



VIA EFILE

April 24, 2017

**SHANNON ESTATES THERMAL ENERGY SYSTEM
RATE APPLICATION EXHIBIT A-17**

Mr. George P. Steeves
Director
Sterling Cooper Consultants Inc.
608 – 1166 Alberni Street
Vancouver, BC V6E 3Z3

Dear Mr. Steeves:

Re: Shannon Wall Centre Rental Apartments Limited Partnership
Rate Application for the Shannon Estates Thermal Energy System

Further to your February 6, 2017 filing of the above noted updated application, enclosed please find Panel Information Request No. 1. Please file your response electronically with the Commission on or before Monday, May 8, 2017.

Yours truly,

Original signed by:

Patrick Wruck

CMcM/dg
Enclosure

BRITISH COLUMBIA UTILITIES COMMISSION
PANEL INFORMATION REQUEST NO. 1
 TO SHANNON ESTATES RENTAL APARTMENTS LIMITED PARTNERSHIP

Shannon Estates Thermal Energy Systems Rates Application

Table of Contents	Page No.
A. Load (Sales) and Revenue Forecast	1
B. Corporate Structure	4

A. LOAD (SALES) AND REVENUE FORECAST

- 1.0 Reference: Load (Sales) and Revenue Forecast
 Exhibit B-17, SRG IRs 4.1, 4.2, and 4.3; Exhibit B-5, BCUC IR 39.1; Exhibit B-6, FAES
 IR 5.1; Redacted Confidential Reply Submission
 Forecast to Actual**

The 2016 and 2017 Load/Sales and Revenue forecast that was included in the financial model (Model) filed in Shannon Wall Centre Rental Apartments Limited Partnership (SWCRA) Redacted Confidential Reply Submission under the Analysis Per Year tab was as follows.

Financial Model - 30 years			2016 Half a year			2017		
2016 to 2045	[Unit]	[\$/Unit]	Qty.	[\$]	[\$/Unit]	Qty.	[\$]	
Sales								
Space Cooling - kWh	[kWh]		73,959			73,959		
Space Heating - kWh	[kWh]		535,644			1,071,287		
Domestic Hot Water - kWh	[kWh]		100,225			200,450		
Revenue								
Service Start Charge		\$ 50.0000	275	\$ 13,750	\$ 50.0000	-	\$ -	
Monthly Capacity Levy	[\$/sqft]	\$ 0.0489	245,818	\$ 72,123	\$ 0.0501	245,818	\$ 147,852	
Monthly Metering Charge		\$ 9.5000	275	\$ 15,675	\$ 9.5000	275	\$ 31,350	
Space Cooling	[kWh]	\$ 0.0518	73,959	\$ 3,811	\$ 0.0539	73,959	\$ 3,984	
Space Heating	[kWh]	\$ 0.1036	535,644	\$ 55,493	\$ 0.1077	1,071,287	\$ 115,425	
Domestic Hot Water	[kWh]	\$ 0.1036	100,225	\$ 10,383	\$ 0.1077	200,450	\$ 21,597	
Subtotal - Revenue				\$ 171,255			\$ 320,209	

- 1.1 Please confirm, or explain otherwise, that the “2016 Half a Year” in the Model represents six months (July to December). If not, which part of 2016 does it represent?
- 1.2 Please confirm, or explain otherwise, that the 2016 Half a Year forecast was prepared under the assumption that the Rental Units were fully occupied and all the Phase I Units were sold/occupied.
 - 1.2.1 Given that 2016 is now over, and actual information is known, please comment on the accuracy of this assumption, specifically confirming, or explaining otherwise, that the Rental Units were full and the Phase I Units were sold/occupied for the 2016 Half a Year.
- 1.3 What percentage of the total Phase I square footage area, as shown on the Usage Inputs tab of the Model, is attributable to the Rental Units?
- 1.4 In response to Shannon Ratepayers Group’s (SRG) Information Request (IR) 4.1 SWCRA provided the actual kilowatt hour (kWh) sales for June – December 2016 and January 2017 relating to Domestic Hot Water (DHW), Space Heating and Space Cooling. The table below was compiled with the forecast Load and Revenue data provided in the Model and the actual sales data

provided in SRG’s IR response for the months of July-December 2016. Please confirm, or update as necessary, that the table below accurately represents the forecast and actual July-December 2016 Load (sales) and Revenues collected from customers.

2016 Half a Year						
	[Unit]		Forecast	Actual	Variance \$	Variance %
Load	Space Cooling - kWh	[kWh]	73,959	301,204	227,245	307%
	Space Heating - kWh	[kWh]	535,644	1,178,633	642,989	120%
	Domestic Hot Water - kWh	[kWh]	100,225	291,674	191,449	191%
			709,828	1,771,511	1,061,683	150%
Revenue		Proposed Rate				
	Space Cooling - kWh	\$ 0.05180	\$ 3,831	\$ 15,602	\$ 11,771	307%
	Space Heating - kWh	\$ 0.10360	\$ 55,493	\$ 122,106	\$ 66,614	120%
	Domestic Hot Water - kWh	\$ 0.10360	\$ 10,383	\$ 30,217	\$ 19,834	191%
			\$ 69,707	\$ 167,926	\$ 98,219	141%

