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August 14, 2018

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British Columbia Utilities Commission
Sixth Floor – 900 Howe Street
Vancouver, B.C. V6Z 2N3

Attention: Patrick Wruck, Commission Secretary

Dear Mr. Wruck:

**Re: British Columbia Utilities Commission (Commission)
Greater Vancouver Sewerage and Drainage District (GVS&DD)
Application for an Exemption from Part 3 of the *Utilities Commission Act*
Project No. 1598948**

We are counsel to GVS&DD for the above-referenced application (the Application) to the Commission for an exemption from Part 3 of the *Utilities Commission Act*. The Application was filed with the Commission on June 14, 2017, and by Order No. G137-18 dated July 24, 2018 the Commission established a regulatory timetable, pursuant to which we enclose our Final Argument.

Yours very truly,

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BRITISH COLUMBIA UTILITIES COMMISSION

**GREATER VANCOUVER SEWERAGE AND DRAINAGE DISTRICT
APPLICATION FOR AN EXEMPTION FROM PART 3 OF THE
*UTILITIES COMMISSION ACT***

**Final Argument of the
Greater Vancouver Sewerage and Drainage District**

August 14, 2018

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1. INTRODUCTION

1. The Greater Vancouver Sewerage and Drainage District (“GVS&DD”) applied to the British Columbia Utilities Commission (“Commission”) on June 14, 2017 (the “Application”)¹ for an order pursuant to section 88(3) of the *Utilities Commission Act* (“UCA”) exempting GVS&DD from Part 3 of the UCA in respect of certain activities as described in the Application and below.
2. The GVS&DD requests an exemption because it plans to undertake activities that could result in GVS&DD falling within the UCA’s definition of “public utility”, and regulation as a public utility is not needed or appropriate.
3. The scheme of the UCA acknowledges that there are circumstances where an entity is caught by the UCA’s definition of “public utility” yet the rationale for regulation is not compelling because the entity has little or no ability to exercise monopolistic behaviour to the detriment of ratepayers and the public interest.² Section 88(3) of the UCA allows the Commission, with the advance approval of the responsible Minister, to grant exemptions from the application of all or any of the provisions of the statute.
4. Appendix A of the Application provides the GVS&DD’s requested form of exemption order.

2. ABOUT THE GVS&DD

5. The GVS&DD is a body corporate and politic created and constituted pursuant to the *Greater Vancouver Sewerage and Drainage District Act* (“GVS&DD Act”).³ The Metro Vancouver Regional District, the GVS&DD, the Greater Vancouver Water District and the

¹ The Application is Exhibit B-1 in this proceeding.

² Refer to the Commission’s Order No. G-104-18 Decision at page 9.

³ The *GVS&DD Act* is also known as *An Act to Incorporate the Greater Vancouver Sewerage and Drainage District*, S.B.C. 1956, c. 59. Section 3 of the Act created and constituted a body corporate and politic under the name of the “Greater Vancouver Sewerage and Drainage District”.

Metro Vancouver Housing Corporation together form what is commonly known as "Metro Vancouver".⁴

6. Like a regional district, the powers and functions of the GVS&DD are exercised and discharged by a board ("GVS&DD Board") consisting of elected representatives. The directors of the GVS&DD Board are mayors and councillors from member jurisdictions.
7. The GVS&DD is deemed to be a regional district for the purposes of planning, regulating, storing and managing solid waste and recyclable material under the *Environmental Management Act*,⁵ however, the GVS&DD is not deemed to be a regional district with respect to the planned activities described in sections 3 and 4, below.
8. Among other things, the GVS&DD operates wastewater treatment plants at Lions Gate, Iona Island, Annacis Island, Lulu Island and Northwest Langley.
9. The GVS&DD has a project at the Lulu Island wastewater treatment plant that captures biogas and upgrades it to pipeline quality biomethane for sale to FortisBC Energy Inc. ("FEI"). The GVS&DD has a contract with FEI dated October 16, 2012 regarding the sale to FEI of biomethane produced at Lulu Island. Pursuant to Order No. E-13-13 the Commission accepted the Biomethane Purchase Agreement between GVS&DD and FEI for filing under section 71 of the *UCA*. In respect of its production and sale of biomethane to FEI, GVS&DD is exempt from regulation under the *UCA* pursuant to Commission Order No. G-126-13, which establishes a class exemption for all biomethane producers selling to public utilities.
10. The GVS&DD also has an exemption pursuant to Commission Order No. G-60-03 with respect to the production and sale of electricity. Order No. G-60-03 exempts GVS&DD and Montenay Inc. from Part 3 of the *UCA*, except section 22, with respect to the sale of electricity produced at the GVS&DD waste-to-energy facility in Burnaby.

