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SSL STREAM A REGISTRATION – WESTHILLS
EXHIBIT B-7

December 16, 2019

British Columbia Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC V6Z 2N3

BCUC File 62480
Batch 62367

Dear Sirs/Mesdames:

Re: SSL-Sustainable Services Ltd. Stream A application public hearing Order

We are in receipt of your letter dated December 9, 2019, enclosing Order G-318-19. At this time we have not taken steps to comply with the Order and are seeking information from the Commission to help us understand this public hearing process, particularly as it relates to the in-service date provisions of the Thermal Energy Systems Regulatory Framework Guidelines (the "Guidelines"). The Guidelines provide in part as follows:

2.3 Stream A TES

2.3.1 Stream A TES Characteristics

The following types of TES are considered by the Commission to be a Stream A Thermal Energy System:

- Any On-Site TES with the characteristics described in Table 1; and
- Any TES that does not meet the requirements of an Exempt TES or any TES without a CPCN or a CPCN exemption that has an in-service date prior to August 28, 2014.

Table 1 Stream A TES Characteristics

1. The thermal generation and distribution equipment and facilities are located on the same Site as the thermal load.
2. The TES is designed to meet the energy demands of a specific Site (one or more customers or buildings).
3. The Thermal Energy System serves one or more customers or buildings on a single Site but there are no shared or common thermal generation or distribution facilities beyond the boundaries of a single Site.
4. There is no, or very limited, use of public rights of way or public streets.
5. The TES provides thermal energy to an existing building(s) or to a new building(s) planned or approved under a municipal building permit process.
6. The TES has an AACE Class 3 capital cost estimate of equal to or greater than \$500,000 and less than \$15 million.



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The wording of this section of the Guidelines is very clear: a TES that has an in-service date prior to August 28, 2014 is **considered by the Commission to be a Stream A Thermal Energy System** [emphasis added]. Not only is this clear on its face in the Guidelines, but prior to making its application, SSL was advised on July 24, 2018, by Kristine Bienert, BCUC staff member, that she had discussed the in-service date provision with BCUC's legal counsel and that they felt it would apply to SSL. In further support of SSL's position on this issue are Figures 2 and 5 to the Guidelines, which are attached to this letter. Figure 2 shows that where a TES has a capital cost of greater than \$500,000, the next question to be asked is whether the TES was in-service prior to August 28, 2014. Where the answer to this question is no, the Commission must then look at whether the TES meets the Stream A criteria set out in the box above. However, where the answer is yes, that TES is referred to Figure 5. Figure 5 then asks whether the TES has been granted a Certificate of Public Convenience and Necessity ("CPCN"). Where the answer to this question is yes, the TES is considered Stream B. Where the answer to this question is no, Figure 5 says that the Applicant is to file a Stream A Registration Form with the Commission, the Commission is to issue an Order exempting the TES from CPCN, Rate Setting and Long-Term Resource and Planning Requirements, and the TES is to operate without active regulatory oversight unless a complaint is received, in which case the Commission shall investigate the complaint.

All of the foregoing, together with SSL's in-service date of April, 2010 and the fact that SSL has not been issued a CPCN makes it very clear that SSL should be determined to be a Stream A TES under the in-service date provisions of the Guidelines. For this reason – as well as because of the advice of BCUC staff on the issue - the in-service date provision was the focus of SSL's Stream A application, and yet from everything we can see in both the Order and the Notice that SSL is being asked to send out, there has been no consideration, and there is no mention of, the in-service date criteria. We are attaching a copy of SSL's application so that you can see both the "Background" section on page two of the application which delves into the in-service date issue as it relates to SSL, and that on page three of the application SSL selected "In service prior to 2014/08/24" as the status of the SSL system – one of the five pre-printed options on the application form.

As you are aware, the thermal energy provided by SSL to homes in Westhills was set up as a municipal service by the City of Langford, underpinning a strong commitment by Mayor and Council to take meaningful local action on climate change. District energy initiatives are prominently featured in the City's Official Community Plan (OCP)¹ and Community Energy & Emissions Reduction Strategy (CEERS)², including "TES connectivity" targets for new developments out to the year 2050. The Westhills TES is a textbook example of bold and tangible climate action taken by a local government in BC. With approximately 450 residential customers and no current plans to expand the thermal energy system beyond its existing capacity, SSL is a small utility provider and has very limited resources. Accordingly, while SSL is quite supportive of having its application process be accessible to the public, it is much less supportive of using its limited resources to invite its customers to make submissions on an Order and a public notice that make no mention of the BCUC criteria that very clearly applies to make SSL a Stream A TES.

