

February 3, 2012

Alanna Gillis
Acting Commission Secretary
B.C. Utilities Commission
6th Floor – 900 Howe Street
Vancouver, B.C.,
V6Z 2N3



Via email: commission_secretary@bcuc.com

Dear Ms. Gillis,

**Re: British Columbia Utilities Commission (BCUC) Order G-201-11
Details regarding efforts to address rising energy supply costs & long term energy supply options**

As requested in the BCUC Order G-201-11 dated December 1, 2011, Sun Peaks Utilities Co., Ltd. (SPUCL) is attaching a report on the efforts to address rising energy supply costs & longer term energy supply options.

The attached report includes information on the following:

1. Discussion of price risk concerns and ratepayer impact and feedback
2. Discussion of Sun Peaks rates relative to other propane utility rates (i.e. FEI – Revelstoke)
3. Near term supply cost mitigation plans (i.e. Competitive bids, supply portfolio options)
4. Demand side management or energy efficiency improvement options
5. Communication and plans to assist ratepayers in managing their growing energy bills
6. Feasibility assessment of longer term supply options (i.e. Natural gas)

Should you have any further comments or questions on the above, please contact the undersigned at 250-578-5490.

Sincerely
Sun Peaks Utilities Co., Ltd.

A handwritten signature in black ink, appearing to read "Pat Miller", enclosed within a large, loopy oval shape.

Pat Miller
Manager, Utility Services

CC: Comptroller of Water Rights, Province of British Columbia

../2012 Feb 15 SPUCL response to BCUC regarding energy supply costs

1280 Alpine Road, Sun Peaks, British Columbia, V0E 5N0
T: 250-578-5490 / F: 250-578-5516 / E-mail: info@sunpeaksutilities.com
www.sunpeaksutilities.com



Section 1. Discussion of price risk concerns and ratepayer impact and feedback

Sun Peaks Utilities communicates on a regular basis with its customers using Newsletters enclosed with the monthly Utility Invoices, updates on the Utility's website www.sunpeaksutilities.com, articles in the local community newspaper as well as public meetings scheduled from time to time. The Utility's newsletter is forwarded to the Mountain Resort Municipality of Sun Peaks to be included in the council's information package. In addition, a monthly meeting is held with the Municipality's Chief Administration Officer to provide a further venue of communication to rate payers.

During the initial customer rate design consultation, the community was very vocal that they wanted rate stabilization. This meant that one rate change per year that could be included in Customer's budgets. This is the key reason behind the creation of a Gas Cost Recovery Account (GCRA) to allow for the fluctuation in commodity purchases. This is unlike most other propane utilities where the commodity rate charged each billing cycle changes based on the purchase price of propane that month.

While Customers are never happy with the increased costs, the community at Sun Peaks understands the reasons behind the increases. For the last five plus years, the Utility has not received any communication from rate payers regarding commodity rate changes. When communications do occur, they generally take the form of informal conversations where clarification of items mentioned in the Utility's communication has been requested.

Communications Plan – The Utility's communication includes providing customers information on various items including the following items:

Commodity Costs based on the Price of Oil

Traditionally the commodity price of propane has been based on the price of oil and while oil is not at an all-time high, it is still significantly above normal levels. In addition, the impact of limited suppliers, the ability to store large quantities of propane and continued increase in the fuel and delivery costs has impacted customers significantly in the past. Over the past few years, the Utility has looked at various options to help mitigate the impact that include the following:

Pre-commit to Fuel Deliveries

In the past, the Utility was able to pre-commit to fuel purchases at low spot-prices during the Spring and even paying the premium to store the fuel until winter delivery made economic sense. However, in the last few years, the premium to pre-commit to fuel purchases has been significant (from \$0.02 cents per litre to \$0.12 per litre in 2011).

It is our believe that this increase may have been due in part to limited storage and the number of companies willing to offer this type of service. As a small utility, we do not have the resources to purchase and pay for the fuel in advance.



Increased On-Hill Storage

The increase of on-hill storage (from 60,000 USG to 120,000 USG) in 2010 allowed for some fuel purchasing when prices are a little lower in the spring/summer as well as to store fuel prior to the road weight restrictions being put in place by the Ministry of Highways due to spring thaw. However, these measures do not make a significant difference in the overall costs.

Highway Weight Restrictions

When the Ministry of Highways implements its annual Spring Road Load Restrictions on the 32 kilometers of the Tod Mountain/Sun Peaks Road that require trucks to carry no more than 70% axle rating, the propane trucking company ships the tanker trucks at 50% of the normal capacity.

To minimize costs, the Utility has made arrangements with the Propane Supplier to share the load with facilities in Kamloops or nearby. Then, the half load proceeds to Sun Peaks. We are required to pay for the additional unloading time. Due to the trucks only being able to carry 50% of the normal fuel, twice as many trips are required.

