

CITY OF SURREY



District Energy System By-law, 2012, No. 17667

DISTRICT ENERGY SYSTEM BY-LAW

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BY-LAW NO. 17667

A By-law to provide for the establishment
and operation of a district energy system

As amended by By-law No. 18391, 02/02/15; 18574, 12/14/15; 18603, 12/14/15; 18966, 12/19/16;
19413, 12/18/17

THIS IS A CONSOLIDATED BY-LAW PREPARED BY THE CITY OF SURREY FOR CONVENIENCE ONLY. THE CITY DOES NOT WARRANT THAT THE INFORMATION CONTAINED IN THIS CONSOLIDATION IS CURRENT. IT IS THE RESPONSIBILITY OF THE PERSON USING THIS CONSOLIDATION TO ENSURE THAT IT ACCURATELY REFLECTS CURRENT BY-LAW PROVISIONS.

THE COUNCIL OF THE CITY OF SURREY, in public meeting assembled, ENACTS AS FOLLOWS:

**SECTION 1
INTERPRETATION**

Name of By-law

- 1.1 This By-law may be cited for all purposes as "District Energy System By-law, 2012, No. 17667".

Definitions

- 1.2 In this By-law:

"applicant" means an applicant for a building permit under section 4.2;

"building" means any structure used or intended for supporting or sheltering any use or occupancy either of a temporary or permanent nature;

"building area" means building area as defined by the total sum of all floor areas enclosed or partially enclosed by the exterior perimeter of a building or structure including without limitation stairways, elevator shafts, storage rooms, mechanical rooms and basements, and excluding areas for parking that are provided as an accessory use to the building or structure;

"Building By-law" means 'Surrey Building By-law, 1987, No.9011' as amended from time to time;

"Building Inspector" means the General Manager, Planning and Development, or his or her duly appointed representatives and assistants;

"building mechanical system" includes the internal space heat energy and domestic hot water distribution system for a building;

"charge" means a variable consumption fee based on the amount of heat energy measured in watt-hours used in, and recorded at the meter or estimated by the Collector under this Bylaw for, a designated property as shown in Schedule C, Part 2;

"City" means the City of Surrey;

"Collector" means the individual appointed by Council to be the Collector of Taxes or a person duly authorized to carry out the powers and duties of the Collector of Taxes;

"community energy centre" means an energy supply facility that provides heat energy in the form of hot water to designated buildings through the distribution system;

"Council" means the council of the City of Surrey;

"delivery point" means the outlet of the heat exchanger at a designated property;

"designated building" means a building to which this By-law applies by virtue of section 2.1 or 2.4;

"designated property" means a parcel of real property on which a designated building is situated;

"distribution system" means a thermal distribution network that links the community energy centre with the energy transfer station in each designated building, and that includes separate loops for the supply and return of heat energy in the form of hot water;

"distribution system extension" means that part of the distribution system that is situated on, over, under, or in a parcel of real property on which a designated building is situated or in a designated building;

"district energy system" means the district energy system referred to in section 3.1, and consists collectively of the community energy centre, distribution system and energy transfer station in each designated building, and all necessary appliances and equipment;

"early adopter" means an owner of a building that meets the criteria described in:

(a) section 2.1(a); or

(b) section 2.2(a) where the building has a floor area ratio of 2.5 or greater,

and who enters into a partnering agreement with the City within three years of the adoption date of this By-law regarding the owner's use of the district energy system;

"energy transfer station" means equipment owned by the City and used to meter, for billing purposes, the amount of energy consumed in a designated building, and to transfer heat energy from the distribution system to the building mechanical system in a designated building, and includes pipes for the supply and return of hot water, valves, controls, meters, and separate heat exchangers for domestic hot water and space heating;

"entry points" mean two openings in an exterior wall of a designated building for the passage of the supply and return pipes connecting the distribution system extension and energy transfer station;

"floor area ratio" means the figure obtained when the area of all the floors of the buildings constructed or proposed to be constructed on a parcel is divided by the area of the parcel;

"future designated building" means a building described in section 2.2(a) or (b);

"General Manager, Engineering" means the General Manager, Engineering for the City and includes his or her duly appointed assistants and representatives;

"heat energy" means heat distributed or delivered by water including for space heating and/or, domestic hot water, and/or heat for ventilation make-up air and/or any other heating requirements;