¹ <https://www.langford.ca/assets/Bylaws/Land-Use/official-community-plan-1200.pdf>

² https://www.langford.ca/assets/Invest/Documents/Langford's_Community_Energy_and_Emissions_Reduction_Strategy.pdf



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We confess to being quite confounded as to why the Commission would ask SSL's 450 customers, other utilities, and the public generally to make submissions on SSL's application when it would seem that at the end of the day SSL should be determined to be a Stream A TES on the factual issue of its in-service date. This does not seem to us like a good use of the public's time or the Commission's or SSL's resources. For the foregoing reasons, prior to taking any further steps in this matter we will need to understand what information the panel was given and considered on this in-service date issue and why it is not part of either the Order or the notice materials being sent out. We ask that this letter and its attachments be part of the public record in this matter, and we are also copying the Mayor of Langford, the municipality for which SSL provides this municipal service, and our local MLA, since we are very concerned that the Commission is not applying its own Guidelines in a fair and transparent manner. We would be happy to discuss this matter with BCUC staff or members of the panel, and for future reference we suggest that situations like this one could be avoided if BCUC was as transparent with its clients such as SSL as it says it wants to be with the public. Had we been aware that this matter was going to be set for a public hearing process without mention of the in-service date criteria we could have worked with staff and the panel to ensure that this did not happen, rather than trying to deal with it after the fact.

On a final note, we are confused about why the Order was issued with such tight timelines. As you are aware and as mentioned above, SSL is a very small utility with limited resources. Its Stream A application was submitted 15 months ago, in September, 2018, and we do not feel it is reasonable of the Commission to give SSL less than two weeks to get notice to all 450 of its customers heading into the holiday season. SSL feels very strongly that its application should be decided by the Commission on the factual basis of its in-service date, in which case public input would not seem to be warranted. However, should the Commission continue to feel that public input is necessary, we request that a revised Order be issued allowing SSL at least 45 days to provide notice to its customers so that this can be done as part of a monthly billing cycle. While SSL is as anxious as anyone to have this situation resolved, we do not see that this is an unreasonable request given how long the application has already taken.

We look forward to hearing from you.

Yours truly,
SSL-Sustainable Services Ltd.

Per:


Lisa Parkes
Corporate Counsel

Encl.