⁴ Metro Vancouver consists of 21 municipalities, one Treaty First Nation and one Electoral Area of the regional district working together for a livable region; refer to < <http://www.metrovancouver.org/> >.

⁵ Pursuant to section 7A(7) of the *GVS&DD Act*.

11. The current Application relates to GVS&DD'S planned project to recover the thermal properties of sewage at the GVS&DD's new North Shore waste water treatment plant (the "North Shore WWTP"), which is currently under construction in the District of North Vancouver, and provide the heat energy to the Lonsdale Energy Corporation ("LEC").

3. THE PLANNED EFFLUENT HEAT RECOVERY PROJECT

12. Metro Vancouver has awarded a contract to design and build the new North Shore WWTP to replace the existing Lions Gate plant. Construction of the North Shore WWTP is underway and the plant is expected to provide secondary treatment by December 31, 2020.
13. GVS&DD is planning to install heat pumps and associated equipment at the North Shore WWTP to recover heat from treated effluent, transfer the heat to a high temperature hot water⁶ loop, and supply this heat only to LEC. The GVS&DD equipment is planned to be contained in a separate room (the "Energy Centre") in the operations and maintenance building on the North Shore WWTP site.
14. LEC plans to install supply and return piping to transfer the hot water from the Energy Centre to the existing district energy system within the City of North Vancouver. The point of interconnection between each party's equipment is planned to be approximately at the property line of the North Shore WWTP site (the "Tie-In").⁷ GVS&DD's heat recovery project will serve only the LEC's district energy system, on demand from LEC.⁸
15. As explained in the LEC's Exhibit C1-2 submission to the Commission in this proceeding, the City of North Vancouver established the service of providing hydronic heat energy

⁶ The maximum temperature of the supplied hot water is planned to be 82°C (that is, it would be hot water and not steam).

⁷ Exhibit B-3, GVS&DD response to BCUC IR 2.4.

⁸ Exhibit B-3, GVS&DD response to BCUC IR 4.1.

for space heating, domestic hot water and space cooling (collectively, the “Service”) to buildings within the City of North Vancouver pursuant to the City’s Hydronic Energy Service Bylaw, 2004, No. 7575. The City of North Vancouver incorporated LEC for the purpose of carrying out various operations of the Service as established by the Bylaw. LEC is wholly owned by the City of North Vancouver. LEC confirms that “the only service which LEC “provides” to anyone is the supply of hydronic energy, and LEC only provides this service within the municipal boundaries of the City, to organizations operating there.”⁹

16. LEC has district energy plants (called mini-plants) that serve approximately 5.3 million square feet of building space in Lower Lonsdale, Central Lonsdale and the Harbourside/Marine Drive areas of the City of North Vancouver. Currently, LEC’s mini-plants heat water using a combination of high efficiency condensing natural gas boilers, ground source heat pumps, heat recovery from building cooling, and solar thermal panels.
17. LEC’s existing Mini-Plant #7 (“MP-7”) is less than 1 km from the site of the new North Shore WWTP, and is planned to be the location at which the hot water supply and return pipes connected to the Energy Centre will connect to the existing district energy system in the City of North Vancouver.
18. Appendix B to the Application provides a diagram showing the location of the site where the North Shore WWTP is being built, MP-7 and the anticipated route of the connecting piping.

4. THERMAL ENERGY SALE AND PURCHASE AGREEMENT

19. In 2014, GVS&DD posted on the BC Bid website a request for qualifications (“RFQ”) and information to assess the level of interest in using heat recovered at the North Shore WWTP for off-site purposes. Letters of invitation were also emailed directly to the City

⁹ Exhibit C1-2, page 1.

of North Vancouver, Corix Utilities, District of North Vancouver, District of West Vancouver, FortisBC Alternative Energy Services, Lonsdale Energy Corporation, Squamish Nation, and Urban Development Institute.¹⁰ GVS&DD had previously met with staff from the two nearest municipalities, the District of North Vancouver and the City of North Vancouver, to explore whether existing or future developments might be able to receive thermal energy from the North Shore WWTP.

