term the Licensee will obtain and keep in force general liability insurance fully insuring against liability of the Licensee with respect to the Lands and the Temporary Improvements or arising out of the maintenance, use or occupation thereof. Such policy will be in an amount of not less than \$5 million per occurrence at the Commencement Date, and thereafter in such amounts as the Licensor may reasonably require from time to time. The general liability policy will name the Licensor, its officers, directors, trustees, governors, employees and agents as additional named insureds, will contain a cross liability clause and broad form coverage for contractual liability and such insurance will be primary in respect of claims and will not participate in or be excess over any insurance carried by the Licensor.
- (d) The Licensee will obtain and keep in force a standard automobile policy including standard contractual liability endorsement against claims for bodily injury, death and damage to property, in an amount of not less than \$2 million per occurrence for all motor vehicles, owned and non-owned, operated on the UBC Campus.
- (e) All of the insurance provided for in Sections 9(a) and 9(c) and all renewals thereof will be issued by such reputable and duly qualified insurers and in such form and substance as are

approved by the Licensor, such approval not to be unreasonably withheld. Each policy provided for in Sections 9(a) or 9(c) will expressly provide that the policy will not be cancelled or altered without 60 days' prior written notice to the Licensor, and that all rights of subrogation against the Licensor are waived. Following the issue and each renewal thereof, a certificate of insurance will be delivered to the Licensor, if requested. The Licensee shall also deliver proof of payment of premiums for insurance to the Licensor if requested.

- (f) The Licensee waives as against the Licensor, its officers, directors, trustees, governors, employees and agents each claim and demand of every nature whatsoever for damage, loss or injury to the Lands, the Temporary Improvements and property of the Licensee, its invitees and licensees which will be caused by or result from fire or other perils, events or happenings which ought to have been covered by insurance, or is covered by insurance pursuant to this Agreement, whether or not such claim is covered by insurance. The Licensee hereby releases the Licensor, its officers, directors, trustees, governors, employees and agents from all liability with respect to such damage, loss or injury, except to the extent such damage, loss or injury is caused by the negligence or wilful misconduct of the Licensor or those for whom the Licensor is responsible at law.

## **10. COMPLIANCE WITH LAWS; GENERAL CONDUCT**

- (a) The Licensee will observe, fulfil, comply with and abide by all federal, provincial, municipal and other statutes, ordinances, laws, bylaws, orders, plans, policies, handbooks, guidelines, rules, regulations and procedures affecting the UBC Campus or the Lands, the Temporary Improvements, the Licensee's Utility Services or any activity or condition on or in the UBC Campus or the Lands, the Temporary Improvements or the Licensee's Utility Services including, without limitation, the British Columbia Building Code, the UBC Land Use Rules and the Development Guidelines and any other applicable policies, rules and regulations of The University of British Columbia (whether in its capacity as the Municipal Authority Having Jurisdiction or as Licensor) adopted from time to time and published.
- (b) The Licensee will obtain, all at the Licensee's sole cost and expense, all necessary permits, licences, consents and approvals, including without limitation a preliminary plan approval from the Municipal Authority Having Jurisdiction, and will provide copies of all of the same to the Licensor, before the Licensee commences construction and installation of the Temporary Improvements or the Licensee's Utility Services on the Lands. Notwithstanding the foregoing, the Licensor will provide all assistance reasonably requested by the Licensee in connection with the Licensee's application for any such permits, licences, consents or approvals for the construction and installation of the Temporary Improvements or the Licensee's Utility Services.
- (c) The Licensee will construct the Temporary Improvements and the Licensee's Utility Services in accordance with the plans and specifications for the Temporary Improvements and the Licensee's Utility Services approved by the Municipal Authority Having Jurisdiction.
- (d) The Licensee will not carry on or perform or suffer or permit to be carried on or performed or suffered on, in or in respect of the Lands, the Temporary Improvements or the Licensee's Utility Services, any practice or act or engage in any activity which is or becomes a nuisance or menace or which in any way adversely affects the Lands, the UBC Campus or any part thereof or is or becomes a hazard or nuisance to any person using or occupying the Lands, the UBC Campus or any part thereof. Notwithstanding the foregoing, the Licensor acknowledges that the Licensee intends to use the Site for the purpose of constructing and operating the Temporary Improvements and the Licensee's Utility Services, and that such use may result in noise, odour and photopollution; accordingly, the Licensor agrees that any such noise, odour and photopollution related to such permitted use will not be a breach of this Section 10(d).



## 11. RELEASE AND INDEMNITY

- (a) None of the Licensor or any of the members of its board of governors, its directors, officers, employees, agents, invitees, successors or assigns shall be liable directly or indirectly for:
  - (i) any loss of or damage to the Temporary Improvements, the Licensee's Utility Services or any chattel or property of any kind to whomsoever belonging at any time on or used in connection with the Lands pursuant to this Agreement or otherwise in connection with the Licensee's exercise of its rights hereunder; or
  - (ii) any loss of life or injury to persons in, upon or about the Lands during the Term;

save and except to the extent such loss or damage is caused or contributed to by the negligence or wilful misconduct of the Licensor or those for whom the Licensor is responsible at law. Without limiting the foregoing, the Licensor will indemnify, defend, and save harmless the Licensee and its affiliates (within the meaning ascribed to that term in the *Business Corporations Act* (British Columbia)) and their respective officers, directors, shareholders, employees, contractors, agents, successors and permitted assigns from and against any and all losses, liabilities, damages, costs, expenses, causes of action, claims, suits, actions and judgments including all costs of defending or denying the same, arising from or in connection with, and to the extent of, any negligence or wilful misconduct perpetrated by the Licensor or any person for whom it is in law responsible.

- (b) The Licensee shall defend, indemnify and save harmless the Licensor, the members of its board of governors and its directors, officers, employees, agents, invitees, successors and assigns from and against any and all losses, liabilities, damages, costs, expenses, causes of action, claims, suits, actions and judgments including all costs of defending or denying the same, arising from or in any way related directly or indirectly to:
  - (i) any breach of the provisions of this Agreement to be fulfilled, kept, observed or performed by the Licensee;
  - (ii) any negligent act or omission of the Licensee; or
  - (iii) any injury to any director, officer, employee, licensee, invitee or agent of the Licensee, including death resulting at any time therefrom, occurring in, upon or about the Lands during the Term.

Without limiting the generality of the foregoing, if the Licensor, without actual fault on its part, is made a party to litigation begun by or against the Licensee, the Licensee shall indemnify and hold harmless the Licensor and pay all costs, expenses and legal fees incurred or paid by the Licensor in connection with the litigation. The provisions of this Section 11 will survive the expiry or earlier termination of the Term.

## 12. ASSIGNMENT

Subject to the requirements of the *Utilities Commission Act* (British Columbia), the Licensee may assign this Agreement:

- (a) to an affiliate (within the meaning ascribed to that term in the *Business Corporations Act* (British Columbia)); or
- (b) in connection with the sale of the majority of its shares or all or substantially all of its business or its material assets or a business division of the Licensee;

without the Licensor's prior written consent (provided that in either case the Licensor reserves the right to participate fully as an intervenor in any proceedings before the BCUC in connection with any such assignment), but otherwise may only assign this Agreement with the Licensor's prior written consent, not to be unreasonably withheld.

No assignment of this Agreement by the Licensee will be effective unless and until the assignee has executed and delivered to the Licensor a written agreement in favour of the Licensor whereunder the assignee assumes all obligations of the "Licensee" under this Agreement. No assignment of this Agreement by the Licensee shall have the effect of releasing the assignor from the obligations of the "Licensee" under this Agreement. Any change in control (within the meaning ascribed to that term in the *Business Corporations Act* (British Columbia)), merger, amalgamation or reorganization of the Licensee shall be deemed to be an assignment of this Agreement by the Licensee for purposes of this Section 12.

