

**Legal Services**

PHILIP C.M. HUYNH, City Solicitor
MAUREEN ST. CYR, Assistant City Solicitor
KELLY RAYTER, Assistant City Solicitor
BENJIE LEE, Assistant City Solicitor
HUGH CAMPBELL, Assistant City Solicitor
WASSAN AUJLA, Assistant City Solicitor

Our File: 2430-20-910
Direct Line: (604) 591-4652

Via E-filing

October 24, 2019

British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Attn: Patrick Wruck, Commission Secretary

Dear Sir,

**Re: BCUC - Inquiry into the Regulation of Municipal Energy Utilities
Order G-177-19 | Project No. 1599007**

Attached, for filing pursuant to Order G-177-19 and the regulatory timetable set by the BCUC, is the Written Submission of the City of Surrey dated October 24, 2019.

Should you require anything further, please do not hesitate to contact us.

Yours truly,

A handwritten signature in blue ink, appearing to read "Benjie Lee", is written over a large blue circular stamp or watermark.

BENJIE LEE
Assistant City Solicitor

CP

Attachment

https://surreybc-my.sharepoint.com/personal/cyp_surrey_ca/documents/desktop/102419_1343_cyp.docx
CYP 10/24/19 1:47 PM



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

and

BRITISH COLUMBIA UTILITIES COMMISSION

An Inquiry into the Regulation of Municipal Energy Utilities
Project No. 1599027 | Order No. G-177-19

SUBMISSION OF CITY OF SURREY

October 24, 2019

Table of Contents

Introduction	3
Commission Order G-177-19.....	3
Overview of Surrey's Position	4
Background	4
Future Plans	6
Governance Model	7
Accessibility and Transparency	7
The Current Definition of "Public Utility" Under the UCA	8
Whether a utility affiliated, in some way, with a municipality or regional district is considered a public utility as defined by section 1 of the UCA?	8
Summary	9
Appendix I – City of Surrey District Energy (DE) Rate-Setting Policy No. H-53	
Appendix II – Letter from Rate Review Panel Chair to Commission Secretary, BCUC	

BCUC Inquiry into the Regulation of Municipal Energy Utilities

Submissions of the City of Surrey

Introduction

1. The City of Surrey (the "City" or "Surrey") is writing to the British Columbia Utilities Commission (the "Commission" or "BCUC") to provide its initial submissions into the Commission's Inquiry into the Regulation of Municipal Energy Utilities (the "Inquiry")
2. A part of Metro Vancouver and currently home to over half a million residents, Surrey is one of the fastest-growing cities in Canada. Surrey is the second largest municipality in British Columbia by population and the largest in Metro Vancouver by land area. Since 2014, Surrey has had a district energy utility in its downtown core, also known as City Centre. Surrey's district energy utility is not regulated under the *Utilities Commission Act* (the "UCA") since the utility is wholly owned by Surrey and is completely within the boundaries of the City.
3. Surrey thanks the Commission for the opportunity to comment as an intervener. Surrey looks forward to developing a greater understanding of the views of the various participants and to providing additional comments as the Inquiry progresses.

Commission Order G-177-19

4. In its letter of August 1, 2019, the Commission indicated the following:

Upon the completion of this Inquiry, the BCUC will consider if it is appropriate or necessary to:

- i) seek advance approval from the Government of BC to offer a class of cases exemption to municipalities and regional district energy systems in certain circumstances; and/or
 - ii) make a recommendation to the Government of BC to review the definition of a "public utility" within the UCA as it relates to such entities.
5. By way of Order Number G-177-19, the Commission requested that registered interveners provide written submissions to address the following:
 - 1) Whether a utility affiliated, in some way, with a municipality or regional district is considered a public utility as defined by section 1 of the UCA. Forms of affiliation include, but may not be limited to:
 - a. The utility's assets are owned by a corporation of which the municipality or regional district is a shareholder or the sole shareholder;

- b. The utility's assets are owned by a partnership of which the municipality or regional district is a partner, a limited partner or a general partner;
- c. The utility's assets are owned by a third party, but the municipality or regional district has granted a franchise agreement, a licence and/or has enacted enabling bylaws to facilitate the construction and/or operation of the utility;
- d. The utilities' assets are owned by a municipality or regional district but are operated by a third party; and
- e. The municipality or regional district, by agreement with the utility, sets or approves the setting of rates for the utility