20. GVS&DD received two responses to its RFQ, of which the LEC was the sole qualified respondent.¹¹ The process verified that LEC is the only feasible customer for thermal energy recovered at the North Shore WWTP. The process was a success: it resulted in an agreement with LEC that enables GVS&DD to proceed with its effluent heat recovery project on acceptable terms.¹²
21. GVS&DD and LEC have entered into a long-term Thermal Energy Sale and Purchase Agreement dated October 5, 2017. The agreement has been provided to the Commission on November 21, 2017 and on June 8, 2018 as Attachment 2 to Exhibit B-3. Among other things, the Thermal Energy Sale and Purchase Agreement provides:
- GVS&DD will supply thermal energy recovered at the North Shore WWTP exclusively to LEC for the 20-year term of the agreement, plus two optional 5-year renewal terms;¹³
 - specifications and performance obligations for GVS&DD's heat pumps and associated equipment to supply heat to LEC;¹⁴

¹⁰ Exhibit B-3, GVS&DD response to BCUC IR 1.1.

¹¹ *Ibid.* The other respondent only expressed interest in supplying equipment for the project and did not meet the qualification criteria.

¹² Exhibit B-3, GVS&DD response to BCUC IR 1.1.1.

¹³ Thermal Energy Sale and Purchase Agreement, s. 3.1.

¹⁴ These are summarised in Exhibit B-3, GVS&DD response to BCUC IR 2.4.

- the installed capacity of GVS&DD’s equipment will be 5 MW, producing heat only in response to requests for heat from LEC’s control system that fall between 2 MW and 5 MW. When LEC’s load is less than 2 MW, the GVS&DD’s heat pumps will shut off and LEC will produce heat using its other resources (*e.g.*, natural gas boilers, ground source heat pumps, heat recovery, solar thermal panels);¹⁵ and
- annual cost recovery from LEC that includes GVS&DD’s reasonable costs and expenses, without any markup, associated with the operation and maintenance of the GVS&DD works within, and forming part of, the North Shore WWTP that are necessary to generate thermal energy at the WWTP and to deliver thermal energy from the WWTP to LEC, and does not include GVS&DD’s capital costs for such works or debt financing on the capital.¹⁶

5. EXEMPTION IS IN THE PUBLIC INTEREST

22. If GVS&DD constructs and operates the effluent heat recovery project component of the North Shore WWTP (*i.e.*, the Energy Centre) and provides heat energy to LEC in accordance with the terms outlined in the Application and above, it would fall within the *UCA* definition of “public utility” according to the following analysis:

- with reference to the *UCA* definition of “public utility”, GVS&DD would be a “person..., who owns or operates in British Columbia, equipment or facilities for (a) the production,... sale,... or provision of... any other agent for the production of... heat, cold... to or for... a corporation [that is, the LEC] for compensation”,¹⁷ and

¹⁵ Exhibit B-3, GVS&DD responses to BCUC IRs 2.1 and 2.1.2.

¹⁶ Exhibit B-3, GVS&DD responses to BCUC IRs 3.3 and 4.3. The largest cost to be recovered from LEC will be the cost of electricity to run the heat pumps.

¹⁷ Water heated to a maximum temperature of 82°C is not steam (nor is it electricity or natural gas), but it would appear to be “any other agent for the production of... heat, cold”.

- no existing exclusion¹⁸ and none of the existing exemptions issued to GVS&DD¹⁹ from public utility status would apply in respect of such activity.

23. The *UCA* provides a solution for the situation where a person falls within the definition of “public utility”, but regulation as a public utility is not warranted. Specifically, section 88(3) of the *UCA* provides as follows:

88(3) The commission may, on conditions it considers advisable, with the advance approval of the minister responsible for the administration of the *Hydro and Power Authority Act*, exempt a person, equipment or facilities from the application of all or any of the provisions of this Act or may limit or vary the application of this Act.

24. In the Commission’s final report dated December 27, 2012 regarding its *Inquiry into the Offering of Products and Services in Alternative Energy Solutions and Other New Initiatives* (the “AES Inquiry Report”), the Commission recommended the use of section 88(3) exemptions where regulation is not warranted, as follows:

“The definition of public utility is set out in the *UCA* but, given the discussion on the economic purposes of regulation, applying the legal definition of public utility does not always lead to an outcome that makes the most economic sense. The Panel notes that the *UCA* was developed at a time when many of the technologies at issue in this Proceeding were not contemplated. The current energy market requires a practical definition of public utility. There would be greater clarity if the Government were to amend the *UCA* to exclude regulation of activities where competitive forces are found to provide sufficient protection to the public. Given the current lack of clarity in the *UCA* the Commission Panel recommends the use of

¹⁸ None of the exclusions in paragraphs (c) to (g) of the *UCA*’s definition of “public utility” would apply. As noted in section 2, above, GVS&DD is governed like a regional district but it is not deemed to be a municipality or regional district with respect to the proposed effluent heat recovery project.