### **13. LIENS**

- (a) The Licensee will use commercially reasonable efforts to ensure that no claim of builders lien, or any other statutory lien is registered against title to the Lands or elsewhere, and if any such lien should be registered against the Lands as a result of any act or failure to act on the part of the Licensee, the Licensee hereby agrees to indemnify and hold harmless the Licensor with respect to such lien, and to take all necessary steps to remove such lien from title to the Lands forthwith upon notice by the Licensor. In the event that the Licensee fails to take such necessary action within 10 Business Days after receipt of notice from the Licensor, the Licensor may take all necessary action to remove the same in the name of the Licensee and the Licensee agrees to indemnify the Licensor for any and all costs, charges or expenses with respect to the same including solicitor's fees on an indemnity basis and to pay to the Licensor, as applicable, such costs, charges and expenses within 10 Business Days after notice from the Licensor of the same or the Licensee will be in default as described in Section 20(a).
- (b) If the Licensee bona fide intends to contest any lien or claim of the nature described in Section 13(a) the Licensee will notify the Licensor of such intention within 5 days after the Licensee learns of such lien or claim and, if the Licensor so requires, will promptly provide security in favour of either the Licensor or the claimant for the payment thereof which is reasonable and satisfactory to the Licensor. The Licensor will be entitled to take, and to require the Licensee to take or cause to be taken, all steps available to cause any lien or claim of lien filed against title to the Lands to be discharged therefrom provided that such steps do not materially prejudice or unreasonably interfere with the Licensee's position in the dispute. If the Licensee complies with the foregoing it will not be in default hereunder and the Licensor will not satisfy, discharge or pay, or cause the Licensee to satisfy, discharge or pay such lien or claim until the same becomes legally due and payable and is required to be paid by statute or by order of a court or other competent tribunal, in which case the Licensee will satisfy and discharge, or cause to be satisfied or discharged, such lien or claim and all penalties, interest and costs in connection therewith. The satisfaction and discharge of any such lien or claim will be made before execution is had upon any judgement rendered thereon and before commencement of any proceeding on account thereof subsequent to judgement to dispose of the interest of the Licensor in the Lands or any improvement thereon. In the event of any such contest and without limiting Section 11(b), the Licensee will protect and indemnify the Licensor against all loss, cost, expense and damage resulting therefrom.

### **14. RESPONSIBILITY FOR SERVICES LEVY, TAXES**

- (a) In each calendar year during the Term the Licensee shall pay to the Licensor the Services Levy and Taxes assessed against or in respect of:

- (i) that part of the Lands used by the Licensee pursuant to this Agreement; and
  - (ii) the Temporary Improvements.
- (b) It is understood and agreed that the Services Levy is intended to be calculated by the Municipal Authority Having Jurisdiction or other Taxing Authority in each year by multiplying the difference between the municipal general and debt tax rate of the City of Vancouver levied on the commercial property class used for retail businesses pursuant to the *Vancouver Charter* minus the Provincial rural service rate levied on the commercial property class used for retail businesses pursuant to the *Taxation (Rural Area) Act* as amended from time to time, or any legislation substituted therefor times the net assessed value of that portion of the Lands or Temporary Improvements that are subject to Municipal Taxes as prepared by the B.C. Assessment Authority. If the Lands or Temporary Improvements ever become part of a municipality or the UEL, the Services Levy shall be replaced by the local governing body's taxes which shall be paid direct to such local governing body.
- (c) It is understood and agreed that notwithstanding anything set out in this Agreement, it is the intention of the Licensor and Licensee that:
  - (i) the overall level of taxation on the Lands and Temporary Improvements, will be approximately equal to the overall level of taxation on lands and structures in the City of Vancouver having an assessed value equal to the assessed value of the Lands and Temporary Improvements; and
  - (ii) if the City of Vancouver is charging separately for services, whether or not such services were formerly included in real estate taxes, charging for new services, then the Municipal Authority Having Jurisdiction may also charge separately for such services, or charge for new services, but all to the effect that there will be no significant difference in the total costs for taxes and services of similarly assessed properties, whether located within the City of Vancouver or within the UBC Campus.

## 15. DEFINITION OF CONTAMINANTS AND ENVIRONMENTAL LAWS

In this Agreement:

- (a) “**Contaminants**” means any substance, including without limitation urea formaldehyde, hydrocarbons, underground or above-ground tanks, lead, pollutants, polychlorinated biphenyls (“**PCB’s**”), PCB-containing equipment or materials, contaminants, deleterious substances, dangerous substances or goods, hazardous, corrosive or toxic substances, hazardous waste, waste, pesticides, defoliant, and any material, including without limitation radioactive materials, asbestos-containing materials, and any other solid, liquid, gas, vapour, odour, heat, sound, vibration, radiation, or combination of any of them, the storage, manufacture, handling, disposal, treatment, generation, use, transport, remediation or release into the environment of which is now or hereafter prohibited, controlled or regulated under Environmental Laws; and
- (b) “**Environmental Laws**” means any statutes, laws, regulations, orders, bylaws, standards, guidelines having the force of law, protocols having the force of law, permits and other lawful requirements of any governmental authority having jurisdiction over the Site, the Temporary Improvements or the Lands (including, without limitation, the Municipal Authority Having Jurisdiction) now or hereafter in force relating in any way to the environment, health, occupational health and safety, product liability, or transportation of dangerous goods, including the principles of common law and equity.

## 16. LICENSEE'S ENVIRONMENTAL COVENANT

The Licensee shall, all at the Licensee's own cost and expense:

- (a) comply with all Environmental Laws;
- (b) not bring onto the Site or the Lands or permit the presence of any Contaminants, other than those Contaminants that are reasonably required for the operation of the Temporary Improvements, without the prior written consent of the Licensor, which may be unreasonably withheld. The Licensee shall, all at the Licensee's sole cost and expense, promptly and diligently remove any unauthorized Contaminants from the Site and the Lands. The Licensee shall, all at the Licensee's sole cost and expense, remedy any damage to the Site or the Lands caused by such event or breach. Without limiting the generality of the foregoing, the Licensee shall in no event use, and does not plan or intend to use, the Site to dispose of, handle or treat any Contaminants in a manner that, in whole or in part, would cause the Site, the Lands, or any adjacent property, to become a contaminated site under Environmental Laws;
- (c) remove all waste of any form from the Site and the Lands related to, or as result of, any act or omission of the Licensee or any person for whom it is responsible at law;
- (d) as soon as reasonably possible after the expiry or earlier termination of this Agreement, remove from the Site and the Lands all Contaminants introduced thereto by the Licensee or any person for whom the Licensee is responsible at law and remediate the Site and the Lands by removal of any contamination of the Site, the Lands or any adjacent property, including without limitation the soil and ground water thereof, resulting from Contaminants, in either case brought onto, used at or released from the Site or the Lands by the Licensee or any person for whom it is at law responsible. The Licensor will provide the Licensee with reasonable access to the Site and the Lands for such purposes. The Licensee shall perform these obligations promptly and in accordance with Environmental Laws. The Licensee shall provide to the Licensor full information with respect to any remedial work performed pursuant to this subsection and shall comply with the Licensor's requirements with respect to such work. The Licensee shall use an environmental consultant acceptable to the Licensor to perform the remediation. The Licensee shall obtain such approvals and certificates from the Ministry of Environment and other applicable governmental authorities in respect of the remediation as are required under Environmental Laws or required by the Licensor, including without limitation a certificate of compliance evidencing completion of the remediation satisfactory to the Ministry of Environment;
- (e) promptly notify the Licensor in writing of:
  - (i) any release, migration or presence of a Contaminant or any other occurrence or condition at the Site, the Lands or any adjacent property which could subject the Licensee or the Licensor to any fines, penalties, orders or proceedings under Environmental Laws;
  - (ii) any charge, order, investigation or notice of violation or non-compliance issued against the Licensee or relating to the Site or the Lands under any Environmental Laws; and
  - (iii) any notice, claim, action or other proceeding by any third party against the Licensee or in respect of the Site or the Lands concerning the actual or alleged release, migration or presence of Contaminants at, from, on or in the Site or the Lands,

and the Licensee shall notify the appropriate governmental authorities of any release, migration or presence of any Contaminants at, from, on or in the Site or the Lands in accordance with

Environmental Laws and if the Licensee fails to do so the Licensor may, but is not obligated to, notify such governmental authorities. The Licensee, all at the Licensee's sole cost and expense, shall use commercially reasonable efforts to ensure that the Licensor is not a party to or named on any charge, order, investigation or notice issued against the Licensee or relating to the Site or the Lands by any appropriate authority under Environmental Laws; and

- (f) indemnify, defend and save harmless the Licensor, the members of its board of governors and the members of its senate and its directors, officers, employees, agents, invitees, successors and assigns (collectively, the "**Indemnified Parties**") from and against any and all liabilities, actions, damages, claims, remediation cost recovery claims, losses, costs, demands, investigations, proceedings, settlement payments, judgments, orders, fines, penalties and expenses whatsoever (including without limitation any and all environmental or statutory liability for remediation, all legal fees and expenses on a solicitor-client basis, all consultants' fees and expenses, and the cost of remediation of the Site, the Lands and any adjacent property) wherever occurring or caused, which may be paid by, incurred by or asserted against an Indemnified Party, arising from or in any way related directly or indirectly to any breach of, or non-compliance with, the provisions of this Section 16 by the Licensee; or
  - (i) any legal or administrative action, proceeding, investigation, demand, claim, order, direction or notice of any third party, including without limitation any governmental authority, against any one or more of the Indemnified Parties pursuant to or under Environmental Laws; or
  - (ii) any actual or alleged release, migration or presence of any Contaminants at, from, on or in the Site or the Lands;

related to or as a result of the use and occupation of the Site or the Lands by, or any act or omission, of the Licensee or any person for whom it is at law responsible.