Cc: Premier John Horgan
Mayor Stewart Young

Figure 2: Determination of the Appropriate Regulatory Stream

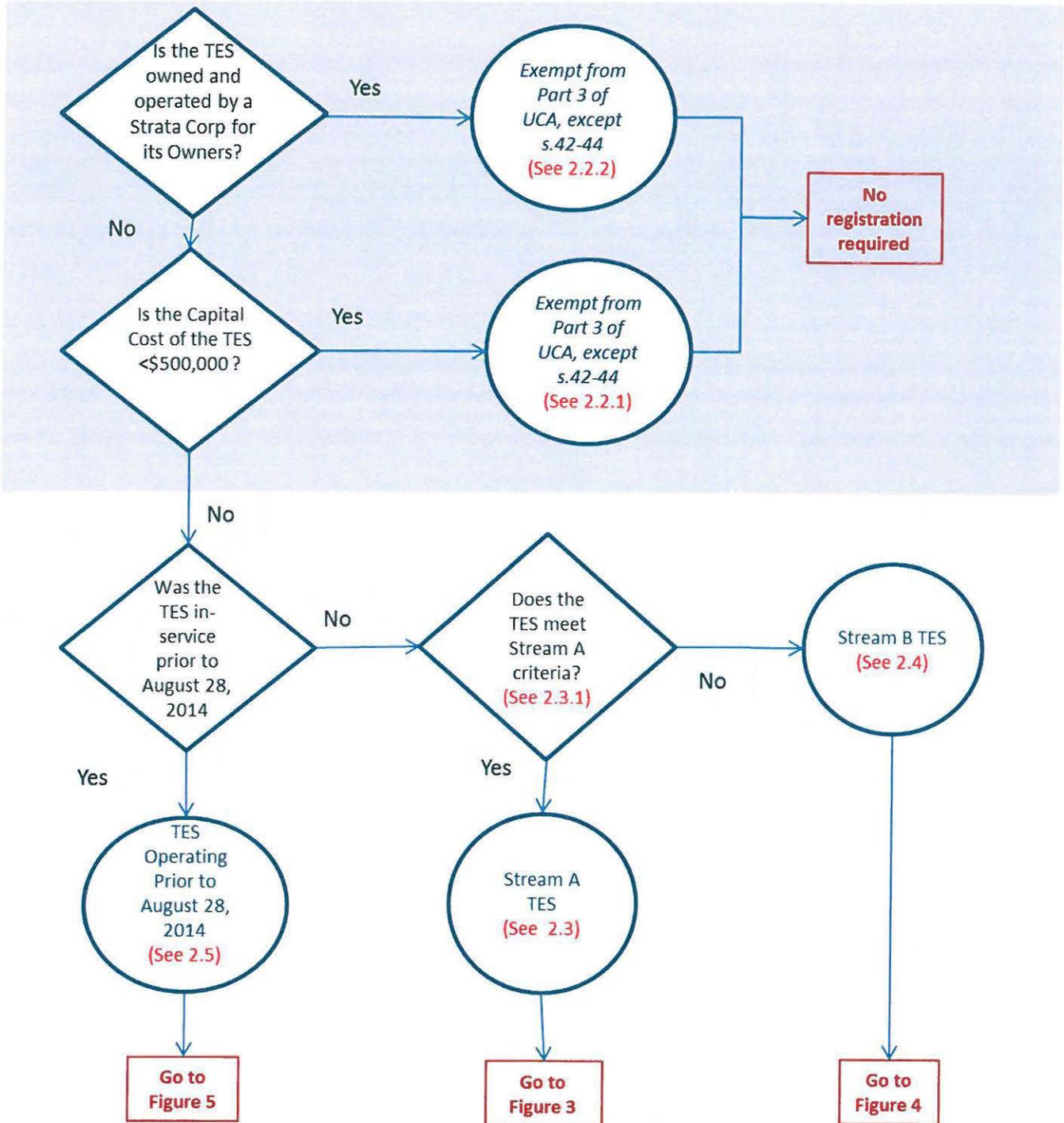
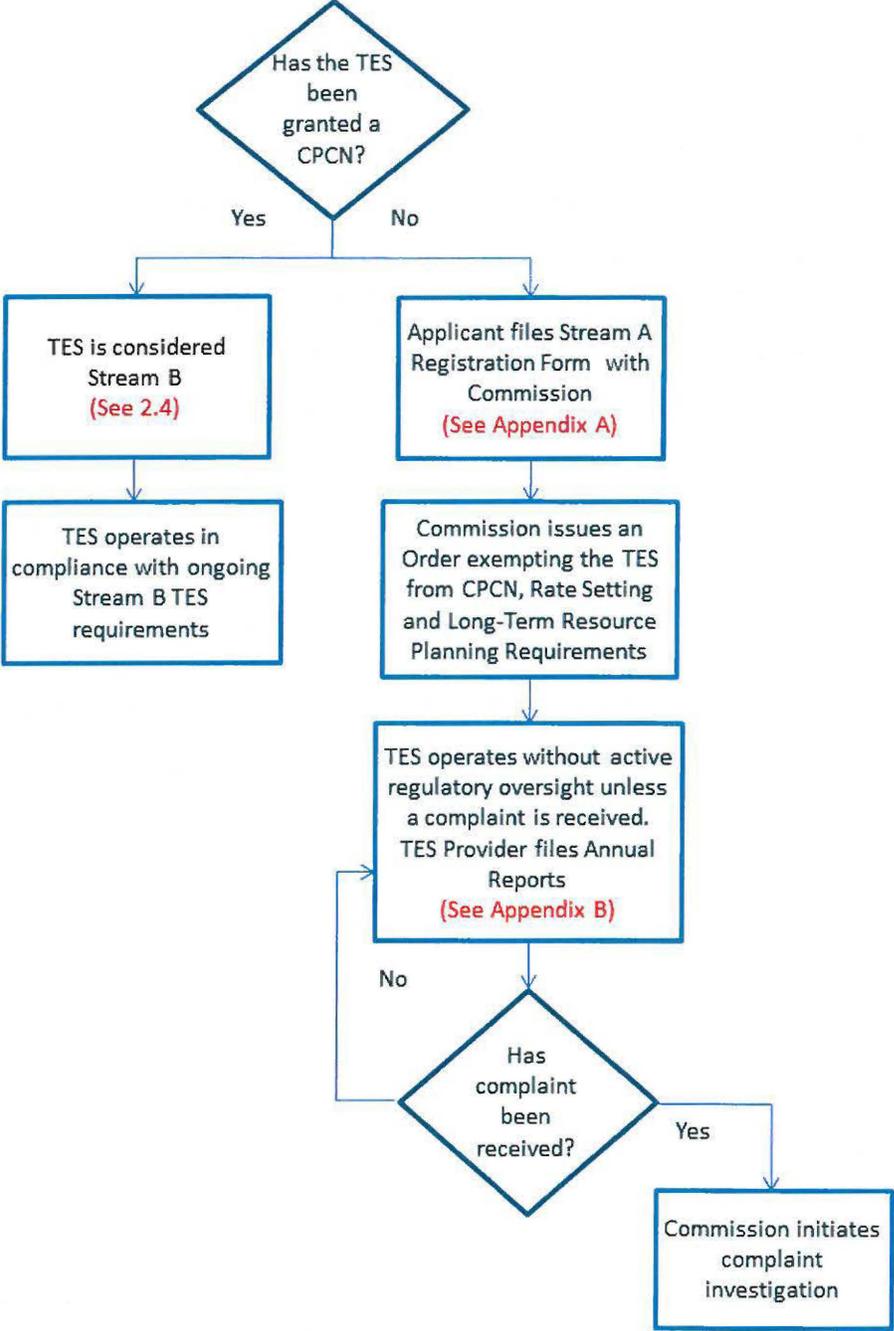