Overview of Surrey's Position

- 6. Surrey owns and operates a district energy utility that is wholly owned by Surrey and entirely within the boundaries of the City. Surrey has plans to expand its district energy utility to one of the largest in the province. Surrey is interested in taking part in the inquiry to ensure that the best interests of Surrey's residents and businesses are being served through the application of municipal regulation.
- 7. The district energy utility services provided by the City through its wholly-owned utility are regulated by Surrey City Council ("Surrey City Council") and do not fall under the jurisdiction of the Commission. The definition of "public utility" in the UCA expressly excludes a municipality or regional district in respect of services provided by the municipality or regional district within its own boundaries.
- 8. Although the specific questions posed by the Commission under Order Number G-177-19 do not affect Surrey's current operating model, Surrey takes the position that the existing exclusion of municipalities and regional districts from the definition of "public utility" in the UCA is broad and includes other operating models where local governments have partnered with private business, particularly where the local government retains ultimate control over the utility in terms of governance and rate-setting.
- 9. Section 8(2) of the *Community Charter*, S.B.C. 2003, c. 26., provides municipalities with broad powers to provide any services that Council considers necessary or desirable, and to provide these services either directly or through another person or organization. This section provides municipalities with the ability to partner with private business in regards to district energy utilities.

Background

- 10. A part of Metro Vancouver and currently home to over half a million residents, Surrey is one of the fastest growing cities in Canada. Surrey is the second largest municipality in British Columbia by population and the largest in Metro Vancouver by land area. With a significant amount of the population growth occurring in the downtown core, Surrey's City Centre is transforming into a high density, transit oriented and clean energy community.

These remarkable changes have been driven by a compelling vision for the area and major public sector investment to catalyze development. The 550-hectare (1,360-acre) City Centre area is designated as Metro Vancouver's second regional downtown core, with proposed high-density developments, diverse land-use types and a high level of regional connectivity – all qualities that make the area particularly attractive for district energy.

11. Surrey has adopted aggressive per capita greenhouse gas reduction targets: 33 percent by 2020 and 80 per-cent by 2050 compared to 2007 levels. To demonstrate climate action leadership and meet these ambitious targets, Surrey is advancing a hot water district heating system in its rapidly growing City Centre community. This system will facilitate a transition from fossil fuels to renewable low-carbon energy sources while increasing resilience to energy price escalation.
12. Key to meeting the City's Community Climate Action Strategy and Community Energy Emissions Plan, Surrey's district energy utility goals are to:
 - Cut greenhouse gas emissions;
 - Generate heating and hot water more efficiently;
 - Keep energy affordable;
 - Deliver energy security through community-level energy solutions;
 - Transition to local, low-impact renewable energy sources; and
 - Raise awareness of energy sustainability.
13. For Surrey City Centre, district energy was identified as a viable path toward community-scale emissions reductions, long-term energy resilience and price stability.
14. The expanding district energy system in Surrey will serve most of the City's growing downtown population with reliable, cost-competitive and cleaner heating and hot water services. City Centre development is characterized by high-density, transit-oriented and clean-energy community. These qualities make the area viable for district energy.
15. Surrey decided early on that district energy utility development must be aligned with community objectives and, by completely owning and operating the district energy system as a municipal utility, the City would play the lead role in shaping its future. This ownership model ensures that the development of the utility is coordinated effectively with other City functions and is consistent with the long-term vision for City Centre. The ownership model also allows for private sector partnership opportunities in the future.
16. Surrey's City Centre District Energy System started up in 2014 and has provided hot water district heating to predominantly new buildings. It includes three high-density nodes, centered around existing rapid transit stations. A separate district energy network will be constructed in each node, and eventually all three networks will be connected to create an integrated system. By 2045, the integrated system may connect more than 25 million sq ft of new development in addition to existing buildings, such as a regional hospital and various schools. The peak capacity of the integrated system may then be on the order of 90 MW thermal.