## **17. REPRESENTATION AND WARRANTY OF THE LICENSOR**

The Licensor represents and warrants to the Licensee that, to the knowledge of the Licensor without investigation, there are as at the Reference Date no Contaminants in, on or under the Site or those portions of the Lands that are immediately adjacent to the Site. Notwithstanding the foregoing, UBC will remediate, and will be responsible for the remediation of, in accordance with Environmental Laws, any and all Contaminants in, on or under any portion or portions of the Lands immediately adjacent to the Site that migrate into, onto or under the Site, or might reasonably be expected to so migrate, and adversely affect the operations of the Licensee thereon as permitted by this Agreement, except to the extent such remediation is Corix's responsibility pursuant to Section 16 and Section 17.6 of the Infrastructure Agreement.

## **18. WAIVER**

The failure of either of the parties to insist upon performance of any covenant or condition contained in this Agreement or to exercise any right hereunder shall not be construed or operate as a waiver or relinquishment for the future of any such covenant, condition or right and no waiver shall be inferred from or implied by anything done or omitted by either of the parties save only an express waiver in writing.

## **19. RIGHT OF RENEWAL**

Provided the Licensee has duly and regularly performed its obligations under this Agreement, the Licensee shall have the option to renew this Agreement for one additional term of 5 years (the "**Renewal Term**") on the same terms and conditions as are contained in this Agreement, other than this right of renewal, and except that the Licence Fee may be increased as agreed between the Parties. The Licensee may exercise this option to renew this Agreement by giving notice in writing to the Licensor at least two months prior to the expiry of the original

Term. If the Licensee exercises the option to renew this Agreement, the Renewal Term shall commence on the day immediately succeeding the expiry of the Term.

## **20. DEFAULT**

If any one of the following occurs:

- (a) the Licensee fails to pay the Licence Fee, or any other amount owing by the Licensee hereunder, as required within 10 days after notice in writing from the Licensor;
- (b) the Licensee fails to remedy any breach or non-performance of its obligations under this Agreement within 30 days after notice in writing from the Licensor (or if such breach cannot be remedied within 30 days, the Licensee fails to commence to remedy the breach within such 30 days and thereafter fails to proceed diligently to remedy such breach), other than in respect of the matters referred to in subsection (a) or any of subsections (c) to (i);
- (c) any of the goods and chattels of the Licensee on the Site or the Lands at any time during the Term are seized or taken in execution or attachment by a creditor of the Licensee;
- (d) the Licensee makes an assignment for the benefit of creditors;
- (e) a receiver-manager is appointed to control the conduct of the Licensee's business on or from the Site;
- (f) the Licensee becomes bankrupt or insolvent or takes the benefit of legislation now or hereafter in force for bankrupt or insolvent debtors;
- (g) an order is made for the winding-up of the Licensee;
- (h) the Licensee permits the Site to be used by any persons other than those entitled to use it under the terms of this Agreement; or
- (i) the Licensee commits a Corix Default (as that term is defined in the Infrastructure Agreement) under the Infrastructure Agreement;

then the Licensor may re-enter and take possession of the Site, and this Agreement, at the option of the Licensor exercisable by notice to the Licensee, shall immediately be terminated.

## **21. TERMINATION OF INFRASTRUCTURE AGREEMENT**

This Agreement will terminate automatically upon the termination of the Infrastructure Agreement.

## **22. END OF TERM AND REMOVAL OF TEMPORARY IMPROVEMENTS**

Unless and to the extent agreed otherwise in writing by the parties, the Licensee shall, within 60 days after the expiry or earlier termination of the Term, remove from the Site and the Lands, the Temporary Improvements, including, without limitation, all fixtures, foundations, concrete pads, gas, electrical, water and other utility and service lines (other than those located on the Lands prior to the Commencement Date), the Licensee's Utility Services, and all machinery, materials, equipment and all other items of the Licensee, whether or not affixed to the Site or the Lands, and restore the Site and the Lands to the reasonable satisfaction of the Licensor, leaving the Site and the Lands in a clean and neat condition. The Licensor will provide the Licensee with reasonable access to the Site and the Lands for such purposes. For greater certainty, the parties confirm and agree that the Temporary Improvements and the Licensee's Utility Services are trade fixtures and title to the Temporary Improvements and the Licensee's Utility Services will at all times remain with the Licensee notwithstanding the

degree of affixation of the Temporary Improvements and the Licensee's Utility Services to the Lands. If the Licensee does not remove the Temporary Improvements and the Licensee's Utility Services within 60 days after expiry or earlier termination of the Term, the Licensor may do so and the Licensee will be responsible for the cost of such removal and for any necessary storage charges. The Licensor will not be responsible for any damage caused to the Temporary Improvements or the Licensee's Utility Services by reason of such removal. Upon removal of the Temporary Improvements and the Licensee's Utility Services, the Licensor may sell, destroy, or dispose of any of the Temporary Improvements and the Licensee's Utility Services without any compensation to the Licensee.

### **23. SEVERABILITY**

Should any part of this Agreement be declared or held invalid for any reason, such invalidity shall not affect the validity of the remainder which shall continue in full force and effect and be construed as if this Agreement had been executed without the invalid portion. It is hereby declared the intention of the parties that this Agreement would have been executed without reference to any portion which may, for any reason, be hereafter declared or held invalid.

### **24. INTERPRETATION**

Wherever the singular or masculine is used in this Agreement, the same shall be deemed to include references to the plural, feminine or body corporate or politic, as the context may require. This Agreement shall enure to the benefit of and shall be binding on the Licensor and its successors and assigns and shall enure to the benefit of and shall be binding on the Licensee and its successors and permitted assigns.

### **25. NOTICES**

- (a) All notices, directions and other instruments required or permitted to be given under this Agreement shall be in writing, and shall be sufficient in all respects if delivered, or if sent by facsimile, or if sent by prepaid registered post mailed in British Columbia to the other party at the following address respectively:

- (i) To the Licensor:

The University of British Columbia  
Room 240, Old Administration Building  
6328 Memorial Road  
Vancouver, British Columbia V6T 1Z2

Attention: •

Facsimile Number: •

- (ii) To the Licensee:

Corix Multi-Utility Services Inc.  
Suite 1160, 1188 West Georgia Street  
Vancouver, British Columbia V6E 4A2

Attention: Eric van Roon

Fax: 604.697.6703

Email: [eric.vanRoon@corix.com](mailto:eric.vanRoon@corix.com)

Either party shall have the right at any time to change its address by notice in writing sent to the other party at the address in effect hereunder.

- (b) Any notice, direction or other instrument shall be deemed to have been received on the following dates:
  - (i) if sent by facsimile, on the Business Day next following the date the sender receives confirmation of successful transmission;
  - (ii) if delivered, on the Business Day next following the date of delivery; or
  - (iii) if sent by registered mail, on the seventh day following its mailing, provided that if there is at the time of mailing or within 7 days thereafter a mail strike, slowdown, lockout or other labour dispute which may affect the delivery, then any notice, direction or other instrument, shall only be effective upon actual delivery or if delivered or sent by facsimile.
- (c) As an alternative to the methods of giving notice described in Section 25(a), a party may give notices, directions and other instruments required or permitted to be given under this Agreement by electronic mail to the other party's representative identified in Section 25(a) who continues to be employed by the other party and is not to the knowledge of the sending party unavailable, provided that (i) the notice, direction or other instrument is stated to be a notice, direction or other instrument required or permitted to be given under this Agreement, and (ii) the notice, direction or other instrument is concurrently also given by electronic mail to the senior legal officer of the other party. Any notice, direction or other instrument given by electronic mail shall be deemed to have been received on the Business Day next following the date of sending, provided that no such notice shall be effective unless such notice is actually received by the representative.

## **26. TIME**

Time is of the essence of this Agreement.

## **27. HEADINGS**

The headings in this Agreement are solely for the purpose of more convenient reference and not for construction or interpretation.

## **28. OPTION TO TERMINATE**

In the event the Licensee is able to relocate the Temporary Improvements or the Licensee's Utility Services to a more permanent facility, then the Licensee may terminate this Licence upon giving the Licensor not less than 60 days' prior written notice. Upon such termination, this License will end and the Licensor and the Licensee (and any permitted assignees) will be completely released from all further obligations under this Licence. Despite the foregoing, any and all obligations of the Licensee that have accrued but are unsatisfied as at the effective date of termination shall survive any such termination of this Agreement.