"heat exchanger" means the equipment, including ventilation systems and electrical pumps, installed at a designated property transfer of energy from the district energy system to a designated property;

"levy" means a fixed capacity fee based on the design, and the estimated peak heat energy demand, approved or varied by the General Manager, Engineering under this Bylaw for a designated building as shown in Schedule C, Part 1;

"meter" means a thermal energy meter at an energy transfer station consisting of a water flow meter, temperature sensors, and associated electronics used to measure and record the heat energy supplied to the designated building which houses the energy transfer station;

"owner" means an owner of a parcel of real property including the registered owner of an estate in fee simple, the tenant for life under a registered life estate, the registered holder of the last registered agreement for sale, the holder or occupier of land held in the manner referred to in the definition of "Owner" in the Schedule to the *Community Charter*, S.B.C. 2003, c.26, and a strata corporation established or continued under the *Strata Property Act*, S.B.C. 1998, c.43.

"parcel" means any lot, block, or other area in which land is held or into which it is subdivided, but does not include a highway.

"peak heat energy demand" means the maximum amount of heat energy, measured in watts, estimated for a designated building and approved by the General Manager, Engineering in accordance with this Bylaw;

"points of delivery" mean the valves on the building side of the heat exchangers at an energy transfer station;

"registered professional" means an architect or engineer registered in the Province of British Columbia, as a member in good standing in the Architectural Institute of British Columbia or the Association of Professional Engineers and Geoscientists of British Columbia;

"service" means the delivery by the City to a designated building of heat energy by way of the district energy system; and

"Service Area A" means the geographic location or area for which the service is currently available from the City and is defined in Schedule A, Figure 1;

"Service Area B" means the geographic location or area for which the service will be available in the future from the City and is defined in Schedule A, Figure 1;

Application of and conflict with other by-laws

- 1.3 The requirements of this By-law are in addition to the requirements of the Building By-law and other City by-laws, except that in case of conflict between the Building By-law or other City by-laws and this By-law, this By-law will prevail.

Table of contents

- 1.4 The table of contents for this By-law is for convenient reference only, and is not for use in interpreting or enforcing this By-law.

Schedules

- 1.5 Schedules attached to this By-law form part of this By-law.

Severability

- 1.6 A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.

SECTION 2 APPLICATION OF BY-LAW

Compulsory use of district energy system

2.1 Each owner in Service Area A of:

- (a) a new building with a floor area ratio equal to or greater than 1.0 proposed for construction or under construction for which the Building By-law requires submission of a building permit application and issuance of an occupancy permit to which the owner, as at the date of enactment of this By-law, is not yet entitled; or
- (b) an existing building with a floor area ratio equal to or greater than 1.0 where the estimated value of proposed alterations or alterations under construction which require submission under the Building By-law of a building permit application is more than \$400,000 and 50% of the building's latest assessed value according to the records of the British Columbia Assessment Authority,

must make use of the district energy system in accordance with the terms and conditions of this By-law.

Compulsory hydronic systems

2.2 Each owner in Service Area B of:

- (a) a new building with a floor area ratio equal to or greater than 1.0 proposed for construction or under construction for which the Building By-law requires submission of a building permit application and issuance of an occupancy permit to which the owner, as at the date of enactment of this By-law, is not yet entitled; or
- (b) an existing building with a floor area ratio equal to or greater than 1.0 where the estimated value of proposed alterations or alterations under construction which require submission under the Building By-law of a building permit application is more than \$400,000 and 50% of the building's latest assessed value according to the records of the British Columbia Assessment Authority,

must utilize hydronic systems that are compatible with the district energy system for all space heating and hot water heating, as described in the City's Design Criteria Manual / Energy Services Design Requirements, and in accordance with those terms and conditions of this By-law stated to be applicable to future designated buildings.

Compulsory hydronic systems where floor area ratio is less than 2.5

2.3 Where a building described in section 2.2(a) or (b) has a floor area ratio of less than 2.5, the owner will not be required to utilize hydronic systems for space heating within individual units, but hydronic systems will be required for all other space heating and hot water heating in the building.