¹⁹ The existing exemption orders noted in paragraphs 9 and 10 of this final argument would not apply.

exemptions, which are contemplated under the *UCA*, where the Commission finds regulation is not warranted.”²⁰

25. The Commission recently returned to the matter in its Order No. G-104-18 Decision dated June 5, 2018 related to SSL-Sustainable Services Ltd. where the Commission said the following:²¹

“...the object of the *UCA* is the protection of the public interest by regulating public utilities to ensure that they provide safe and reliable service at reasonable prices. Public utilities tend to operate in monopolistic circumstances which could lead to monopolistic abuse of ratepayers. The BCUC regulates public utilities to ensure that the prices they charge to customers, who are often captive, are reasonable for the level of service provided.

The scheme of the *UCA* acknowledges that there may be circumstances where an entity is caught by the definition of public utility yet the rationale for regulation is not compelling because the public utility has little or no ability to exercise monopolistic behaviour to the detriment of ratepayers and the public interest. In those situations, the *UCA* allows the BCUC, with the advance approval of the responsible Minister, to grant exemptions in whole or in part from regulation under the statute.”

26. With respect to the circumstances where exemption is appropriate, the Commission made the following determinations in its AES Inquiry Report:

“Regulation exists to protect the public from potential monopolistic behaviour on the part of a public utility while ensuring the continued quality of an essential service.

²⁰ AES Inquiry Report, pages 15-16.

²¹ Order No. G-104-18 Decision dated June 5, 2018, at page 9.

It is the regulator's function to prevent the abuse of monopoly power, so that customers have access to the utility product or service at a fair price, but at the same time allow the utility the opportunity to earn a fair return on its investment so that it can continue to operate and attract the capital required to sustain and/or grow its business."²²

"Regulation exists to protect consumers against the abuse of monopoly power but, in the Commission Panel's view, the superior protection for consumers is the competitive marketplace. ... This is consistent with the first principle outlined in this Section, to only regulate where required. Competitive forces are generally accepted as provided societal benefits and consumer protection more efficiently and effectively than economic regulation. ...

Regulation is costly, time-consuming, and limited by informational asymmetries. It is only in natural monopoly situations where consumer protection is needed that these limitations are outweighed by the benefits of regulation.

Based on the above, the Commission Panel finds as a fundamental principle that regulation is only appropriate where required and is driven by the inability of competitive forces to operate with greater efficiency and effectiveness than a sole service provider."²³

27. The effluent heat recovered at the North Shore WWTP Energy Centre will have only one buyer (namely LEC) under a long-term contract. GVS&DD will not be a natural monopoly with respect to the provision of heat energy to LEC. There are ample alternative energy sources available to LEC to meet the demands on its district energy system, including the high-efficiency condensing natural gas boilers, ground source heat pumps, heat

²² AES Inquiry Report, page 8.

²³ AES Inquiry Report, page 14.

recovery from buildings, and solar thermal panels already on that system. LEC confirms the following in its letter of support of the Application:

“The proposed heat sale is one of several energy sources used by LEC. As mentioned in the report [to the Mayor and Council of the City of North Vancouver, attached to LEC’s letter], LEC already uses solar energy, geexchange, heat recovery from cooling process as well as natural gas boilers. LEC owns 8 mini-plants that are inter-connected. Natural gas is purchased from different suppliers and under different contract rates so that LEC may take advantage of available pricing opportunities. LEC’s goal is to ensure that the most appropriate source of energy is used whenever available.”

28. LEC has ample energy source options and is not under any compulsion to obtain its heat energy from the North Shore WWTP Energy Centre. The opportunity to obtain from GVS&DD a substantial portion of the heat energy needs of the district energy system is the result of a combination of convergent factors including GVS&DD’s goal of reducing greenhouse gas (“GHG”) emissions and the proximity of the LEC network to the North Shore WWTP.
29. With respect to the recovery of heat at the North Shore WWTP and the terms of the provision of such heat to LEC, the elected governing bodies of the City of North Vancouver and GVS&DD will protect the public interest, as they are required to do. The City of North Vancouver’s Council has decided that it is in the public interest of the City’s residents and LEC’s customers for LEC to obtain heat from the GVS&DD project on the terms of the long-term Thermal Energy Sale and Purchase Agreement.²⁴

²⁴ A copy of the resolution of the Council of the City of North Vancouver approving LEC entering into the agreement is provided in Exhibit C1-2.