IN WITNESS WHEREOF the parties have executed this Agreement as of the day and year first written above.



**THE UNIVERSITY OF BRITISH COLUMBIA**

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Authorized Signatory

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Authorized Signatory

**CORIX MULTI-UTILITY SERVICES INC.**

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Authorized Signatory

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**SCHEDULE A (TO LICENSE AGREEMENT)**

The Lands and the Site

(see attached)

**SCHEDULE H**  
**Form of Lease Agreement – Permanent CEP Site**

**Next Page**

## LEASE FOR CENTRAL ENERGY PLANT

THIS LEASE, dated for reference the • day of •, 2014 (the “**Reference Date**”),

BETWEEN:

**THE UNIVERSITY OF BRITISH COLUMBIA**, 2075 Wesbrook Mall,  
Vancouver, British Columbia V6T 1Z1

(the “**Landlord**”)

AND:

**CORIX MULTI-UTILITY SERVICES INC.**, Suite 1160 – 1188 West  
Georgia Street, Vancouver, British Columbia V6E 4A2

(the “**Tenant**”)

WITNESSES THAT in consideration of the rents and covenants herein contained, and other good and valuable consideration, the parties agree as follows:

### 1. DEFINITIONS

The following definitions apply in this Lease:

- (a) “**BCUC**” means the British Columbia Utilities Commission, or a successor entity;
- (b) “**Business Day**” means any calendar day that is not a Saturday, Sunday or other day recognized as a statutory holiday in British Columbia;
- (c) “**Commencement Date**” means •;
- (d) “**Complementary Facilities**” means facilities on UBC’s Vancouver Campus such as roadways, parking areas and other improvements which are to be used in connection with the operations of the Tenant and others;
- (e) “**Development Guidelines**” means those guidelines identified from time to time as such by the Municipal Authority Having Jurisdiction for the orderly development and operation of buildings on UBC’s Vancouver Campus or any improvements thereon;
- (f) “**Infrastructure Agreement**” means the Infrastructure Agreement dated as of •, 2014 between The University of British Columbia and Corix Multi-Utility Services Inc.;
- (g) “**Improvements**” has the meaning given to it in Section 5;
- (h) “**Lands**” means those lands forming a part of the UBC Campus and shown [**in bold outline on the reference plan filed in the Land Title Office under No. •**] [**or: in bold black outline on the plan drawing attached as Schedule A**]. The entire parcel of which the Lands form a part is legally described as: •;

- (i) **“Municipal Authority Having Jurisdiction”** means The University of British Columbia's Department of Campus & Community Planning in its capacity as regulatory, inspection and permitting authority for UBC’s Vancouver Campus or such other department of The University of British Columbia as becomes responsible for this function from time to time. In the event that the Lands become part of a municipality or the UEL, or any other governing body acquires jurisdiction over the Lands similar to that of municipalities and assumes these functions, that governing body shall become the Municipal Authority Having Jurisdiction;
- (j) **“Municipal Taxes”** means all taxes, rates, and assessments, whether general or specially levied or assessed by the Surveyor of Taxes under the *Taxation (Rural Area) Act* (British Columbia), as amended from time to time, or any legislation substituted therefor, for municipal, rural, school, or other purposes, or levied or assessed by other lawful governmental authority for such purposes in respect of the Lands or the Improvements, whether therein referred to as “Property Taxes”, “Municipal Taxes”, “Taxes” or by some other term and which are attributable to the Lands or the Improvements, and shall also include any other taxes which are imposed in substitution of the foregoing Municipal Taxes, the whole as finally determined for each applicable period of time as a result of an assessment, appeal, or judicial review and shall include any legal fees or appraiser's fees incurred by the Tenant in respect of such final determination thereof;
- (k) **“NDES”** means the neighbourhood district energy system contemplated by the Infrastructure Agreement;
- (l) **“Premises”** means that part of the Lands shown **[in bold red outline on the plan drawing attached as Schedule A]**;
- (m) **“Reference Date”** has the meaning given to it above on page 1 of this Lease;
- (n) **“Rent”** means the rent payable under Section 4;
- (o) **“Sales Taxes”** means any and all taxes, fees, charges, assessments, rates, levies, duties and excises (whether characterized as sales taxes, purchase taxes, value added taxes, goods and services taxes, harmonized sales taxes or any other form of tax) which are imposed on the Tenant or the Landlord or for which the Landlord or Tenant is obliged to pay, or to collect from the Tenant, and which are levied, rated or assessed on the act of entering into this Lease or otherwise on account of this Lease, on the use or the occupancy of the Lands or any portion thereof or the Improvements, on the Rent or any portion of the Rent and includes all such taxes, fees, charges, assessments, rates, levies, duties and excises with respect to:
- (i) any or all amounts paid or payable by the Landlord for goods and services, repairs, maintenance, real estate taxes, insurance, and all other outlays and expenditures (including capital expenditures) for and in connection with the Lands;
  - (ii) any or all amounts paid or payable by the Tenant pursuant to this Lease, including the Rent; and
  - (iii) this Lease or services or goods supplied or provided or deemed to have been supplied or provided by the Landlord or which the Landlord is deemed responsible to provide in accordance with the terms of this Lease or the consideration for such goods and services;

whether in each case characterized as goods and services tax, sales tax, multi-stage sales tax, value added tax, consumption tax, harmonized sales tax or any other tax, levy, duty or

assessment; provided however, that Sales Taxes will exclude income tax under Part I of the *Income Tax Act* (Canada), the Tenant's Taxes and the Taxes;

- (p) “**Services Levy**” means the charge levied by the Taxing Authority against or in respect of that part of the Lands used by the Tenant pursuant to this Lease or the Improvements, for the use, provision, maintenance and repair, from time to time, of certain services, sometimes provided by municipalities or other public authorities, such as connections and lines for water, sewer, telephone, electricity and gas, the use, provision, maintenance and repair, from time to time, of street lighting, sidewalks, curbs, gutters, roads, landscaping, etc.; and for the use of the Complementary Facilities, all of which are provided by The University of British Columbia to all tenants, licensees or other occupiers of UBC's Vancouver Campus lands;
- (q) “**Taxes**” means all taxes, fees, levies, charges, assessments, rates, duties and excises which are or may hereafter be levied, imposed, rated or assessed upon or with respect to the Lands or any part of the Lands used by the Tenant pursuant to this Lease or the Improvements, by the Taxing Authority. Without restricting the generality of the foregoing, Taxes will include all:
- (i) Municipal Taxes, general and special assessments and capital taxes, and business taxes of the Tenant with respect to that part of the Lands used by the Tenant pursuant to this Lease or the undertaking of the Tenant thereon;
  - (ii) taxes, fees, levies, charges, assessments, rates, duties and excises for transit, housing, schools, police, fire, sewer or other governmental services or for purported benefits to that part of the Lands used by the Tenant pursuant to this Lease or the Improvements;
  - (iii) local improvement taxes, service payments in lieu of taxes, and taxes, fees, levies, charges, assessments, rates, duties and excises, however described, that may be levied, rated or assessed as a substitute for, or as an addition to, in whole or in part, any property taxes or local improvement taxes; and
  - (iv) costs and expenses including legal fees and other professional fees and interest and penalties on deferred payments, incurred by the Tenant in contesting or appealing any taxes, assessments, rates, levies, duties, excises, charges or other amounts as aforesaid;

but Taxes will exclude income tax under Part I of the *Income Tax Act* (Canada), the Tenant's Taxes and the Sales Taxes;

- (r) “**Taxing Authority**” means any duly constituted federal, provincial, municipal or other authority that is authorized pursuant to statute or contract to impose taxes, rates, assessments, or charges, or other charges in lieu thereof, on, upon or in respect of the Lands or the Improvements and includes the Municipal Authority Having Jurisdiction, in its capacity as regulator of the Lands, with regard to the Services Levy, whether or not now customary or in the contemplation of the parties on the Reference Date;
- (s) “**Tenant's Taxes**” means all taxes, fees, levies, charges, assessments, rates, duties and excises which are now or may hereafter be levied, imposed, rated or assessed by any lawful authority relating to or in respect of the business of the Tenant or relating to or in respect of personal property and all business and trade fixtures, machinery and equipment owned or installed by the Tenant on, in or under the Lands including, without limitation, the Improvements, whether any such amounts are payable at law by the Tenant or by the Landlord and whether such amounts are included by the Taxing Authority in the Taxes;

- (t) “**Tenant’s Utility Services**” has the meaning given to it in Section 7;
- (u) “**Term**” means the term of years and days as set out in Section 3;
- (v) “**UBC Land Use Rules**” means the plans, policies, handbooks, guidelines, rules, regulations, procedures and any other documents no matter how they are titled governing land use and the construction, renovation, maintenance, repair and replacement of structures and buildings on UBC’s Vancouver Campus in the form adopted by The University of British Columbia's Board of Governors from time to time, and all permits that are required to be issued by the Municipal Authority Having Jurisdiction in connection with the construction, renovation, maintenance, repair and replacement of the Improvements by the Tenant from time to time during the Term;
- (w) “**UBC’s Vancouver Campus**” means the lands within the boundaries described in the *Point Grey Campus Lands Regulation (195/2010)*; and
- (x) “**UEL**” means the administration set up pursuant to the *University Endowment Land Act*, R.S.B.C., 1996, Ch. 496 and amendments thereto for the purpose of administering all land included within the definition of land set out in Section 1 of the *University Endowment Land Act*, which lands can be generally described as being situate in the areas east of Wesbrook Mall and north of Agronomy Road.