17. The system is to be fueled by a diverse range of energy sources. The initial phases of the system rely primarily on natural gas with supplement heat provided using renewable natural gas (RNG) as well as excess heat from the City's geexchange system at City Hall. The City plans to integrate larger-scale sources of renewable energy once a suitable customer base is established. Among the renewable fuel sources studied to date, biomass and sewer heat are the leading options. Considering the scale of the project, however, the system will likely need to rely on multiple sources of energy.
18. In the initial phases of the district energy utility, temporary boiler plants were installed within City Centre. These temporary plants will be replaced by a piped connection to the permanent West Village Energy Centre over time as the network grows.
19. One of the City's first district energy plants, a temporary 4.5 MW thermal plant was installed in 2014, on the site of what is now the West Village Energy Centre.
20. West Village Energy Centre, located at 13231 Central Ave, is the City's first permanent energy centre. As the network expands, adding additional piping and new renewable energy centres, the West Village Energy Centre will serve as a peaking plant for the system. The permanent facility's current thermal capacity is 15 and can be expanded to 45 MW.

Future Plans

21. Surrey's district energy strategy is developing over 3 phases of growth:
 - Initially, temporary energy centres are installed in multiple areas within City Centre.
 - As demand for heat energy grows, temporary centres are replaced with permanent centralized energy centres, like the West Village Energy Centre.
 - Further investment will take place to integrate the use of large-scale renewable energy sources.
22. Surrey's long-term vision includes an integrated hot water district energy system covering the entire City Centre area. Over time, this will include multiple energy centres with a range of low-carbon renewable energy sources, including geexchange, biomass from local clean wood waste, waste heat from various sources, and renewable natural gas.
23. Surrey has a 30-year plan to build out its City Centre network. It will include three high density nodes, centered around existing rapid transit stations (Surrey Central, King George and Gateway). A separate district energy network will be constructed at each node, and eventually all three networks will be connected to create an integrated system.

Governance Model

24. The City's district energy utility is not incorporated and operates as a business unit of the City's Engineering Department, under the name Surrey City Energy. As a wholly municipally owned utility operating within the municipality's own boundaries, the district energy utility is exempt from regulation of the BCUC, pursuant to the UCA. Similar to how the City oversees water, sewer, drainage and solid waste utilities, Surrey City Council is tasked with the responsibility of regulating the price of services being delivered by the district energy utility and ensuring that the public interest is served. Surrey's rate structure compares favourably to other district energy systems and energy providers of both electricity and gas boiler systems.
25. Consumers may conveniently provide their input about rates directly to Surrey City Council, which is ultimately accountable to the residents and property owners of the City by way of elections. The current system allows Surrey City Council to respond quickly and efficiently to the needs of relevant stakeholders by adjusting rates as necessary by bylaw. This simple yet effective procedure results in the ability of Surrey City Council to respond directly to concerns of consumers and results in lower administrative costs to the City, which are passed onto the consumer.
26. In order to maintain a fair and objective procedure for setting rates, the City has established an independent External Rate Review Panel (the "Rate Review Panel") in accordance with the Terms of Reference of a District Energy (DE) Rate-Setting Policy (the "Rate-Setting Policy"), which is attached hereto as Appendix "I". The Rate Review Panel is comprised of three members who are appointed by Surrey City Council with one member being appointed as the Chair. The individuals appointed as panelists are experts in utility finance and regulation. The Rate Review Panel may take into account public input and submits a letter of endorsement to Surrey City Council recommending rates.
27. The purpose of the Rate Review Panel is to provide objective expert advice to the City to ensure that the rates and rate structure are consistent with the principles set out in the Rate-Setting Policy. The Rate Review Panel's chair has provided a letter summarizing their role in the rate-setting process, which is attached hereto as Appendix "II".

Accessibility and Transparency

28. As with any issues concerning the City, members of the public may contact individual councillors with their concerns or they may make representations to Mayor and Council, as a whole, at a Council meeting. Pursuant to the City's *Council Procedure By-law, 2004, No. 15300*, as amended, members of the public may request to speak to Council at a Council meeting (s. 47).
29. Documents in the possession of Surrey are also available to the public. Surrey is a public body pursuant to the *Freedom of Information and Protection of Privacy Act*, R.S.B.C. 1996, c. 165 (the "*Freedom of Information Act*") and as such members of the public may access information related to the City and the City's district energy utility through the *Freedom of Information Act*.