The additional trucking costs increased significantly last year due to road weight restrictions being imposed much earlier than normal. In 2010, road restriction was applied mid-February instead of the normal mid-March (2011). However this year, the road restriction became effective January 31, 2012 adding an extra six weeks of extra trucking costs.

The Utility has applied in earlier years to have the weight restriction waived for propane fuel deliveries without success. Due to the early road load restrictions, we are working with the Municipality to have the weight restrictions waived.

Section 2. Discussion of Sun Peaks rates relative to other propane utility rates (i.e. FEI – Revelstoke)

Although, details of various supply contracts and the costs associated with fuel deliver normally remain confidential, Sun Peaks Utilities was able to confirm the following information. The Commission may have more details to compare how the Commodity Costs for each utility are developed.

- a. Sun Peaks Utilities
 - i. supplied by MP Energy via truck. Winter delivery costs including fees for chaining up to deliver to Sun Peaks Storage Facility, reduced truck capacity due to road restrictions, etc.
 - ii. The Tank Storage Facility is owned by FortisBC but is 'rate payer funded'
 - iii. Risk mitigation for winter delivery (if the highways from Alberta are closed, then delivery can be made from the Kamloops depot via smaller trucks)
 - iv. Commodity Rates are set annually/semi-annually via a rate application process
 - v. Utility maintains a Gas Cost Recovery Account (GCRA) through Fortis BC and associated financing costs are passed onto rate payers



British Columbia Utilities Commission (BCUC) Order G-201-11

Report on efforts to address rising energy supply costs & long term energy supply options

- b. Revelstoke
 - i. supplied by MP Energy via Rail or truck
 - ii. Tank Storage Facility is owned by FortisBC and is 'investor funded'
 - iii. risks for winter delivery (if rail blocked, then delivery by truck)
 - iv. Commodity Rates are set annually/semi-annually via rate application process
 - v. Utility maintains a Gas Cost Recovery Account (GCRA) and associated costs are passed onto rate payers
- c. Big White
 - i. supplied by Superior Propane via Truck
 - ii. The Tank Storage Facility is owned by Superior Propane and is 'rate payer' funded
 - iii. Risk mitigation for winter delivery (if the road is closed, then delivery may be made from the Kelowna depot via smaller trucks)
 - iv. Commodity costs fluctuate monthly based on the fuel delivery costs
 - v. The Utility does not maintain a GCRA
- d. Panorama – supplied by Truck
 - i. supplied by Superior Propane via Truck
 - ii. The Tank Storage Facility is owned by Corix (funding source unknown)
 - iii. Risks for winter delivery (chain up fees, split loads due to road weight restrictions)
 - iv. Commodity costs fluctuate monthly based on the fuel delivery costs
 - v. The Utility does not maintain a GCRA

Section 3. Near term supply cost mitigation plans (i.e. Competitive bids, supply portfolio options)

- a. The current supply contract with MP Energy expires on March 31, 2011. It is the Utility's intention to work with Fortis BC to secure a fuel contract for the next two years. There are several items that are key to a successful supply contract.
 - i. Delivery costs – no additional costs for chaining up and no additional costs to split loads due to road conditions
 - ii. Ability to deal with local highway weight restrictions - delivering 50% of fuel to a Kamloops facility so costs are minimized when Highways places load restrictions on the Tod Mountain/Sun Peaks Road.
 - iii. Emergency fuel supply options. Our biggest demand for fuel is during the winter and in the past all major highways to Sun Peaks have been closed due to avalanches for short periods of time in January and February. The successful supplier must have a storage facility in the Kamloops area that we can draw on.
 - iv. Emergency Response Training – Sun Peaks is a remote community with limited emergency response personal and the successful bidder must assist FortisBC in the training of Utility staff and the Sun Peaks volunteer fire department in emergency response procedures.



Section 4. Demand side management or energy efficiency improvement options

Sun Peaks Utilities continues to work with our customers in providing different options to help conserve their demand for utility services. This includes both water and gas usage. A few of the projects we have worked on in the past are as follows:

a. Energy demand reductions

i. Water Conservation Projects that reduce demand for propane heated hot water

Sun Peaks Resort Corp. changed all sink aeration devices and toilets to Ultra Low Flow Water Fixtures as a trial to find out what the reduction in Utility costs would be. The project took place in 2000-2001 and proved to be very successful. In the six buildings where retrofits were possible, the pay back for both water and propane savings was between 3 and 3.8 years.

ii. Change in Water Tariff to require Ultra Low Flow Water Fixtures

In 2002, the Utility applied to the Comptroller of Water Rights to change the requirement from low flow water fixtures to Ultra-low flow water fixtures. This included water fixtures that used hot water (shower and bathroom sink aeration devices from 2.5 USG/m to 1.5 USG/m).

iii. In 2004, the Utility worked with several hotel properties to change out their shower, sink and toilets to Ultra Low Flow Fixtures. These customers noticed a reduction in overall Utility annual costs including propane usage.