Permissive use of district energy system

- 2.4 An owner of property located outside Service Area A and Service Area B but within the City may apply to the General Manager, Engineering to utilize the district energy system, if:
- (a) the General Manager, Engineering is of the opinion that the district energy system is capable of servicing the building that is the subject of the application;
 - (b) the General Manager, Engineering is of the opinion that servicing the building is necessary or desirable; and
 - (c) the owner enters into an agreement with the City, in form and substance satisfactory to the General Manager, Engineering, undertaking, among other matters, to wholly or partially, in the City's sole discretion, fund the capital cost of extending the district energy system to the owner's property in an amount and at a time determined by the General Manager, Engineering,

the General Manager, Engineering may approve the application, in which case the owner must utilize the district energy system in accordance with the terms and conditions of this By-law.

Exemption for early adopters

- 2.5 Despite sections 2.1, 2.2 and 2.3, an early adopter will be exempt from those provisions of this By-law identified in the partnering agreement entered into between the early adopter and the City.

SECTION 3 IMPLEMENTATION OF DISTRICT ENERGY SYSTEM

Authorization for district energy system

- 3.1 Council authorizes the design, construction, installation, maintenance, operation, repair, and management of a district energy system for the generation, storage, transmission, distribution and sale of heat energy to supply the entire heat energy demand for each designated building.

Ownership of district energy system

- 3.2 Ownership of the property comprising the district energy system will remain vested in the City, and is not to pass to any owner, or other person who has an interest in a designated building or designated property, and, despite any attachment or annexation to a designated building, the distribution system extension and energy transfer station are not to become part of the real property.

Role of the Collector and the General Manager, Engineering

- 3.3 For the purposes of this By-law, the Collector shall have charge of the levies, charges and fees and their collection and the General Manager, Engineering shall have charge and control of all properties and works in connection with the district energy system and of all connected engineering and mechanical work.

Authority for policies and criteria

- 3.4 The Collector and the General Manager, Engineering may establish or amend policies and criteria relating to the district energy system.

**SECTION 4
BUILDING PERMIT REQUIREMENTS
FOR BUILDING MECHANICAL SYSTEM**

Application to designated buildings and future designated buildings

- 4.1 All conditions of section 4 apply to designated buildings. All conditions of section 4 apply to future designated buildings with the exception of sections 4.2(c), 4.2(h) and 4.9(e).

Building permit application

- 4.2 A person who applies, under the Building By-law, for a permit to authorize the installation or alteration of a building mechanical system must include in, or submit with, the application:
- (a) an acknowledgment signed by the owner that the building is a designated building or future designated building;
 - (b) a certificate, signed by the registered professional who is responsible for design of the building mechanical system, estimating the:
 - (i) peak heat energy demand for space heating,
 - (ii) peak heat energy demand for domestic hot water,
 - (iii) combined peak heat energy demand for any uses other than space heating and domestic hot water,
 - (iv) annual average heat energy demand for space heating,
 - (v) annual average heat energy demand for domestic hot water, and
 - (vi) annual average heat energy demand for any uses other than space heating and domestic hot water;

- (c) a cheque in the amount of the excess demand fee referred to in section 8.1;
- (d) the proposed location of the energy transfer station;
- (e) the proposed location of the distribution system extension;
- (f) the proposed location of the distribution system extension entry points;
- (g) the proposed schedule for installation or alteration of the building mechanical system;
- (h) the proposed commencement date for the delivery of heat energy by the City to the energy transfer station; and
- (i) such other information as the Building Inspector or General Manager, Engineering may require.

Submission of copy of application

- 4.3 The owner must submit a copy of the building permit application described in section 4.2 to the General Manager, Engineering.

Approval of estimated maximum heat energy demand

- 4.4 The estimated peak heat energy demand submitted under section 4.2(b) is subject to approval by the General Manager, Engineering.

Approval of locations

- 4.5 The proposed location of each of the:

- (a) energy transfer station, submitted under section 4.2(d);
- (b) distribution system extension, submitted under section 4.2(e); and
- (c) entry points, submitted under section 4.2(f),

is subject to approval by the Building Inspector and General Manager, Engineering.

Approval of alternate locations

- 4.6 If:

- (a) the location which the owner proposes for the energy transfer station, distribution system extension, or entry points would be acceptable to the Building Inspector and General Manager, Engineering except for increased costs the City would incur

to install the energy transfer station or distribution system extension in that location; and

- (b) before issuance of the building permit, the owner:
 - (i) pays the City the estimated increased costs calculated by the General Manager, Engineering, and
 - (ii) agrees to pay the City on demand any amount by which the actual increased costs calculated by the General Manager, Engineering exceed the estimated increased costs,

the Building Inspector and General Manager, Engineering may approve the alternate location.