## 2. DEMISE

The Landlord hereby demises and leases the Premises to the Tenant, and the Tenant hereby accepts such demise and lease, all on the terms and conditions set out in this Lease. The Tenant acknowledges and agrees that it is accepting the Premises in an “as is, where is” condition and that the Landlord has no obligation to carry out any work whatsoever in respect of the Premises. Without limiting the generality of the foregoing, the Landlord shall not be required to provide any security of any sort whatsoever in respect of the Premises, the Improvements or the Tenant’s Utility Services or to take any steps whatsoever, during any weather-related event, to ensure that the Tenant can gain access to the Premises, the Improvements or the Tenant’s Utility Services.

## 3. TERM

The Tenant shall have and hold the Premises from the Commencement Date to and including • [NTD: the **Term is to be for 99 years**], unless earlier terminated in accordance with the terms of this Lease.

## 4. RENT

The Tenant shall throughout the Term pay to the Landlord at the Landlord’s place of business, or at such other place as the Landlord may specify in writing from time to time, in lawful money of Canada, gross rent in the amount of \$• per annum, plus applicable Sales Taxes, payable in advance in equal consecutive monthly instalments on the first day of each and every month during the Term commencing on the Commencement Date and continuing until and including the first day of the month immediately preceding the last day of the Term.

The Tenant acknowledges and agrees that it is intended that this Lease shall be a completely carefree triple-net lease for the Landlord as applicable to the Premises and that the Landlord will not be responsible during the Term for any costs, charges, expenses or outlays of any nature whatsoever in respect of the Lands, the Premises or the Improvements, excepting only as expressly provided herein and any income tax under Part I of the *Income Tax Act* (Canada) in respect of income received from leasing the Premises pursuant to this Lease.

## 5. USE

The Tenant will be permitted to use the Premises during the Term for the purposes of constructing, maintaining, repairing, replacing and operating a [NTD: **describe CEP – including potential for initial operation as high**

**efficiency natural gas boiler and later conversion to alternative energy plant]** facility and all ancillary equipment and machinery required in connection therewith, including without limitation any gas, electrical, water and other utility and service connections, and connecting the same to the NDES (collectively, the “**Improvements**”).

## 6. IMPROVEMENTS

The Tenant acknowledges and agrees that the Tenant is responsible for constructing, installing, maintaining, repairing, replacing and removing, all at the Tenant’s cost and expense, the Improvements, including without limitation any utilities and services required in connection with the Improvements. The Improvements will at all times remain the property of the Tenant notwithstanding any rule of law or equity to the contrary. The Landlord will have no obligations whatsoever in respect of the Improvements or any utilities or services required in connection therewith.

The Tenant will obtain, at its sole cost and expense, all necessary permits, licences, consents and approvals, including without limitation a preliminary plan approval from the Municipal Authority Having Jurisdiction and will provide copies of all of the same to the Landlord, before the Tenant commences construction and installation of the Improvements on the Premises or the Tenant’s Utility Services on the Lands. Notwithstanding the foregoing, the Landlord will provide all assistance reasonably requested by the Tenant in connection with the Tenant’s application for any permits or approvals for the construction and installation of the Improvements or the Tenant’s Utility Services.

The Tenant will construct the Improvements and the Tenant’s Utility Services in accordance with the plans and specifications of the Improvements and the Tenant’s Utility Services provided by the Tenant to the Landlord on or before the Commencement Date, with such modifications as may be reasonably required by the Tenant or any applicable governmental authority.

## 7. ACCESS

The Landlord hereby grants to the Tenant, for and during the Term, a non-exclusive license for the Tenant and its employees, contractors, invitees, licensees, permittees, servants and agents, subject to any rights over or in respect of the Lands granted by the Landlord prior to the Reference Date to any lessee, licensee or permittee of the Landlord, to use, enter and be on and pass and re-pass over and along such portions of the Lands **[(excluding any buildings or other improvements)]** as they reasonably require access to in connection with the exercise of the Tenant’s rights under the other provisions of this Lease at their will and pleasure at all times with or without vehicles, equipment and machinery for the purposes of:

- (a) constructing, installing, replacing, maintaining, repairing and operating any gas, electrical, water and other utility and service lines, pipes, conduits and connections on the Lands that are reasonably required by the Tenant in connection with the operation of the Improvements (collectively, the “**Tenant’s Utility Services**”) and in this regard, the Tenant agrees to obtain the approval of the Landlord, acting reasonably, to the location of the Tenant’s Utility Services prior to the installation thereof by the Tenant; and
- (b) access to and egress from the Premises to any of the Tenant’s Utility Services that are located on the Lands.

The Tenant will also be entitled, in common with all others entitled thereto, to the enjoyment, for itself, its employees, contractors, invitees, licensees, permittees, servants and agents of the right, privilege and licence over the common roadways and walkways on UBC’s Vancouver Campus for the purposes of access and egress to and from the Lands. The Landlord may alter the boundaries or change the location of any of such roadways and walkways from time to time so long as reasonably adequate access to and egress from the Lands is provided.

In exercising its rights under this Section 7, the Tenant will comply with (and will ensure that its employees,

contractors, invitees, licensees, permittees, servants and agents comply with) Section 6 above and all reasonable rules and regulations of the Landlord, including without limitation rules and regulations to ensure that there is no significant blockage in traffic access and to ensure that no property which is owned or lease by any third party is damaged in any way.

## 8. UTILITIES

The Tenant will be solely responsible, all at the Tenant's sole cost and expense, for making all arrangements for, and for constructing, installing, maintaining, repairing, replacing and removing, all requisite Tenant's Utility Services, and for paying all costs related to the use thereof and consumption of all applicable services. The Landlord shall have no responsibility whatsoever in respect of the Tenant's Utility Services.

## 9. REPAIR

The Tenant shall, all at the Tenant's sole cost and expense:

- (a) maintain the Premises, the Improvements and the Tenant's Utility Services in good and substantial repair;
- (b) forthwith repair any damage to the Lands resulting from the exercise of the Tenant's rights under Section 7 such that the Lands are restored to the condition they were in prior to the exercise of such rights;
- (c) keep the Premises and the Improvements clean, tidy and free of debris; and
- (d) install on the Premises any landscaping and hoarding that is required by the Landlord, acting reasonably, to mitigate the visual impact of the Improvements.

## 10. INSURANCE

- (a) The Tenant will obtain and keep in force throughout the Term All Risk property insurance including coverage for flood and earthquakes and such other coverage as the Landlord may reasonably require, on all the Improvements. The amount of such insurance will be the full replacement value of all the Improvements.
- (b) The policy(ies) of insurance provided for in Section 10(a) will name the Landlord as an additional named insured and will be payable to the Landlord and the Tenant, as their respective interests may appear, and any major loss adjustment will require the written consent of each of them with an interest therein. The parties hereto agree that the proceeds paid by any such insurance policies will be applied to reconstruct or replace the Improvements.
- (c) Throughout the Term the Tenant will obtain and keep in force general liability insurance fully insuring against liability of the Tenant with respect to the Lands and the Improvements or arising out of the maintenance, use or occupation thereof. Such policy will be in an amount of not less than \$5 million per occurrence at the Commencement Date, and thereafter in such amounts as the Landlord may reasonably require from time to time. The general liability policy will name the Landlord, its officers, directors, trustees, governors, employees and agents as additional named insureds, will contain a cross liability clause and broad form coverage for contractual liability and such insurance will be primary in respect of claims and will not participate in or be excess over any insurance carried by the Landlord.
- (d) The Tenant will obtain and keep in force a standard automobile policy including standard contractual liability endorsement against claims for bodily injury, death and damage to property,



in an amount of not less than \$2 million per occurrence for all motor vehicles, owned and non-owned, operated on UBC's Vancouver Campus.