Figure 5 below illustrates the regulatory process for TES operating prior to August 28, 2014.

Figure 5: Stream A TES Operating Prior to August 28, 2014





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September 4, 2018

British Columbia Utilities Commission
Sixth Floor, 900 Howe Street, Box 250
Vancouver, BC V6Z 2N3

via Email
commission.secretary@bcuc.com

ATTN: Patrick Wruck, Commission Secretary

RE: **BCUC – Sustainable Services Ltd. – Application for Stream A TES**

Dear Mr. Wruck,

Further to the Commission's Order dated June 5, 2018 directing SSL to file an application for regulatory approvals, please find enclosed our Stream A TES Application and supporting appendices.

Sincerely,

SSL-Sustainable Services Ltd.

A handwritten signature in black ink, appearing to read "K Taylor", with a horizontal line extending to the right.

Kyle Taylor

Manager

cc: Lisa Parkes, Corporate Counsel – SSL

Stream A TES Application – Background:

Section 2.3 of the TES Guidelines state that two types of TES are considered by the Commission to be Stream A Thermal Energy Systems. The second of these are “Any TES that does not meet the requirements of an Exempt TES, without a CPCN or a CPCN exemption that has an in-service date prior to August 28, 2014.”

SSL was established in 2008 and began providing thermal energy as a municipal service through its Community Energy System in 2010. Several years of planning, design and construction of infrastructure preceded the system commencing operation, and as part of that, SSL requested a meeting with BCUC. That meeting was held on June 3, 2008, between Brian Williston and Philip Nakoneshny of BCUC, and Reg Stewart, Ryan McKenzie and Georgeann Glover of SSL, as well as two consultants working with SSL on the creation of the system. A range of topics were discussed at that meeting, with SSL representatives answering all of the BCUC representatives’ questions, and the meeting did not result in BCUC regulation of SSL.