The Current Definition of "Public Utility" Under the UCA

30. The UCA provides the following:

"public utility" means a person, or the person's lessee, trustee, receiver or liquidator, who owns or operates in British Columbia, equipment or facilities for

(a) the production, generation, storage, transmission, sale, delivery or provision of electricity, natural gas, steam or any other agent for the production of light, heat, cold or power to or for the public or a corporation for compensation, or

(b) the conveyance or transmission of information, messages or communications by guided or unguided electromagnetic waves, including systems of cable, microwave, optical fibre or radiocommunications if that service is offered to the public for compensation,

but does not include

(c) a municipality or regional district in respect of services provided by the municipality or regional district within its own boundaries,

31. Surrey's district energy utility is a wholly owned utility within its own boundaries and is consequently not a "public utility" as defined in the UCA. As a result, it is not subject to regulation by the Commission. Surrey understands that the scope of the Inquiry does not affect Surrey's current operating model.

Whether a utility affiliated, in some way, with a municipality or regional district is considered a public utility as defined by section 1 of the UCA?

32. Surrey's position is that the existing exclusion of municipalities and regional districts from the definition of "public utility" in the UCA is broad and allows for local governments to make use of private partnerships in order to operate district energy utilities. This is particularly the case where local governments retain ultimate control over governance and rate-setting. Such circumstances are similar to district energy utilities wholly owned and operated by the local government. They also share the same benefits of accountability and transparency.

33. The ability of local governments to partner with private enterprise is important for the continued growth and sustainability of district energy utilities

34. Through various initiatives, most local governments have committed themselves to reducing carbon emissions and environmental sustainability. District energy utilities serve as important vehicles to accomplish these objectives.

35. Permitting local governments to explore a range of business models, including partnering with private business, gives them more flexibility to deliver on these objectives. Without private sector investment, local governments must fund district energy utility projects through their limited tax base and fees.

36. As well, under some operational models where private enterprise is engaged, the local governments still retain ultimate control over the district energy utility and rate-setting. Such models should be treated no differently than district energy utilities wholly owned and operated by the local government.
37. In order for a district energy system to expand its infrastructure, it must make timely decisions early on as a development is contemplated. Developments connecting to the district energy utility often fund the construction of the expansion of the utility as part of the development. If district energy systems are regulated under the UCA, then such expansions would require a certificate of public convenience and necessity, pursuant to s. 45 of the UCA. The process for obtaining the certificate is thorough, but it may also be lengthy and costly for many local governments. These factors may inhibit the ability of local governments to make use of opportunities to expand the district utility's infrastructure and may negatively impact the sustainability of district energy utilities.

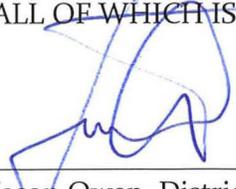
Summary

38. Surrey owns and operates a district energy utility that is wholly owned by Surrey and entirely within the boundaries of the City. Surrey has plans to expand its district energy utility to one of the largest in the province. Surrey is interested in taking part in the inquiry to ensure that the best interests of Surrey's residents and businesses are being served through the application of municipal regulation.

Although the specific questions posed by the Commission under Order Number G-177-19 do not affect Surrey's current operating model, Surrey takes the position that the existing exclusion of municipalities and regional districts from the definition of "public utility" in the UCA is broad and includes other operating models where local governments have partnered with private business, particularly where the local government retains ultimate control over the utility in terms of its governance and rate-setting.

39. Surrey thanks the Commission for the opportunity to comment as an intervener. Surrey looks forward to developing a greater understanding of the views of the various participants and to providing additional comments as the Inquiry progresses.