Delta Resort and Conference Centre and Sun Peaks Lodge saw a small drop in propane consumption and a larger savings in their water and wastewater costs. Sun Peaks is a fully metered community (water & gas).

b. Retrofit to Dual Fuel Heating System

i. In 2008, several properties converted to a dual fuel heating system where the fuel used was dependent on the time of day cost of fuel. The three customers that we are aware of who converted saw a reduction in their Utility costs.

Hotel # 1 (Large hotel) saw an average reduction of 8,500 GJ or 46% drop in propane usage from previous year.

Hotel # 2 (Medium hotel) saw an average reduction of 550 GJ or 33% drop in propane usage from previous year.

Hotel # 3 (Smaller hotel) saw an average reduction of 3,100 GJ or 62% drop in propane usage from previous year.

These three customers' conservation measures reduced the overall propane usage for the Utility by 12-13%. We can't address any overall heating costs savings as the properties may have reduced their propane usage, but will have increased their electrical usage.



c. Exploration of Geothermal Heating Systems

- i. Sun Peaks Utilities continues to explore the options of geothermal heating systems that do not impact the potable water aquifer by thermal contamination.

Sun Peaks draws its water from Aquifer #235 which is rated as IIC (moderately used & vulnerable to contamination). In 2008, Sun Peaks Utilities contracted with Dr. Thierry Carriou, M.Sc., P.Eng. Hydrogeologist (1993) in looking at the vulnerability of the Sun Peaks aquifer to thermal contamination from Geothermal heating.

It was concluded that due to the aquifer's limited area and depth (110 to 130 feet below surface) and the high level iron bacteria naturally occurring, it was very likely that thermal contamination would occur within 3 to 4 months and there was a strong possibility of plugging off the existing utility wells would cause the aquifer to be unusable for drinking water.

However, this potential for thermal contamination was unlikely within the upper groundwater table (5 to 30 feet below surface). With this information in hand, Sun Peaks Utilities has encouraged new home builders to consider implementing a horizontal geothermal system (installed at the same time as their foundation is installed). At least one home owner has installed a horizontal geothermal system and solar hot water system with great success in reducing his propane consumption.

The Utility has considered a community horizontal geothermal heating system (using mountain slopes) for the East Village. However, this project is stalled due to slow real estate sales.

Section 5. Communication and plans to assist ratepayers in managing their growing energy bills

The Utility believes in proactive communication with rate payers. As outlined in Section 1, the Utility communicates with rate payers through newsletters, website updates, public meetings and face-to-face meetings with commercial and lodging customers.

At the last public meeting in April 2011, to discuss the option of proceeding with a Composting System and the rate impacts for wastewater, the Utility took the time to update what is happening with all utilities including potential propane commodity rate increase.

The PowerPoint presentation from the April 2, 2011 public meeting can be found at <http://www.sunpeaksutilities.com/pdf/Apr2PublicMeetingPPTPresentation.pdf>. Twelve people attended this meeting. Copies of the past newsletters are available at http://www.sunpeaksutilities.com/newsletters_2011.htm.



Section 6. Feasibility assessment of longer term supply options (i.e. Natural gas)

In 2005, Sun Peaks Utilities realized that the price of Propane was most likely going to continue to rise. At that time, the Utility contracted with Terasen Utility Services (now Fortis BC Alternate Energy Supply) to investigate the options to reduce energy costs through either a Natural Gas Line or a Liquefied Natural Gas Storage Facility.

a. Liquefied Natural Gas Storage Facility (LNG)

- i. Based on the expected growth patterns of the resort and the existing investment in the propane system, it was deemed at the time, that a LNG storage facility would require an \$8 to \$10 million investment which was not a viable option, thus no further reviews were undertaken.

b. Natural Gas Pipeline

- i. Sun Peaks Utilities in conjunction with FortisBC signed a contract with Northwest Pacific Gas Limited to investigate the costs and possible routes for a natural gas line to Sun Peaks. The best route selected was Fortis BC's Lafarge's Gate Station 37.5 kilometers away and the pipeline construction and customer conversion costs were estimated to be \$12.6 million. At the time, the differential cost between Natural Gas and Propane were not sufficient to support the costs of this project.
- ii. The differential costs between Natural Gas (\$2.98 per gigajoule at the Henry Hub Spot Price <http://www.cmegroup.com/trading/energy/natural-gas/natural-gas.html>) and Propane (MP Energy) is currently \$13.80 per gigajoule (as of January 3, 2012). At the annual delivery volumes of 75,000 gigajoules, the price differential of fuel only is \$810,000 each year. Further costs savings for trucking, etc. may realize additional savings.

Sun Peaks Utilities is currently working with the Municipality to apply for a \$10,000 community study grant to re-confirm the construction costs in today's dollars as well as the business case viability for the installation and operation of a natural gas pipeline.

We will keep the Commission updated as we move through this process. We would appreciate any comments or suggestions the Commission has to assist in the success of a natural gas pipeline installation and conversion.