Approval of schedule

- 4.7 The proposed schedule for installation or alteration of the building mechanical system is subject to approval by the General Manager, Engineering.

Design of building mechanical system

- 4.8 The design of the building mechanical system is subject to approval by the Building Inspector and General Manager, Engineering.

Design and technical requirements

- 4.9 The building mechanical system must comply with the following design and technical requirements:
 - (a) the City's Design Criteria Manual / Energy Services Design Requirements or as stipulated by the General Manager, Engineering;
 - (b) the Building By-law;
 - (c) the applicable edition of the BC Building Code;
 - (d) the design must not incorporate features that increase the difficulty of efficiently integrating the building mechanical system and energy utility system;
 - (e) the system must achieve a minimum water temperature drop across the heat exchanger interface with the energy utility system of at least 15°C between the energy utility system hot water supply and return pipes as recorded at the meter;

- (f) the space heating system must include a variable flow operation with variable speed pumps to minimize the pumping power requirements, and to achieve the minimum water temperature drop;
- (g) all control valves, being terminal units and zone valves, must be the 2-way modulating type or the on/off type for fan coil units;
- (h) the system must not include 3-way valves that allow flow to by-pass the heating elements; and
- (i) the system must require an energy utility supply temperature of no greater than 65°C when the outdoor ambient temperature is equal to or greater than 0°C.

Approval of building permit

4.10 The building permit is subject to approval by the:

- (a) Building Inspector under the Building By-law; and
- (b) Building Inspector and General Manager, Engineering under this By-law.

No work before permit issuance

4.11 A person must not begin to install or alter a building mechanical system until the Building Inspector has issued the building permit.

SECTION 5 DESIGN AND INSTALLATION OR ALTERATION OF BUILDING MECHANICAL SYSTEM

Integration with district energy system

5.1 The design and installation or alteration of the building mechanical system must integrate the building mechanical system and district energy system in a manner that enables the building mechanical system to derive the most benefit possible from the district energy system and the district energy system to operate at peak efficiency.

Prohibited components

5.2 A building mechanical system must utilize the district energy system for all the space heating and domestic hot water requirements for a designated building, and must not incorporate any heat production equipment including but not limited to boilers, furnaces, hot water heaters or make-up air heaters, except that:

- (a) an owner who is constructing a new building or altering an existing building may incorporate, as part of the building mechanical system, a solar system to generate heat energy or equipment to acquire waste heat energy from the refrigeration or cooling system of the building or of another building in the vicinity, for the purpose of supplementing the heat energy provided by the district energy system; and
- (b) a person who is altering an existing building may retain components otherwise prohibited under this section 5.2 to the extent permitted by the Building Inspector under the Building By-law or by the Building Inspector and General Manager, Engineering under this By-law.

Installation of valves

- 5.3 The City will install the valves on the building side of the heat exchangers at the energy transfer station.

Scheduling

- 5.4 An owner must:
- (a) ensure that installation of the building mechanical system proceeds in accordance with the schedule approved under section 4.7, and any changes to the schedule approved under this section 5.4; and
 - (b) advise the Building Inspector and General Manager, Engineering within 24 hours of any proposed changes to the schedule for installation or alteration of the building mechanical system, which proposed changes are subject to approval by the Building Inspector and General Manager, Engineering.

Approval of installation or alteration of work

- 5.5 Completion of the installation or alteration of a building mechanical system in a designated building or future designated building is subject to approval by the Building Inspector and General Manager, Engineering under this By-law.

Adjustment of increased installation costs

- 5.6 Upon completion by the City of installation of the energy transfer station and distribution system extension or either of them in an alternate location under section 4.6:
- (a) after notice from the General Manager, Engineering of the amount by which the actual increased costs calculated by the General Manager, Engineering exceed the estimate, the owner referred to in section 4.6 must pay the City the difference; or
 - (b) the City must pay the owner the amount by which such actual increased costs are less than the estimate.

No occupancy permit

- 5.7 An owner is not entitled to issuance of an occupancy permit under the Building By-law for a designated building or a future designated building until the General Manager, Engineering has given approval under section 5.5, and, where applicable, the owner has paid the City any shortfall under section 5.6(a).

SECTION 6 ENTRY ONTO AND ACCESS TO REAL PROPERTY

Entry with respect to district energy system

- 6.1 The General Manager, Engineering, and other authorized employees, contractors or agents of the City, may enter onto real property at any reasonable time for the purpose of installation, maintenance, repair, or removal of a district energy system.