ALL OF WHICH IS RESPECTFULLY SUBMITTED



Jason Owen, District Energy Manager
& Acting Manager, Sustainability
City of Surrey



City of Surrey Policy

No. H-53

Policy Title:	DISTRICT ENERGY (DE) RATE-SETTING POLICY
Approval Date:	2013 DEC 16 (RES. 13-2605)
History:	NEW
Department:	ENGINEERING FINANCE & TECHNOLOGY

TITLE: District Energy (DE) Rate-Setting Policy

Utility rates for thermal energy provided by the City of Surrey (the "City") are regulated under the District Energy System By-law, 2012, No. 17667, as amended. This policy forms the basis for the establishment and adjustment of the City's thermal energy utility rates.

EXPERT EXTERNAL RATE REVIEW PANEL

The City will establish an Expert External Rate Review Panel (the "Panel") in accordance with the Terms of Reference attached as Schedule 1 to this policy. Information on the District Energy Utility (the "Utility") rates and rate structure is to be reviewed by the Panel who will provide objective, expert advice to the City to ensure that the rates and rate structure are consistent with the following principles.

RATE STRUCTURE AND RATE-SETTING PRINCIPLES:

1. COST RECOVERY

The cost-of-service model is the accounting structure that will be used to establish the rates and rate structure for the Utility and will take into account all costs associated with financing, operating, and administering the utility.

2. RATE COMPETITIVENESS

Rates will be established and maintained such that they are competitive with the costs that Utility customers would incur if they were using other thermal energy options that are available in the market, such as electricity and natural gas.

3. ***RETURN ON INVESTMENT***

The rates over time will be set to include a rate of return on investment. In this regard, the rate of return on the City's investment over time will be no less than the City's cost of borrowing to finance the development of the Utility and no more than the rate of return established for private utilities regulated by the British Columbia Utilities Commission.

4. ***SHORTFALL RECOVERY***

If by virtue of the rates and rate structure that emanates from this policy, the Utility incurs a shortfall in any year including debt servicing, operations, administration and capital replacement, such a shortfall will be recognized as debt against the Utility and will be taken into account in relation to future rate adjustments.

5. ***LOW-CARBON / RENEWABLE ENERGY SOURCES***

The Utility will seek to maximize the proportion of low-carbon, renewable heat sources within its energy supply mix as early as possible while ensuring that the other rate-setting principles are respected.

6. ***FAIRNESS***

Utility rates will be structured such that the rates charged to different user types are fair and equitable. The Utility will not charge one user type a higher rate as a means to charge a different user type a lower rate that is not commensurate with the cost of providing utility service to that user type (i.e., cross-subsidization will not occur across user types).

Terms of Reference

District Energy Utility Expert External Rate Review Panel

DRAFT

BACKGROUND

Surrey City Energy (SCE) is a municipally-owned utility and, as such, is exempt from the regulatory oversight of the British Columbia Utilities Commission (BCUC). Similar to the City's water, sewer, drainage and solid waste utilities, Council is tasked with the responsibility of regulating the pricing of services being delivered under the utility and ensuring that the public interest is served.

Where SCE differs from the City's other utilities is that it is a new utility providing a new service in the City, it is relatively complex and there are private utility operators who offer similar service under the regulation of BCUC.

While the City is exempt from the regulatory oversight of BCUC, an external rate review panel is being established to assist Council in the oversight of SCE's rates and rate structure.

Expert Rate-Review Panel Structure

The Panel will be comprised of 4 members that are appointed by Council. Council will appoint one member as the Chair. The Panel will provide objective, expert advice to the City regarding SCE utility rate structure and rates consistent with the rate-setting principles articulated in this policy.

SCOPE OF WORK

Staff proposes that a full rate review would be conducted once every 3 years or more frequently if the Panel deems such a more frequent review as being necessary. The rate review process will include:

1. The updating by City staff of the financial model for SCE including proposed rates, rate escalation factor and any other changes to the financial structure of SCE considered necessary by staff;
2. The Panel will review the updated financial model and the proposed rates and rate structure;
3. The Panel will prepare a report that either approves the revised rates and rate structure as proposed in the updated financial model or recommend revisions to the model and/or rates and/or the rate structure; and
4. With the Panel's report as background staff will prepare a report to Council recommending the financial model for SCE including any proposed rate or rate structure changes.

Through this process, SCE will be held to a high level of accountability in its stewardship of the utility and related reporting. The approval of the SCE rates and rate structure will be conducted in a fully transparent manner.