We submit that the second basis for being considered to be a Stream A TES set out above exists for situations exactly like SSL’s where the thermal energy provider had commenced operation prior to BCUC’s Thermal Energy Guidelines being enacted. Not only is this the situation for SSL, representatives of the company also went above and beyond simply determining whether BCUC appeared to regulate thermal energy providers, and sought and attended a meeting with BCUC representatives to ensure that it was in compliance with BCUC rules. We make this submission in support of SSL’s application to be considered a Stream A TES on the basis that it has an in-service date prior to August 28, 2014.

Name of Applicant:	Kyle Taylor
Company Name:	SSL-Sustainable Services Ltd.
BC Business Registration No.:	Inc. No. 0822775
Year Registered:	2008
Full Address:	204-957 Langford Pky, Victoria, BC V9B 0A5
Phone:	250-391-7260
Email Contact:	info@SSL-BC.com
Public or Privately held Business:	Private
Name of Parent Company:	Westhills Land Corp (957 Langford Pky, Victoria, BC V9B 0A5)
TES Location (address):	
TES Service Area:	Westhills community (see Appendix A)
Primary Energy Centre:	3011 Langford Lake Rd, Victoria, BC

Is this TES a:

~~New Construction~~ ~~Retrofit~~ ~~Purchase~~ ~~Extension to an existing TES~~ In service prior to 2014/08/24

In Service Date of the TES:

April 2010

Description of the Construction phase-in or build-out period (in years):

Construction of the TES began in 2008, with commissioning of the first phase and establishment of utility operations occurring in early 2010. Subsequent build-out of the TES – including both the primary energy centre and thermal energy distribution network – was phased with the Westhills development project and completed in 2017.

Service Provided:

Space heating is provided to all customers. Space cooling and domestic hot water heating is provided to the majority of customers.

Primary Thermal Energy Sources:

Heating: Geo-exchange

Cooling: Geo-exchange

Energy conversion technology used:

The TES utilizes water-to-water heat pumps and plate heat exchangers in its primary energy centre.

Buildings served:

420 single-family homes; 4 town home strata complexes (32 units); 1 condo strata (68 units)

Approx. 110,000 sq-meters of serviced floor area

Municipal building permit number:

N/A

Location of TES facilities and description of site size. Include map or schematic diagram if possible.

The TES was established to provide heating and cooling services to end-users in the community of Westhills in Langford, BC. SSL-Sustainable Services Ltd. (“SSL”) delivers these services as part of a Services Agreement with the City of Langford (“the City”) and consistent with the terms and conditions of Bylaw 1291, both of which define a contiguous Service Area within the municipal boundaries of the City where the TES currently operates. Further details are provided in Appendices A and B.

Description of TES including energy centre and distribution system (drawing, diagram or description of equipment, connections etc.)

The primary thermal energy source for the TES is a geo-exchange borefield consisting of 212 vertically drilled wells combined into a closed-loop system. The geo-exchange borefield is located underneath Goudy Field, which is part of an artificial playing surface and stadium complex owned by the City. The TES also utilizes natural gas boilers as an energy source for backup and peak demand energy needs. Finally, the TES is connected to Westhills Arena, a nearby ice rink facility owned by the City, which provides supplemental energy to the TES in the form of waste heat generated by its refrigeration system.

Energy from the above-mentioned sources is routed through a primary energy centre which transfers this thermal energy into a water-based distribution network. Each street within the service area contains a pair of energy distribution mains, connecting all users to a common loop (similar to a water system). Water is used to deliver heat to and from end-users because of its strong ability to store thermal energy. The distribution network consists of two mains in every street: a “warm” pipe and a “cool” pipe. The warm pipe contains water running at a higher temperature and is the main energy source for space and domestic hot water heating. The cool pipe runs at a lower temperature and acts as a cooling sink to remove heat and provide space cooling.

End users connect to the distribution network via on-site water-source heat pumps, which provide functional heating or cooling to their buildings.

Describe system size and known energy demand.

Please refer to the “Load Forecast & Analysis” section (below) and Appendix B for details on system size and energy figures.

Description of whether system and or site is designed to be scalable and intended to connect to other systems, buildings or locations.

The TES is broadly designed for scalability, as evidenced by its ability to expand from initially serving only a handful of customers to its current service base of more than 400 connections. At this time, there are no confirmed plans to scale the system beyond its current capacity.