Entry with respect to building mechanical system

- 6.2 The General Manager, Engineering, and other authorized employees, contractors or agents of the City, may enter onto real property at any reasonable time to inspect the real property and appliances and equipment, including any building mechanical system, and to enforce this By-law.

Work on entry

- 6.3 Without limiting the generality of sections 6.1 and 6.2, the General Manager, Engineering, and other authorized employees, contractors or agents of the City, for the purposes of those sections, may conduct investigations, expose pipes, calibrate instruments, and read and test meters.

Access to designated property

- 6.4 The owner of a designated property that is to receive the service must sign and deliver to the City a covenant and a statutory right of way to be registered against title to the designated property, in the format specified by the City, for the installation, operation and maintenance on the designated property of all necessary facilities for supplying the service to the designated property.

Access to intervening property

- 6.5 If one or more privately-owned intervening properties are located between the designated property and the district energy system, then the owner of the designated property will obtain, at the owner's sole cost, a registered easement and a statutory right of way in favour of the City, in a form specified by the City, for the installation, operation and

maintenance on each intervening property of all necessary facilities for supplying the service to the designated property.

**SECTION 7
OPERATION OF DISTRICT ENERGY SYSTEM
AND BUILDING MECHANICAL SYSTEM**

Operation of district energy system

7.1 The City will maintain, repair, and manage the district energy system including the energy transfer station in each designated building up to and including the points of delivery.

No obligation to provide service

- 7.2 Nothing in this By-law shall obligate the City to provide the service to any person when:
- (a) the cost of laying the mains to the premises of the person to provide the service would be excessive and create an additional burden upon the revenues of the district energy system, unless the person shall pay to the City the cost of laying the mains to the person's property and other associated works; or
 - (b) the capacity of the district energy system is insufficient to provide the service.

No guarantee of service

7.3 The City does not guarantee service, or any particular level of service, to any designated building.

City not liable for failure of the district energy system

7.4 The City will not be liable for the failure of the district energy system in consequence of any accident or damage to the district energy system, breakdown or malfunction of the district energy system, or any temporary stoppage from breaks, alterations or repairs, whether the failure arises from the negligence of any person in the employ of the City or any other person or through natural deterioration or obsolescence of the district energy system, or otherwise.

City's ability to change operating conditions without liability

7.5 The City reserves the right at any and all times, without notice, to change operating conditions of the service, for the purposes of making repairs, extensions, alterations or improvements, or for any other reason, and neither the City, its officers, employees, contractors or agents shall incur any liability of any kind whatever by reason of the cessation in whole or in part of the district energy system or changes in operating conditions.

Tampering with district energy system

- 7.6 A person must not tamper, interfere with, damage, or destroy any part of the district energy system.

Operation of building mechanical system

- 7.7 An owner of a designated property must maintain and repair the building mechanical system to the points of delivery including:
- (a) keeping the building mechanical system free of foreign material so as to prevent fouling of the heat exchangers at the energy transfer station; and
 - (b) treating water in the building mechanical system sufficiently to prevent corrosion of the heat exchangers at the energy transfer station, and in accordance with the minimum criteria set out in Schedule B,

Damage to district energy system components

- 7.8 An owner of a designated property must advise the City immediately of any damage to the energy transfer system or distribution system extension.

No obstruction

- 7.9 An owner of a designated property must not construct any structure, which in the sole opinion of the General Manager, Engineering, obstructs access to a distribution system extension, energy transfer station, or any part of the district energy system above ground or underground.

Protection of equipment

- 7.10 An owner of a designated property must take reasonable care of and protect all equipment installed by the City on the owner's designated property.

No unauthorized changes

- 7.11 No equipment such as heat exchangers, meter-sets or related equipment will be installed, connected, moved or disconnected except by the City's authorized employees, contractors or agents or by other persons acting with the City's written permission.

Application for service

- 7.12 An owner of a designated property must apply to the General Manager, Engineering to commence service to a designated building at least 120 days before the earlier of:
- (a) the date the owner requires service; and
 - (b) the date of issuance of any occupancy permit for occupancy of the building.

Meter test

- 7.13 When an owner of a designated property notifies the General Manager, Engineering, in writing, that a past charge for service is excessive the General Manager, Engineering will arrange to have the meter tested at the expense of the owner.