30. With respect to potential customer complaints,²⁵ if a LEC customer has concerns about the Service they are receiving from LEC or the rates charged by LEC, the customer can take their concern to LEC or to the City of North Vancouver's Council.²⁶
31. The LEC operates a municipal utility that is not subject to the *UCA* or regulation by the Commission. The rates for the Services provided by the City of North Vancouver through its wholly-owned subsidiary LEC are regulated by the City of North Vancouver's Council. LEC provides notice to its customers of its rate applications, and the City of North Vancouver holds public meetings to discuss and provide members of the public the opportunity to comment on the LEC rate application.²⁷ The Commission does not have the mandate to regulate LEC or to protect LEC's ratepayers. The City of North Vancouver's Council has that responsibility.
32. With respect to any concerns LEC might have about GVS&DD's provision of heat energy pursuant to the long-term Thermal Energy Sale and Purchase Agreement, the agreement provides that GVS&DD and LEC will interact in a cooperative manner, share information and notify each other of any proposed operational changes. Cooperation is specifically provided for in section 2.6 of the agreement. In the unlikely event of a complaint by LEC, section 14 of the agreement provides a dispute resolution process, which has the parties using best efforts to settle the dispute by amicable negotiations based on frank and timely disclosure of all relevant facts and information to facilitate such discussions.

²⁵ BCUC IRs 4.1 and 4.2 asked GVS&DD about how customer complaints will be addressed.

²⁶ There is extensive information about the LEC's services, rates, rates setting, financial statements, contact information, 24-hour emergency line, etc. on the City of North Vancouver's website: < <https://www.cnv.org/city-services/lonsdale-energy> >.

²⁷ See, for example, "LEC TO ADJUST ITS RATES" item at < <https://www.cnv.org/city-services/lonsdale-energy/latest-news-and-updates> >.

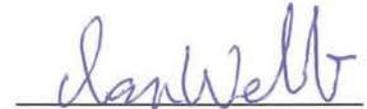
6. REQUESTED TERMS OF EXEMPTION

33. GVS&DD requests that the exemption encompass Part 3 of the *UCA*, except section 22, with respect to construction and operation of equipment at the GVS&DD's North Shore WWTP that recovers heat energy from treated effluent and with respect to the sale of this energy to LEC. The requested form of order is essentially the same as the Order No. G-60-03 exemption the Commission approved for GVS&DD with respect to the sale of electricity produced at the waste-to-energy facility in Burnaby, except that the scope of the exemption is limited to the sale to LEC of heat energy recovered at the North Shore WWTP. The requested form of order is provided in Appendix A of the Application.
34. LEC supports the Commission granting the requested exemption, and has provided a letter of support to the Commission (Attachment 4 to Exhibit B-3).
35. Only one information request related to the requested terms for the exemption order: BCUC IR 4.1.3 asked whether it would be reasonable to include a provision in the exemption order "to lift the exemption in response to a customer complaint against the utility." GVS&DD submits that it would be problematic and not reasonable to include such provision for the reasons stated in GVS&DD's response to BCUC IR 4.1.3.
36. The effluent heat recovery project is an important GHG reduction opportunity within the North Shore WWTP project. GVS&DD and LEC have reached agreement on satisfactory terms for the provision of the recovered heat energy; however, the heat recovery component of the North Shore WWTP project will only proceed as currently planned if GVS&DD obtains a satisfactory exemption from regulation as a public utility under the *UCA*. GVS&DD will not proceed with the project on a basis that could render its entire sewerage, drainage and waste water treatment operations subject to regulation as a public utility under the *UCA*. If GVS&DD is not able to obtain a satisfactory form of exemption order from Part 3 of the *UCA*, GVS&DD would reconsider the alternative ownership and operations model described in the GVS&DD response to BCUC IR 2.5 as it avoids GVS&DD or LEC falling within the definition of public utility in the *UCA*.

37. The merits of the ownership and operations model that both GVS&DD and LEC prefer for the project (as described above and in the Application) are set out in the GVS&DD response to BCUC IR 2.5. The alternative ownership and operations model would avoid the need for an exemption order; however, it would add complexity in relation to safety and security, access for operating and maintaining facilities, compliance with environmental laws, insurance and similar matters, and add costs unnecessarily.
38. The purpose of exemption orders generally is to allow the applicant to proceed with the most cost-effective ownership and operations model for its project/service without becoming subject to public utility regulation where such regulation is not warranted. Exempting GVS&DD on the requested terms will allow GVS&DD and LEC to undertake the heat recovery project using the most cost-effective ownership and operations model and on the contractual terms they have agreed to, ensuring certainty of contract.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 14TH DAY OF AUGUST 2018.

Counsel for Greater Vancouver Sewerage & Drainage District

A handwritten signature in blue ink, appearing to read 'Ian Webb', is written over a horizontal line.

Ian D. Webb