- 1.5 Please provide a rationale for the 2016 Load and Revenue forecast filed in the Model being significantly different from the actuals provided in the SRG IR responses.
- 1.5.1 In your response, please specifically address whether, on average, each unit used more cooling, heating, and DHW than anticipated when the Model was originally developed. In other words, is the forecast Load different than the actual Load because individual units used more energy than expected or because more units were occupied than expected or some other reason.
- 1.5.2 How, if at all, is the increased Load related to the energy efficiency of the building(s) and/or the ‘Intensity of Usage’ set out on the Usage Inputs tab of the Model. Please explain fully.
- 1.6 For the 2016 Half a Year, please provide the actual quantity and actual Revenues collected for Service Start Charges, the Monthly Capacity Levy, and the Monthly Metering charges. Please provide an explanation for any variance between these actuals and the forecast that was included in the Analysis per Year tab of the Model.
- 1.6.1 If the 2016 Half a Year actual results are different from the forecast how, if at all, does this information impact the forecast provided in the Model for Service Start Charges, the Monthly Capacity Levy, and the Monthly Metering charges for the remaining years.
- 1.7 The following table was prepared to compare the 12 months 2017 forecast Load (sales) and Revenue to the 6 months actual Load and Revenue. Please confirm that the table is accurate or update as necessary.

2017 (12 Months)						
	[Unit]		Forecast 2017	Actual 2016 Ha	Variance \$	
Load	Space Cooling - kWh	[kWh]	73,959	301,204	227,245	
	Space Heating - kWh	[kWh]	1,071,287	1,178,633	107,346	
	Domestic Hot Water - kWh	[kWh]	200,450	291,674	91,224	
			1,345,697	1,771,511	425,814	
Revenue		Proposed Rate				
	Space Cooling - kWh	\$ 0.05387	3,984	\$ 16,226	\$ 12,242	
	Space Heating - kWh	\$ 0.10774	115,425	\$ 126,991	\$ 11,566	
	Domestic Hot Water - kWh	\$ 0.10774	21,597	\$ 31,426	\$ 9,829	
			\$ 141,006	\$ 174,643	\$ 33,637	

- 1.8 Please confirm, or explain otherwise, that the table above shows that SWCRA actually sold more kWh in the last six months of 2016 than it forecasts to sell in all of 2017 (12 months).
- 1.9 In SRCRA's view is the Load (sales) and Revenue forecast for Space Cooling, Space Heating, and DHW provided in the Model still accurate considering the actual 2016 information that is now available? If SWCRA considers the forecast is still accurate, please explain fully.
 - 1.9.1 If not accurate, please update the Load (sales) and Revenue forecast in the Model for all years and explain how the updated Load forecast for 2016 to 2020 (full build out) was derived and explain any assumptions.
- 1.10 On the basis of an updated Load forecast please update the four tables that were provided in response to BCUC IR 39.1 to reflect the updated expected Load for a 775 square foot unit and a 2000 square foot unit and update the 'Comparison of the Rates' table.
 - 1.10.1 For any changes to the estimated kWh (11,547 kWh for a 775 square foot unit and 13,381 kWh for a 2000 square foot unit) please explain the rationale for the change addressing space heating, space cooling, and DHW separately.
 - 1.10.1.1 If there are resulting changes to the British Columbia Hydro and Power Authority (BC Hydro) scenario's kWh please explain fully the rationale for the change.
 - 1.10.2 Please explain any difference between the forecasted annual charges under SWCRA's proposed rates and BC Hydro's rates in the updated 'Comparison of the Rates' table if different than the one provided in response to BCUC IR 39.1.
- 1.11 If the Load forecast is updated is there a resulting change to the energy savings set out in response to FortisBC Alternative Energy Services Inc. (FAES) IR 5.1? If not, why not? If yes, please explain and disclose the updated energy savings.

**2.0 Reference: Financial Model
Exhibit B-17, SRG IRs 4.2, 4.4; Appendix D – SETES Utility Invoices
Monthly electric usage**

- 2.1 Based on the BC Hydro invoices provided in Appendix D of Exhibit B-17 (SRG's IRs), the registered kW demand for the months of September 2016 to January 2017 does not agree to the information in the table provided in response to SRG IR 4.2. Please explain the discrepancy or update the table as necessary.
- 2.2 The table below was compiled to show variances between the 2016 Half a Year (July to December) electricity and natural gas (Cost of Energy or COE) forecast purchases provided in the Model with the actual COE purchases provided in response to SRG IR 4.4. Please confirm that the table is accurate or update as necessary.