- (e) All of the insurance provided for in Sections 10(a) and 10(c) and all renewals thereof will be issued by such reputable and duly qualified insurers and in such form and substance as are approved by the Landlord, such approval not to be unreasonably withheld. Each policy provided for in Sections 10(a) or 10(c) will expressly provide that the policy will not be cancelled or altered without 60 days' prior written notice to the Landlord, and that all rights of subrogation against the Landlord are waived. Following the issue and each renewal thereof, a certificate of insurance will be delivered to the Landlord, if requested. The Tenant shall also deliver proof of payment of premiums for insurance to the Landlord if requested.
- (f) The Tenant waives as against the Landlord, its officers, directors, trustees, governors, employees and agents each claim and demand of every nature whatsoever for damage, loss or injury to the Lands, the Improvements and property of the Tenant, its invitees and licensees which will be caused by or result from fire or other perils, events or happenings which ought to have been covered by insurance, or is covered by insurance pursuant to this Lease, whether or not such claim is covered by insurance. The Tenant hereby releases the Landlord, its officers, directors, trustees, governors, employees and agents from all liability with respect to such damage, loss or injury, except to the extent such damage, loss or injury is caused by the negligence or wilful misconduct of the Landlord or those for whom the Landlord is responsible at law.

#### 11. COMPLIANCE WITH LAWS; GENERAL CONDUCT

- (a) The Tenant will observe, fulfil, comply with and abide by all federal, provincial, municipal and other statutes, ordinances, laws, bylaws, orders, plans, policies, handbooks, guidelines, rules, regulations and procedures affecting UBC's Vancouver Campus or the Lands, the Improvements, the Tenant's Utility Services or any activity or condition on or in UBC's Vancouver Campus or the Lands, the Improvements or the Tenant's Utility Services including, without limitation, the British Columbia Building Code, the UBC Land Use Rules and the Development Guidelines and any other applicable policies, rules and regulations of The University of British Columbia (whether in its capacity as the Municipal Authority Having Jurisdiction or as Landlord) adopted from time to time and published.
- (b) The Tenant will obtain, all at the Tenant's sole cost and expense, all necessary permits, licences, consents and approvals, including without limitation a preliminary plan approval from the Municipal Authority Having Jurisdiction, and will provide copies of all of the same to the Landlord, before the Tenant commences construction and installation of the Improvements or the Tenant's Utility Services on the Lands. Notwithstanding the foregoing, the Landlord will provide all assistance reasonably requested by the Tenant in connection with the Tenant's application for any such permits, licences, consents or approvals for the construction and installation of the Improvements or the Tenant's Utility Services.
- (c) The Tenant will construct the Improvements and the Tenant's Utility Services in accordance with the plans and specifications for the Improvements and the Tenant's Utility Services approved by the Municipal Authority Having Jurisdiction.
- (d) The Tenant will not carry on or perform or suffer or permit to be carried on or performed or suffered on, in or in respect of the Lands, the Improvements or the Tenant's Utility Services, any practice or act or engage in any activity which is or becomes a nuisance or menace or which in any way adversely affects the Lands, UBC's Vancouver Campus or any part thereof or is or becomes a hazard or nuisance to any person using or occupying the Lands, UBC's Vancouver

Campus or any part thereof. Notwithstanding the foregoing, the Landlord acknowledges that the Tenant intends to use the Premises for the purpose of constructing and operating the Improvements and the Tenant's Utility Services, and that such use may result in noise, odour and photopollution; accordingly, the Landlord, in its capacity as landlord hereunder, agrees that any such noise, odour and photopollution related to such permitted use will not be a breach of this Section 11(d) except that nothing in this Section 11(d) prevents UBC, acting in a capacity other than as landlord hereunder, including without limitation, acting on behalf of a faculty, unit or department of UBC, or as part of a consortium or partnership with other entities, that are impacted by such noise, odour or photopollution from advancing a nuisance claim against the Tenant.

## 12. RELEASE AND INDEMNITY

- (a) None of the Landlord or any of the members of its board of governors, its directors, officers, employees, agents, invitees, successors or assigns will be liable directly or indirectly for:
- (i) any loss of or damage to the Improvements, the Tenant's Utility Services or any chattel or property of any kind to whomsoever belonging at any time on or used in connection with the Lands pursuant to this Lease or otherwise in connection with the Tenant's exercise of its rights hereunder; or
  - (ii) any loss of life or injury to persons in, upon or about the Lands during the Term;
- save and except to the extent such loss or damage is caused or contributed to by the negligence or wilful misconduct of the Landlord or those for whom the Landlord is responsible at law. Without limiting the foregoing, the Landlord will indemnify, defend, and save harmless the Tenant and its affiliates (within the meaning ascribed to that term in the *Business Corporations Act* (British Columbia)) and their respective officers, directors, shareholders, employees, contractors, agents, successors and permitted assigns from and against any and all losses, liabilities, damages, costs, expenses, causes of action, claims, suits, actions and judgments including all costs of defending or denying the same, arising from or in connection with, and to the extent of, any negligence or wilful misconduct perpetrated by the Landlord or any person for whom it is in law responsible.
- (b) The Tenant will defend, indemnify and save harmless the Landlord, the members of its board of governors and its directors, officers, employees, agents, invitees, successors and assigns from and against any and all losses, liabilities, damages, costs, expenses, causes of action, claims, suits, actions and judgments including all costs of defending or denying the same, arising from or in any way related directly or indirectly to:
- (i) any breach of the provisions of this Lease to be fulfilled, kept, observed or performed by the Tenant;
  - (ii) any negligent act or omission of the Tenant; or
  - (iii) any injury to any director, officer, employee, Tenant, invitee or agent of the Tenant, including death resulting at any time therefrom, occurring in, upon or about the Lands during the Term.

Without limiting the generality of the foregoing, if the Landlord, without actual fault on its part, is made a party to litigation begun by or against the Tenant, the Tenant shall indemnify and hold harmless the Landlord and pay all costs, expenses and legal fees incurred or paid by the Landlord in connection with the litigation. The provisions of this Section 12 will survive the expiry or earlier termination of the Term.

### 13. ASSIGNMENT

Subject to the requirements of the *Utilities Commission Act* (British Columbia), the Tenant may assign this Lease:

- (a) to an affiliate (within the meaning ascribed to that term in the *Business Corporations Act* (British Columbia)); or
- (b) in connection with the sale of the majority of its shares or all or substantially all of its business or its material assets or a business division of the Tenant;

without the Landlord's prior written consent (provided that in either case the Landlord reserves the right to participate fully as an intervenor in any proceedings before the BCUC in connection with any such assignment), but otherwise may only assign this Lease with the Landlord's prior written consent, not to be unreasonably withheld.

No assignment of this Lease by the Tenant will be effective unless and until the assignee has executed and delivered to the Landlord a written agreement in favour of the Landlord whereunder the assignee assumes all obligations of the "Tenant" under this Lease. No assignment of this Lease by the Tenant shall have the effect of releasing the assignor from the obligations of the "Tenant" under this Lease. Any change in control (within the meaning ascribed to that term in the *Business Corporations Act* (British Columbia)), merger, amalgamation or reorganization of the Tenant shall be deemed to be an assignment of this Lease by the Tenant for purposes of this Section 13.

### 14. LIENS

- (a) The Tenant will use commercially reasonable efforts to ensure that no claim of builders lien, or any other statutory lien is registered against title to the Lands or elsewhere, and if any such lien should be registered against the Lands as a result of any act or failure to act on the part of the Tenant, the Tenant hereby agrees to indemnify and hold harmless the Landlord with respect to such lien, and to take all necessary steps to remove such lien from title to the Lands forthwith upon notice by the Landlord. In the event that the Tenant fails to take such necessary action within 10 Business Days after receipt of notice from the Landlord, the Landlord may take all necessary action to remove the same in the name of the Tenant and the Tenant agrees to indemnify the Landlord for any and all costs, charges or expenses with respect to the same including solicitor's fees on an indemnity basis and to pay to the Landlord, as applicable, such costs, charges and expenses within 10 Business Days after notice from the Landlord of the same or the Tenant will be in default as described in Section 22.
- (b) If the Tenant bona fide intends to contest any lien or claim of the nature described in Section 14(a) the Tenant will notify the Landlord of such intention within 5 days after the Tenant learns of such lien or claim and, if the Landlord so requires, will promptly provide security in favour of either the Landlord or the claimant for the payment thereof which is reasonable and satisfactory to the Landlord. The Landlord will be entitled to take, and to require the Tenant to take or cause to be taken, all steps available to cause any lien or claim of lien filed against title to the Lands to be discharged therefrom provided that such steps do not materially prejudice or unreasonably interfere with the Tenant's position in the dispute. If the Tenant complies with the foregoing it will not be in default hereunder and the Landlord will not satisfy, discharge or pay, or cause the Tenant to satisfy, discharge or pay such lien or claim until the same becomes legally due and payable and is required to be paid by statute or by order of a court or other competent tribunal, in which case the Tenant will satisfy and discharge, or cause to be satisfied or discharged, such lien or claim and all penalties, interest and costs in connection therewith. The satisfaction and discharge of any such lien or claim will be made before execution is had upon any judgement rendered thereon and before commencement of any

proceeding on account thereof subsequent to judgement to dispose of the interest of the Landlord in the Lands or any improvement thereon. In the event of any such contest and without limiting Section 12(b), the Tenant will protect and indemnify the Landlord against all loss, cost, expense and damage resulting therefrom.