Payment of meter testing fee

- 7.14 Before the City conducts the test outlined in section 7.13, the owner of the designated property requesting the test must pay the fee set out in Schedule D.

Accuracy of meter

- 7.15 A meter will be considered to be accurate unless the meter testing result indicates that the percentage accuracy of the meter is less than 95% or greater than 105%.

Meter found to be not accurate

- 7.16 If the test outlined in section 7.13 shows that the meter is not accurate, the meter testing fee will be refunded to the owner, the meter will be replaced or repaired by the City, and the excess charge for service will be refunded to the owner.

Meter found to be accurate

- 7.17 If the test outlined in section 7.13 shows that the meter is accurate, the meter testing fee will be retained by the City, no refunds or adjustments will be made in favour of the owner and the meter will not be replaced or repaired by the City.

Service calls

- 7.18 An owner of a designated property may apply to the General Manager, Engineering to temporarily interrupt service to a designated building by closing the appropriate valves or by such other means as the General Manager, Engineering may find appropriate.

Changes to energy transfer station or distribution system extension

7.19 An owner of a designated property may apply to the General Manager, Engineering to remove, relocate, or alter the energy transfer station or distribution system extension servicing a designated building.

Cost of changes to energy transfer station or distribution system extension

7.20 If the General Manager, Engineering agrees to remove, relocate, or alter the energy transfer station or distribution system extension referred to in section 7.19:

- (a) the General Manager, Engineering will give the owner an estimate of the cost;
- (b) the owner must pay the City the amount of the estimate before commencement of the work;
- (c) after completion of the work, the General Manager, Engineering will notify the owner of the actual cost;
- (d) if the actual cost is more than the estimated cost, the owner must pay the City the shortfall within 30 days after demand by the City; and
- (e) if the actual cost is less than the estimated cost, the City must pay the owner the excess except that if the owner owes the City money under this By-law at that time, the City may apply the excess against such debt.

Removal of equipment

7.21 If the supply of the service to an owner's designated building is discontinued or terminated for any reason then the City may, but is not required to, removed the energy transfer station and related equipment from the designated property.

SECTION 8 LEVIES AND CHARGES AND OTHER COSTS

Excess demand fee

8.1 Pursuant to section 4.2(c), a building permit applicant must pay the City the excess demand fee set out in Schedule C.

Imposition of levy

8.2 From and after the earlier of the date the owner of a designated building requires service, as indicated in the application referred to in section 7.12(a), and the date of issuance of

any occupancy permit for occupancy of the building, the owner must pay the City the levy set out in Schedule C.

Imposition of charge

8.3 From and after the date upon which service to a designated building begins, the owner of the designated property must pay the City the charge set out in Schedule C.

Billing for levy or charge

8.4 The Collector will send a bill for the amount of each levy or charge to each owner according to the frequency set out in Schedule C, and the bill will include:

- (a) the date when payment of the amount of each levy or charge is due and payable;
- (b) the number of megawatt hours of heat energy supplied to the energy transfer station; and
- (c) the number of megawatt hours of heat energy returned from the energy transfer station.

Payment of levy or charge

8.5 The owner of a designated property must pay the City the amount of each levy or charge on or before the due date set out in each bill referred to in section 8.4.

Amount added for late payment

8.6 Council hereby imposes a penalty or loss of discount of an amount equal to 5% of any levy or charge that remains unpaid after the date it is due under this By-law.

Insertion in tax roll

8.7 The Collector may insert each levy or charge in the real-property tax roll of the designated property.

Adjustment for partial period

8.8 The Collector may pro rate the amount of a levy or charge for a partial billing period on a daily basis.

Non-registering meter

8.9 If a meter for a designated building fails to register accurately the consumption of heat energy, the Collector will estimate the consumption, and render a bill based on the average previous consumption adjusted to take into account seasonal variations, changes in occupancy, or other factors which, in the opinion of the Collector or the General

Manager, Engineering, may affect the consumption of heat energy in the designated building.