Utility Invoices Summary				
2016 Half a year				
	Forecast	Actual	Variance \$	Variance %
BC Hydro	\$ 19,458.39	\$ 36,430.60	\$ 16,972.21	87%
Fortis	\$ 14,511.82	\$ 47,758.42	\$ 33,246.60	229%
	\$ 33,970.21	\$ 84,189.02	\$ 50,218.81	148%
Invoice	BCH	Fortis		
	Note 1			
17-Jan	\$ 3,777.07			
16-Dec	7,837.26	16,890.81		
16-Nov	6,765.31	8,667.47		
16-Oct	5,689.81	11,444.25		
16-Sep	5,301.70	2,409.93		
16-Aug	4,706.48	4,064.32		
16-Jul	2,352.98	4,281.64		
	\$ 36,430.60	\$ 47,758.42		
Note 1:	BCH billing period starts mid-month (i.e. billing period ending Jul 2016 covers Jun 16th to Jul 15th). Therefore, half of the total bill amount for billing periods ended Jul 2016 & Jan 2017 were used to calculate COE for Jul 1 to Dec 31, 2016.			

- 2.3 Please explain why the Fortis (natural gas) October, November and December invoices are significantly higher than the other months.
- 2.4 Is the increased COE, of 87 percent for BC Hydro and 229 percent for Fortis, related solely to the increased demand (increased kWh sold) or is it also related to the Thermal Energy System requiring more electricity and natural gas than originally expected? If the later, please fully explain.
- 2.5 On the basis of the actual 2016 COE used does SWCRA still consider the COE forecast in the Model to be accurate? If yes, please fully explain why.
- 2.5.1 If not, please update the Model to reflect the updated COE forecast for 2016 and beyond. For clarity please update the entire Confidential Financial Model filed as Exhibit B-1-1 (Updated Application) to reflect the updated Load/Sales forecast, Revenue forecast and COE forecast for 2016-2045. Please ensure that the Analysis Per Year tab and all the supporting tabs including the Usage Inputs and Loads tabs are updated as necessary.
- 2.5.2 Please fully explain how the updated COE forecast was derived and explain any assumptions.
- 2.6 Given the apparent uncertainty with the Load forecast (and the resulting Revenues and COE expense), in at least the initial years, would SWCRA be open to having a deferral account to capture any variance between forecast and actual: (a) Revenues due to Load, and (b) COE expense? In your response please explain fully the basis of any objections and discuss the advantages and disadvantage of such a variance deferral account.

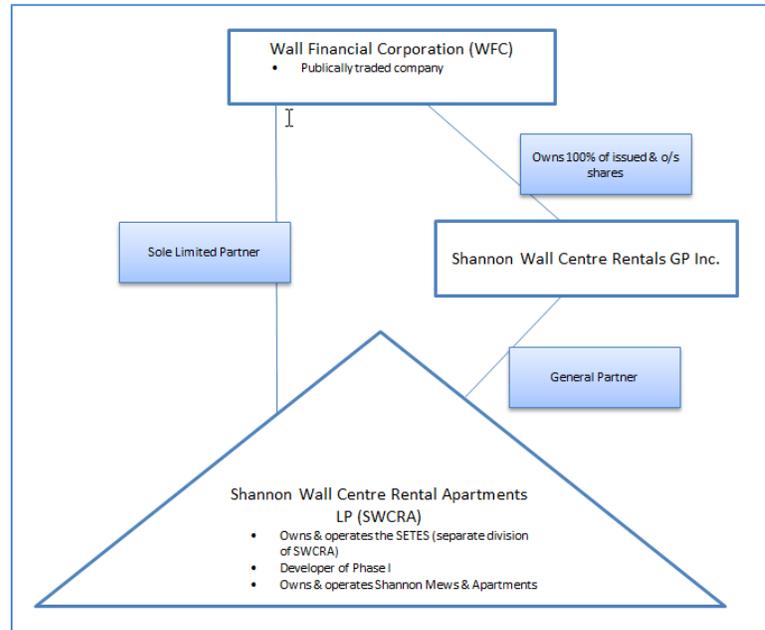
B. CORPORATE STRUCTURE

3.0 Reference: Corporate Structure Exhibit B-1-1, p. 13; Exhibit B-5, BCUC IR 49.1; Exhibit B-17, SRG IR 2.12; Exhibit B-20, BCUC IR 92.1 Organizational chart

- 3.1 Based on the information provided in the Updated Application and SWCRA's responses to BCUC's and SRG's IRs, the current corporate structure of the Shannon Estates Thermal Energy

System (SETES) is as depicted below in Figure 1 and in Figure 2 following (IR 3.4). Please confirm, or update as necessary, that these diagrams accurately reflect the current corporate structure of the SETES.

Figure 1: Shannon Wall Centre Rental Apartments



- 3.2 SWCRA stated that SETES operates as a separate division of SWCRA. Please clarify the meaning of a ‘division’ of a limited partnership. In your response please address how the books for SETES are maintained and if they are tracked separately from the rest of the activities of the limited partnership.
- 3.2.1 Other than the SETES and the Rental Apartments, are there any other divisions within SWCRA? If yes, please explain what they are.
- 3.3 The diagram in Figure 2 shows the structure of the Shannon Condominium Unit Trust. Please identify who the current trustee(s) and beneficiary(ies) of the Shannon Condominium Developments Unit Trust are.
- 3.4 Please combine Figures 1 and 2 to show the inter-relationship, if any, between the Shannon Condominium Developments Unit Trust and Wall Financial Corporation and SWCRA.

Figure 2: Shannon Condominium Development Unit Trust