#### 15. **HOLDING OVER**

If the Tenant shall hold over after the expiration of the Term, and the Landlord should accept Rent, the new tenancy thereby created shall be deemed a month to month tenancy and shall be subject to the covenants and conditions herein contained insofar as the same are applicable to a tenancy from month to month.

#### 16. **QUIET ENJOYMENT**

Upon the Tenant paying the Rent hereby reserved at the times and in the manner herein provided and performing the covenants on the Tenant's part herein contained, the Tenant shall and may peaceably possess and enjoy the Premises for the Term without any interruption or disturbance from the Landlord or any other person or persons lawfully claiming by, from or under the Landlord.

#### 17. **RESPONSIBILITY FOR SERVICES LEVY; TAXES**

- (a) In each calendar year during the Term the Tenant shall pay to the Landlord the Services Levy and Taxes assessed against or in respect of:
  - (i) that part of the Lands used by the Tenant pursuant to this Lease; and
  - (ii) the Improvements.
- (b) It is understood and agreed that the Services Levy is intended to be calculated by the Municipal Authority Having Jurisdiction or other Taxing Authority in each year by multiplying the difference between the municipal general and debt tax rate of the City of Vancouver levied on the commercial property class used for retail businesses pursuant to the *Vancouver Charter* minus the Provincial rural service rate levied on the commercial property class used for retail businesses pursuant to the *Taxation (Rural Area) Act* as amended from time to time, or any legislation substituted therefor times the net assessed value of that portion of the Lands or Improvements that are subject to Municipal Taxes as prepared by the B.C. Assessment Authority. If the Lands or Improvements ever become part of a municipality or the UEL, the Services Levy shall be replaced by the local governing body's taxes which shall be paid direct to such local governing body.
- (c) It is understood and agreed that notwithstanding anything set out in this Lease, it is the intention of the Landlord and Tenant that:
  - (i) the overall level of taxation on the Lands and Improvements will be approximately equal to the overall level of taxation on lands and structures in the City of Vancouver having an assessed value equal to the assessed value of the Lands and Improvements; and
  - (ii) if the City of Vancouver is charging separately for services, whether or not such services were formerly included in real estate taxes, charging for new services, then the Municipal Authority Having Jurisdiction may also charge separately for such services, or charge for new services, but all to the effect that there will be no significant difference in the total costs for taxes and services of similarly assessed properties, whether located within the City of Vancouver or within UBC's Vancouver Campus.

## 18. DEFINITION OF CONTAMINANTS AND ENVIRONMENTAL LAWS

In this Lease:

- (a) “**Contaminants**” means any substance, including without limitation urea formaldehyde, hydrocarbons, underground or above-ground tanks, lead, pollutants, polychlorinated biphenyls (“**PCB’s**”), PCB-containing equipment or materials, contaminants, deleterious substances, dangerous substances or goods, hazardous, corrosive or toxic substances, hazardous waste, waste, pesticides, defoliant, and any material, including without limitation radioactive materials, asbestos-containing materials, and any other solid, liquid, gas, vapour, odour, heat, sound, vibration, radiation, or combination of any of them, the storage, manufacture, handling, disposal, treatment, generation, use, transport, remediation or release into the environment of which is now or hereafter prohibited, controlled or regulated under Environmental Laws; and
- (b) “**Environmental Laws**” means any statutes, laws, regulations, orders, bylaws, standards, guidelines having the force of law, protocols having the force of law, permits and other lawful requirements of any governmental authority having jurisdiction over the Premises, the Improvements or the Lands (including, without limitation, the Municipal Authority Having Jurisdiction) now or hereafter in force relating in any way to the environment, health, occupational health and safety, product liability, or transportation of dangerous goods, including the principles of common law and equity.

## 19. TENANT’S ENVIRONMENTAL COVENANT

The Tenant will, all at the Tenant’s own cost and expense:

- (a) comply with all Environmental Laws;
- (b) not bring onto the Premises or the Lands or permit the presence of any Contaminants, other than those Contaminants that are reasonably required for the operation of the Improvements, without the prior written consent of the Landlord, which may be unreasonably withheld. The Tenant will, all at the Tenant’s sole cost and expense, promptly and diligently remove any unauthorized Contaminants from the Premises and the Lands. The Tenant will, all at the Tenant’s sole cost and expense, remedy any damage to the Premises or the Lands caused by such event or breach. Without limiting the generality of the foregoing, the Tenant will in no event use, and does not plan or intend to use, the Premises to dispose of, handle or treat any Contaminants in a manner that, in whole or in part, would cause the Premises, the Lands, or any adjacent property, to become a contaminated site under Environmental Laws;
- (c) remove all waste of any form from the Premises and the Lands related to, or as result of, any act or omission of the Tenant or any person for whom it is responsible at law;
- (d) as soon as reasonably possible after the expiry or earlier termination of this Lease, remove from the Premises and the Lands all Contaminants introduced thereto by the Tenant or any person for whom the Tenant is responsible at law and remediate the Premises and the Lands by removal of any contamination of the Premises, the Lands or any adjacent property, including without limitation the soil and ground water thereof, resulting from Contaminants, in either case brought onto, used at or released from the Premises or the Lands by the Tenant or any person for whom it is at law responsible. The Landlord will provide the Tenant with reasonable access to the Premises and the Lands for such purposes. The Tenant will perform these obligations promptly and in accordance with Environmental Laws. The Tenant will provide to the Landlord full information with respect to any remedial work performed pursuant to this subsection and shall comply with the Landlord’s requirements with respect to such work. The Tenant will use an environmental consultant acceptable to the Landlord to perform the remediation. The Tenant

will obtain such approvals and certificates from the Ministry of Environment and other applicable governmental authorities in respect of the remediation as are required under Environmental Laws or required by the Landlord, including without limitation a certificate of compliance evidencing completion of the remediation satisfactory to the Ministry of Environment;

- (e) promptly notify the Landlord in writing of:
  - (i) any release, migration or presence of a Contaminant or any other occurrence or condition at the Premises, the Lands or any adjacent property which could subject the Tenant or the Landlord to any fines, penalties, orders or proceedings under Environmental Laws;
  - (ii) any charge, order, investigation or notice of violation or non compliance issued against the Tenant or relating to the Premises or the Lands under any Environmental Laws; and
  - (iii) any notice, claim, action or other proceeding by any third party against the Tenant or in respect of the Premises or the Lands concerning the actual or alleged release, migration or presence of Contaminants at, from, on or in the Premises or the Lands,

and the Tenant will notify the appropriate governmental authorities of any release, migration or presence of any Contaminants at, from, on or in the Premises or the Lands in accordance with Environmental Laws and if the Tenant fails to do so the Landlord may, but is not obligated to, notify such governmental authorities. The Tenant, all at the Tenant's sole cost and expense, shall use commercially reasonable efforts to ensure that the Landlord is not a party to or named on any charge, order, investigation or notice issued against the Tenant or relating to the Premises or the Lands by any appropriate authority under Environmental Laws; and

- (f) indemnify, defend and save harmless the Landlord, the members of its board of governors and the members of its senate and its directors, officers, employees, agents, invitees, successors and assigns (collectively, the "**Indemnified Parties**") from and against any and all liabilities, actions, damages, claims, remediation cost recovery claims, losses, costs, demands, investigations, proceedings, settlement payments, judgments, orders, fines, penalties and expenses whatsoever (including without limitation any and all environmental or statutory liability for remediation, all legal fees and expenses on a solicitor-client basis, all consultants' fees and expenses, and the cost of remediation of the Premises, the Lands and any adjacent property) wherever occurring or caused, which may be paid by, incurred by or asserted against an Indemnified Party, arising from or in any way related directly or indirectly to any breach of, or non-compliance with, the provisions of this Section 19 by the Tenant; or
  - (i) any legal or administrative action, proceeding, investigation, demand, claim, order, direction or notice of any third party, including without limitation any governmental authority, against any one or more of the Indemnified Parties pursuant to or under Environmental Laws; or
  - (ii) any actual or alleged release, migration or presence of any Contaminants at, from, on or in the Premises or the Lands;

related to or as a result of the use and occupation of the Premises or the Lands by, or any act or omission, of the Tenant or any person for whom it is at law responsible.