Description of back up or alternative services available. Including information of provider.

In addition to the primary thermal energy source (geo-exchange), the TES also uses centralized natural gas (FortisBC) boilers in its energy centre, along with a waste heat recovery system connected to a nearby ice rink (owned by the City). Most end user mechanical systems also include an electric (BC Hydro) or natural gas (FortisBC) backup/heating component.

Any other information on service/energy provided and the scope of services and facilities.

SSL leases water-source heat pump systems to the majority of its end users. These systems are designed to be compatible with the operating conditions provided by the overall TES. As part of this arrangement, SSL is also responsible for the ongoing maintenance, repair, and eventual replacement of leased equipment.

While largely separate from the TES, SSL is also responsible for the delivery of potable water within the Westhills Service Area. Water is provided under a similar structure to that of the TES, with SSL acting as a service provider on behalf of the City in accordance with a local bylaw and Service Agreement.

Description of the use of municipal or public rights of ways.

SSL has installed infrastructure for the energy distribution system throughout the roads leading to and within the Westhills Service Area. One such road, Lot D, is actually a titled lot (owned by the City) making up a part of the Langford Parkway. There is infrastructure running under this road, including two large distribution pipes, which is used to provide the Energy Service to the Westhills Energy Service Area with no SRW or other charge in place formalizing SSL's rights to install such infrastructure nor preserving SSL's ownership of this infrastructure. Similarly, as opposed to what is often the case for major utility providers such as BC Hydro and Fortis, SSL and the City do not have a formal highway license agreement in place for SSL's installation of Energy Service infrastructure in dedicated roads. While the Services Agreement contemplated the granting of such an instrument by the City to SSL, it was in fact never entered into by the parties. The attached Appendix C offers a schematic plan showing the areas where infrastructure is installed pursuant to a formal charge and areas where there is no such formal charge or license agreement.

Name the customer(s) involved in the selection or signing of contracts.

N/A (Unclear what is being asked?)

Number of customers/end-users:

The TES currently provides service to 425 connections.

Type of customers: (e.g.)

All customers are residential, including a mix of single-family homes, strata town homes, and a 68-unit strata condominium.

Is (are) the Customer(s) obligated or restricted to taking service from the TES? If so, how and why.

Customers are not required to receive service from the TES. Alternative options, such as electric heating/cooling, are available through other providers (e.g. BC Hydro) and provisions exist for termination/disconnection of service from the TES.

What percent of the estimated TES cost was/will be competitively tendered?

System construction is complete and there are no confirmed plans for further expansion.

How else is cost reasonableness for construction of the facility assured?

System construction is complete.

LOAD FORECAST & ANALYSIS

I/We confirm that the load analysis and energy demand forecast was/will be completed by the following qualified person(s):

Andrew Byrnes, P.Eng. (Pinchin Ltd.)

Information on peak loads (MW) and annual loads (MWh) by thermal energy end-use.

		TOTAL
Peak Load (MW)	HEATING	1.627 MW
	COOLING	1.396 MW
Annual Loads (MWh)	HEATING	2,346 MWh
	COOLING	1,344 MWh

What is the method used to forecast the peak and annual loads? What are the key assumptions and design references used?

Peak loads are based on actual plant data from 2016 and forecast based on 2018 customer buildings. Annual loads are based on data from previous 12 months of operation as provided by the operator (SSL).

What is the peak design output (MW) of the TES (not including peaking/backup systems)?

1.648 MW heating capacity

What is the peak design output (MW) of the peaking/backup system?

1.464 MW heating capacity

Has the TES been designed to meet the full peak load for the site? If not, please explain other sources of peaking

Customer buildings include backup/peaking heat sources. This includes electric resistance duct heaters in single-family homes and electric resistance or natural gas boilers in multi-family buildings.

Cost Estimates

Estimated Capital Cost: Approx. \$11M

Estimated Annual Operating Costs: Approx. \$0.5M

APPENDICES*:

Appendix A – Westhills Energy Service Area

Appendix B – SSL TES Distribution Schematic

Appendix C – SSL TES Right-Of-Way Schematic

** attached separately*