Variation in matters affecting levy

8.10 With respect to a designated building:

- (a) the owner must give the General Manager, Engineering written notice at least 30 days in advance of any variation in use, occupancy, building alteration, or other matter that may affect the amount of the levy, and must include in the notice the date the owner anticipates such variation to take effect;
- (b) the owner may apply to the General Manager, Engineering to vary the estimated peak heat energy demand; or
- (c) the General Manager, Engineering may notify the owner that the General Manager, Engineering is varying the estimated peak heat energy demand,

and, if the General Manager, Engineering is of the opinion that, as a result of any such variation, the amount of the levy for the designated building should increase or decrease, the General Manager, Engineering may order such increase or decrease to take effect on a date specified by the General Manager, Engineering after taking into account the incremental costs to the City as a consequence of the variation.

Calculation of City's costs

8.11 Calculation of the costs or estimated costs the City incurs or expects to incur under this By-law will include, without duplication, amounts spent by the City using its own work force or engaging an independent contractor for gross wages, employee fringe benefits, materials, equipment rentals at rates paid by the City or set by the City for its own equipment, and fees and other charges payable to an independent contractor, plus an amount equal to 20% of those costs to cover the City's overhead and administrative expenses.

Back-billing

8.12 On discovery that service provided in the past by the City has not been billed yet to a designated property, the City may bill the cost associated to the owner of the designated property, providing details and, on submission of the bill to the owner, the amount billed will be due.

Historical billing information

8.13 An owner who requests historical billing information may be charged the cost of processing and providing the information. The cost will be charged based on the actual hours of work performed by the City in retrieving and preparing the information.

**SECTION 9
APPLICATIONS AND FEES**

Form of application

- 9.1 Each person who submits an application under this By-law must use the form of application prescribed by the General Manager, Engineering, Building Inspector, or Collector, as the case may be.

Fee for application

- 9.2 Each person who submits an application under this By-law must pay the applicable fee set out in Schedule D.

Returned cheques

- 9.3 If a person's cheque is returned to the City, that person must pay to the City on demand the amount set out in Schedule D.

**SECTION 10
OFFENCES AND PENALTIES
AND ENFORCEMENT**

Termination of service for failure to pay

- 10.1 Without limiting the City's other rights or remedies under this By-law, if an owner of designated property fails to pay to the City any levy, charge, fee, or cost for more than 30 days after the due date:
- (a) the Collector may serve notice upon the owner; and
 - (b) such notice will:
 - (i) set out the amount owing,
 - (ii) demand payment of that amount within 10 days from the date of such notice,
 - (iii) notify the owner that failure to pay that amount within such 10 days will result in the City ceasing service to the owner's building, and
 - (iv) notify the owner that the City will not restore such service until the owner has paid to the City the amount owing together with any additional costs incurred by the City in connection with such cessation and restoration of service.

Notice of violation

10.2 An inspector or official of the City, or a By-law Enforcement Officer, may give notice to any person ordering or directing that person to:

- (a) discontinue or refrain from proceeding with any work or doing anything that contravenes this By-law; or
- (b) carry out any work or do anything to bring a building mechanical system into conformity with this By-law,

within the time specified in such notice.

Service of notice

10.3 An inspector or official of the City, or a By-law Enforcement Officer, may serve a notice under this By-law:

- (a) by mailing it by registered post to an owner at the address of the owner shown on the real property assessment roll prepared pursuant to the *Assessment Act*;
- (b) by handing it to the owner or other person who is the addressee of the notice; or
- (c) if the notice refers to real property, by posting it on the real property.

Offences under By-law

10.4 A person who:

- (a) violates any provision of this By-law, or does any act or thing which violates any provision of this By-law, or suffers or allows any other person to do any act or thing which violates any provision of this By-law;
- (b) neglects to do or refrains from doing anything required to be done by any provision of this By-law; or
- (c) fails to comply, or suffers or allows any other person to fail to comply, with an order, direction, or notice given under any provision of this By-law,

is guilty of an offence against this By-law, and liable to the penalties imposed under this Section 10.

Fine for offence

- 10.5 Every person who commits an offence against this By-law is punishable on conviction by a fine of not less than \$250.00 and not more than \$10,000.00 for each offence, except that:
 - (a) a person who commits an offence under section 7.11 that results in fouling of the heat exchangers is liable to a fine of not less than \$2000.00 for each offence; and
 - (b) a person who fails to comply, or suffers or allows any other person to fail to comply, with an order, direction, or notice given under any provision of this By-law is liable to a fine of not less than \$500.00 for each offence.

Fine for continuing offence

- 10.6 Every person who commits an offence of a continuing nature against this By-law is liable to a fine for each day such offence continues.