## 20. REPRESENTATION AND WARRANTY OF THE LANDLORD

The Landlord represents and warrants to the Tenant that, to the knowledge of the Landlord without investigation, there are as at the Reference Date no Contaminants in, on or under the Premises or those portions

of the Lands that are immediately adjacent to the Premises. Notwithstanding the foregoing, the Landlord will remediate, and will be responsible for the remediation of, in accordance with Environmental Laws, any and all Contaminants in, on or under any portion or portions of the Lands immediately adjacent to the Premises that migrate into, onto or under the Premises, or might reasonably be expected to so migrate, and adversely affect the operations of the Tenant thereon as permitted by this Lease, except to the extent such remediation is the Tenant's responsibility pursuant to Section 19 and Section 17.6 of the Infrastructure Agreement.

## 21. WAIVER

No waiver of or neglect by the Landlord to enforce any right to forfeiture of this Lease or right of re-entry upon or breach of any term of this Lease shall be deemed a waiver of such rights upon any subsequent breach. No waiver of any default will be binding unless acknowledged in writing by the Landlord.

## 22. DEFAULT

If any one of the following occurs:

- (a) the Tenant fails to pay Rent, or any other amount owing by the Tenant hereunder, as required within 10 days after notice in writing from the Landlord;
- (b) the Tenant fails to remedy any breach or non-performance of its obligations under this Lease within 30 days after notice in writing from the Landlord (or if such breach cannot be remedied within 30 days, the Tenant fails to commence to remedy the breach within such 30 days and thereafter fails to proceed diligently to remedy such breach), other than in respect of the matters referred to in subsection (a) or any of subsections (c) to (i);
- (c) any of the goods and chattels of the Tenant on the Premises or the Lands at any time during the Term are seized or taken in execution or attachment by a creditor of the Tenant;
- (d) the Tenant makes an assignment for the benefit of creditors;
- (e) a receiver-manager is appointed to control the conduct of the Tenant's business on or from the Premises;
- (f) the Tenant becomes bankrupt or insolvent or takes the benefit of legislation now or hereafter in force for bankrupt or insolvent debtors;
- (g) an order is made for the winding-up of the Tenant;
- (h) the Tenant permits the Premises to be used by any persons other than those entitled to use it under the terms of this Lease; or
- (i) the Tenant commits a Corix Default (as that term is defined in the Infrastructure Agreement) under the Infrastructure Agreement;

then the current month's rent and the next ensuing two months' rent, if not yet paid, shall immediately become due and payable as accelerated rent and the Landlord may re-enter and take possession of the Premises as though the Tenant were holding over after the expiration of the Term and this Lease, at the option of the Landlord, shall immediately be forfeited and ended. Notwithstanding the foregoing, in the event that this Lease is terminated in accordance with this Section 22, the Tenant will have 30 days to remove the Improvements and the Tenant's Utility Services from the Premises and the Lands and the Landlord will provide the Tenant with reasonable access to the Premises and the Lands for such purposes.

### 23. **TERMINATION OF INFRASTRUCTURE AGREEMENT**

This Lease will terminate automatically upon the termination of the Infrastructure Agreement.

### 24. **END OF TERM AND REMOVAL OF IMPROVEMENTS**

Unless and to the extent agreed otherwise in writing by the parties, the Tenant will, within 60 days after the expiry or earlier termination of the Term, remove from the Premises and the Lands, the Improvements, including, without limitation, all fixtures, foundations, concrete pads, gas, electrical, water and other utility and service lines (other than those located on the Lands prior to the Commencement Date), the Tenant's Utility Services, and all machinery, materials, equipment and all other items of the Tenant, whether or not affixed to the Premises or the Lands, and restore the Premises and the Lands to the reasonable satisfaction of the Landlord, leaving the Premises and the Lands in a clean and neat condition. The Landlord will provide the Tenant with reasonable access to the Premises and the Lands for such purposes. For greater certainty, the parties confirm and agree that the Improvements and the Tenant's Utility Services are trade fixtures and title to the Improvements and the Tenant's Utility Services will at all times remain with the Tenant notwithstanding the degree of affixation of the Improvements and the Tenant's Utility Services to the Lands. If the Tenant does not remove the Improvements and the Tenant's Utility Services within 45 days after expiry or earlier termination of the Term, the Landlord may do so and the Tenant will be responsible for the cost of such removal and for any necessary storage charges. The Landlord will not be responsible for any damage caused to the Improvements or the Tenant's Utility Services by reason of such removal. Upon removal of the Improvements and the Tenant's Utility Services, the Landlord may sell, destroy, or dispose of any of the Improvements and the Tenant's Utility Services without any compensation to the Tenant.

### 25. **SEVERABILITY**

Should any part of this Lease be declared or held invalid for any reason, such invalidity shall not affect the validity of the remainder which shall continue in full force and effect and be construed as if this Lease had been executed without the invalid portion. It is hereby declared the intention of the parties that this Lease would have been executed without reference to any portion which may, for any reason, be hereafter declared or held invalid.

### 26. **INTERPRETATION**

Wherever the singular or masculine is used in this Lease, the same shall be deemed to include references to the plural, feminine or body corporate or politic, as the context may require. This Lease shall enure to the benefit of and shall be binding on the Landlord and its successors and assigns and shall enure to the benefit of and shall be binding on the Tenant and its successors and permitted assigns.

### 27. **NOTICES**

(a) All notices, directions and other instruments required or permitted to be given under this Lease shall be in writing, and shall be sufficient in all respects if delivered, or if sent by facsimile, or if sent by prepaid registered post mailed in British Columbia to the other party at the following address respectively:

(i) To the Landlord:

The University of British Columbia  
2075 Wesbrook Mall  
Vancouver, British Columbia V6T 1Z1

Attention: •

Facsimile Number: •

(ii) To the Tenant:



Corix Multi-Utility Services Inc.  
Suite 1160 – 1188 West Georgia Street  
Vancouver, British Columbia V6E 4A2

Attention: Eric van Roon

Facsimile Number: 604.697.6703

Email: [eric.vanRoon@corix.com](mailto:eric.vanRoon@corix.com)

Either party shall have the right at any time to change its address by notice in writing sent to the other party at the address in effect hereunder.

- (b) Any notice, direction or other instrument shall be deemed to have been received on the following dates:
- (i) if sent by facsimile, on the Business Day next following the date the sender receives confirmation of successful transmission;
  - (ii) if delivered, on the Business Day next following the date of delivery; or
  - (iii) if sent by registered mail, on the seventh day following its mailing, provided that if there is at the time of mailing or within 7 days thereafter a mail strike, slowdown, lockout or other labour dispute which may affect the delivery, then any notice, direction or other instrument, shall only be effective upon actual delivery or if delivered or sent by facsimile.
- (c) As an alternative to the methods of giving notice described in Section 27(a), a party may give notices, directions and other instruments required or permitted to be given under this Lease by electronic mail to the other party's representative identified in Section 27(a) who continues to be employed by the other party and is not to the knowledge of the sending party unavailable, provided that (i) the notice, direction or other instrument is stated to be a notice, direction or other instrument required or permitted to be given under this Lease, and (ii) the notice, direction or other instrument is concurrently also given by electronic mail to the senior legal officer of the other party. Any notice, direction or other instrument given by electronic mail shall be deemed to have been received on the Business Day next following the date of sending, provided that no such notice shall be effective unless such notice is actually received by the representative.

## 28. TIME

Time is of the essence of this Lease.

## 29. HEADINGS

The headings in this Lease are solely for the purpose of more convenient reference and not for construction or interpretation.

## 30. ENUREMENT

This Lease and everything herein contained will enure to the benefit of and be binding upon the parties hereto and their respective successors and permitted assigns.

IN WITNESS WHEREOF the parties have executed this Lease as of the day and year first written above.

**THE UNIVERSITY OF BRITISH COLUMBIA**

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Authorized Signatory

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Authorized Signatory

**CORIX MULTI-UTILITY SERVICES INC.**

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Authorized Signatory

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**SCHEDULE A (TO LICENSE AGREEMENT)**

The Lands and the Premises

(see attached)

**SCHEDULE I**  
**Form of Energy Services Contract**

To be provided