This policy is subject to any specific provisions of the Local Government Act, or other relevant legislation or Union agreement.

The Panel's review will include consideration of the following factors:

- a) Long-term forecasted cost of inputs, including forecasted fuel costs and the utility's cost of capital, including debt charges and return on equity premiums;
- b) Revenue forecasts;
- c) Rate stabilization reserve requirements; and
- d) Comparisons of the rates and rate structure to other energy benchmarks.

PANEL EXPERTISE

The Panel should have within its membership a variety of expertise to ensure a balanced review process. Expertise in the following areas is considered desirable:

1. Utility Pricing and Regulation: Demonstrated expertise and experience in the area of utility finance/pricing, ideally with past experience working for or reporting to British Columbia Utilities Commission or another similar regulatory body;
2. Finance: A professional understanding with demonstrated expertise and experience in finance and financial modelling, ideally in the field of utility finance and pricing; and
3. Renewable, Low-Carbon Energy: Demonstrated expertise in the area of renewable energy production and demand management.

Each Panel member should be able to carry out the work objectively, have the demonstrated ability to make complex decisions that equitably balance the interests of various stakeholders, and be perceived as a credible, objective expert by SCE stakeholders.

In the interest of avoiding any conflicts of interest, Panel members should not be:

- a) an employee of the City of Surrey;
- b) an elected official for the City of Surrey;
- c) a customer of SCE;
- d) an employee or major shareholder of a competing energy utility; or
- e) in any position or role that would be perceived as being in a conflict of interest in relation to the responsibilities described in these Terms of Reference.

APPENDIX "II"

October 15, 2019

Mr. Patrick Wruck,
Commission Secretary and Manager, Regulatory Support
British Columbia Utilities Commission
Suite 410, 900 Howe Street
Vancouver, BC V6Z 2N3

Dear Mr. Wruck:

RE: BCUC Municipal Energy Utilities Inquiry - Project No. 1599027

The City of Surrey has owned and successfully operated its district energy utility since 2014, Surrey City Energy (SCE). Surrey's City Council is responsible for regulating the pricing of services being delivered under the utility and ensuring the ratepayers of the City are best served. As such, an independent external rate review panel ("panel") has been selected through a Request for Expressions of Interest process by City Council, with one member appointed as the Chair. Panelists serve a term of up to three years. The three-member panel meets on an annual basis to provide objective, expert advice to the City regarding SCE's utility rate structure in accordance to the principles of rate setting established by City policy. These principles include:

1. Cost Recovery
2. Low-Carbon / Renewable Energy Sources
3. Fairness
4. Shortfall Recovery
5. Rate Competitiveness
6. Return on Investment

The current panel is comprised of the following individuals:

- **Panel Chair:** Fong Kwok is a Chartered Professional Accountant and the Principal of Red Phoenix Consulting Services Inc. with extensive regulatory experience in the utility industry with consulting expertise in regulatory strategy, capital planning, and rate forecasting.
- **Panel Member:** Christopher Oakley is the co-founder of Midgard Consulting Inc. with over three decades of power industry experience, having held senior roles in Regulatory Support, Project Management, Engineering Management, Transmission System Planning and Revenue Management.
- **Panel Member:** Melissa Davies is an Associate with InterGroup Consultants who specializes in utility rate regulation, including revenue requirement, cost of service and rate design. Melissa's utility rate experience includes for electricity, natural gas, water, wastewater and storm water.

The annual review process includes a kick-off meeting led by SCE staff to review preliminary forecasts and issues, proposed rates and supporting models, IRs submitted by the panel, and a follow-up meeting to review responses to the panel's IRs. The panel Chair then prepares a report that either endorses the revised rates and rate structure as proposed or recommends revisions to the model and/or rates and/or the rate structure. City staff uses this report as background to finalize its rate proposal and recommendations to Council.

Through this annual review process, the setting of the SCE rates and rate structure has been conducted in a fully transparent manner by the expert independent rate review panel. SCE has been held to a high level of accountability in its stewardship of the utility's assets and adherence to the principles of rate setting.

Yours very truly,



Fong Kwok, Panel Chair