Termination of service for failure to comply

- 10.7 Without limiting the City's other rights or remedies under this By-law, the City may enforce compliance with the requirements of this By-law against the owner by discontinuing the service to the designated building.

**SECTION 11
LIMITATIONS ON LIABILITY**

Responsibility before and after delivery point

- 11.1 An owner of a designated property is responsible for all expense, risk and liability for:
 - (a) the use or presence of energy being delivered from the district energy system to the owner's property before it passes the delivery point;
 - (b) the use or presence of energy being returned from an owner's property to the district energy system after it passes the delivery point; and
 - (c) the City-owned facilities serving the owner's property,if any loss or damage caused by or resulting from failure to meet that responsibility is caused, or contributed to, by the act or omission of the owner or a person for whom the owner is responsible.

Responsibility after delivery point

- 11.2 The owner of a designated property is responsible for all expense, risk and liability with respect to the use or presence of energy being delivered to the owner's property after it passes the delivery point.

Responsibility for energy transfer station

- 11.3 The owner of a designated property is responsible for all expense, risk and liability with respect to all energy transfer station related equipment at the owner's property unless any loss or damage is:
 - (a) directly attributable to the negligence of the City, its employees, contractors or agents; or
 - (b) caused by or resulting from a defect in the equipment, and the owner must prove that negligence or defect.

For greater certainty and without limiting the generality of the foregoing, the owner is responsible for all expense, risk and liability arising from any measures required to be taken by the City to ensure that the energy transfer station related equipment on the owner's property are adequately protected, as well as any updates or alterations to the distribution system extension on the owner's property necessitated by changes to the grading or elevation of the owner's property or obstructions placed on such distribution system extension.

Owner indemnification

- 11.4 The owner of a designated property will indemnify and hold harmless the City and its elected and appointed officials, employees, contractors and agents from all claims, loss, damage, costs or injury (including death) suffered by the owner or any person claiming by or through the owner or any third party caused by or resulting from the use of energy by the owner or the presence of energy in the owner's property, or from the owner or owner's employees, contractors or agents damaging the City's facilities.

**SECTION 12
ENACTMENT**

Force and effect

- 12. This By-law will come into force and take effect on the date of its enactment.

READ A FIRST TIME on the 11th day of June, 2012.

READ A SECOND TIME on the 11th day of June, 2012.

READ A THIRD TIME on the 11th day of June, 2012.

RECONSIDERED AND FINALLY ADOPTED, signed by the Mayor and Clerk, and sealed with the Corporate Seal on the 25th day of June, 2012.

MAYOR

CLERK

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SCHEDULE A

Figure 1 – SERVICE AREA A & SERVICE AREA B



Produced by GIS Section: May 31, 2012, CS/AWB



**DISTRICT ENERGY SERVICE AREA
(SERVICE AREA A & SERVICE AREA B)**

**ENGINEERING
DEPARTMENT**

The data provided is compiled from various sources and IS NOT warranted as to its accuracy or sufficiency by the City of Surrey. This information is provided for information and convenience purposes only. Lot sizes, Legal descriptions and encumbrances must be confirmed at the Land Title Office.

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CORPORATE REPORTS\Eng-Utilities\
AW-DistrictEnergyServiceAreaFig1.mxd

SCHEDULE B

STANDARDS FOR TREATING WATER IN THE BUILDING MECHANICAL SYSTEM

Inserted by By-law No. 18603, 12/14/15

1. The water in the building mechanical system must be treated to ensure that the following minimum standards are met at all times:

Maximum 30 parts per million chloride;
Maximum 5% nitrate;
PH Level between 9.5 and 10;
Maximum 2 parts per million hardness;
Maximum 1 part per million Iron; and
Total bacteria count \leq 100 cfu/ml (colony forming units per millilitre).

2. Testing and reporting of the water quality may be required by the General Manager, Engineering.

Schedule C - Charges

Part 1 – Levy

	Levy
<u>Class 1</u> Residential and mixed-use buildings where the non-residential portion of the building does not exceed 20% of the building area.	\$0.0179 per square metre of the building area per day
<u>Class 2</u> Any building where the non-residential portion of the building exceeds 20% of the building area.	\$0.2569 per kilowatt of peak heat energy demand per day

Part 2 –Charge

Charge	\$52.96 per megawatt-hour of heat energy
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SCHEDULE D
APPLICATION AND MISCELLANEOUS FEES

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