

IN THE MATTER OF  
the Utilities Commission Act  
S.B.C. 1980, c. 60, as amended

and

IN THE MATTER OF  
an Application by  
Squamish Gas Co. Ltd.

DECISION

February 27, 1991

BEFORE:

J.D.V. Newlands, Deputy Chairman  
W.M. Swanson, Q.C., Commissioner

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## **LIST OF EXHIBITS**

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## **1.0 INTRODUCTION**

Squamish Gas Co. Ltd. ("Squamish" or "the Applicant"), a wholly-owned subsidiary of BC Gas Inc. ("BC Gas"), provides piped propane service to the Municipality of Squamish, a community of approximately 10,150 people located approximately 65 kilometres north of Vancouver at the head of Howe Sound. The Applicant has 1,000 customers.

Upon completion of the Vancouver Island pipeline project, natural gas will be available and will displace piped propane in Squamish. Natural gas is estimated to be available by July, 1991.

## **2.0 APPLICATION**

Squamish applied on December 13, 1990 to increase its rates by \$0.600 per Ccf due to the increased cost of propane from its supplier, Superior Propane Inc. ("Superior"). The Application sought three changes, namely:

1. An increase in permanent rates of \$0.374 per Ccf, effective January 1, 1991 to reflect the estimated cost of propane in the period January 1, 1991 to June 30, 1991. The forecast delivered cost of propane was \$0.17 per litre.
2. An increase in the existing "Rider" from \$0.096 to \$0.322 per Ccf for consumption from January 1, 1991 to June 30, 1991 to recover the accumulated balance in the Propane Purchase Deferral Account as of December 31, 1990.
3. To continue the Propane Purchase Deferral Account but increasing the current delivered benchmark price of \$0.136 per litre to \$0.170 per litre effective January 1, 1991 to reflect the forecast cost of propane to June 30, 1991.

The Propane Purchase Deferral Account was established on January 1, 1989 to absorb the amount that the actual average monthly propane costs are above or below the benchmark price included in the rates. The original delivered benchmark price was \$0.094 per litre.

Prior to this Application the Applicant sought and was granted an increase of \$0.374 per Ccf effective October 1, 1990 to recover the increased cost of propane, at which time the Applicant forecast the cost to be at an average delivered price of \$0.136 per litre to

June 30, 1991. A Rider of \$0.096 per Ccf from October 1, 1990 to June 30, 1991 was approved which would fully amortize the accumulated balance in the Propane Purchase Deferral Account.

The increase approved effective October 1, 1990, together with the original proposed increase effective January 1, 1991 would represent an aggregate increase of approximately 60 percent or \$1.07 per Ccf.

A notice was included in the customers' December bills and advised them of a proposed 32 percent increase. On December 13, 1990 after further review by Squamish of its forecast cost of propane to June 30, 1991 this proposed increase was reduced to 26 percent.

By letter dated December 13, 1990 the District of Squamish wrote to the Commission expressing concerns about the magnitude and frequency of the increases. By Order No. G-113-90 made December 20, 1990, the Commission, on its own motion, directed a public hearing into the Squamish Application to commence on February 11, 1991 in Squamish.

Subsequently, on January 28, 1991, the Applicant submitted Revision 1 and Revision 2 as alternatives to the Application. The effect on rates of the two revisions is:

Revision 1:

1. An increase in the permanent rates, effective March 1, 1991, by \$0.173 per Ccf based on a revised forecast average delivered propane prices of \$0.15 per litre from March 1, 1991 to June 30, 1991.
2. An increase in the Rider from \$0.096 to \$0.554 per Ccf for the period from March 1, 1991 to June 30, 1991 to recover the actual Propane Purchase Deferral Account balance as at December 31, 1990 and the forecast changes to February 28, 1991.

The effect of Revision 1 would be an increase in rates of 28 percent.

Revision 2:

1. Increase the permanent rates identical to Revision 1.
2. Maintain the Rider of \$0.096 per Ccf for the period from March 1, 1991 to October 31, 1992 (20 months) to recover the actual Deferral Account balance as at December 31, 1990 and the forecast changes to February 28, 1991.

The effect of Revision 2 would be an increase in rates of 7.6 percent.

On February 8, 1991, on the eve of the hearing, the Applicant submitted yet another amendment in the form of Revision 3. This revision contained the following proposals:

1. Remove the request for an increase to the current permanent rates and Rider.
2. The Propane Purchase Deferral Account will continue to absorb the difference between the actual average monthly propane prices and the current benchmark price of \$0.136 per litre.
3. The Commission could order Squamish to change from deferred income tax accounting to the taxes payable accounting method effective January 1, 1991.
4. Offset the Deferred Income Tax Account balances as at December 31, 1990 against the Propane Purchase Deferral Account.

At the hearing, witnesses for the Applicant gave evidence that the delivered cost of propane had dropped rapidly and dramatically during late January and early February, 1991 from the forecast price of \$0.15 per litre to a then current price of approximately \$0.10 per litre. Mr. Wessler of BC Gas stated that if the average delivered price from February 1 to June 30, 1991 was \$0.11 per litre then the balance in the Propane Purchase Deferral Account would be zero by June 30, 1991. In view of this fall in price, the Applicant, late in the hearing, asked for a further amendment to the third revision as follows:

"As another alternative to ameliorate the rate impact of propane price increases, the B. C. Utilities Commission could by order direct Squamish to change its accounting for income taxes to the taxes payable method effective January 1, 1991, and offset on June 30, 1991, the Deferred Income Tax Account balances as at December 31, 1990 against the Propane Purchase Deferral Account." (underlining added for emphasis)

(Exhibit 5, pg.3, T. 321)

### **3.0 MAJOR ISSUES**

#### **3.1 Propane Market**

Mr. MacDonald, Vice-President of Marketing of Superior explained the factors that affect the propane market in general. He gave evidence that propane is a commodity that is traded in the North American marketplace. He stated that it is a versatile fuel and is suitable for use as a feedstock in petrochemical applications. Naphtha, an oil product, is the normal feedstock for petrochemical producers but as the price of oil rises, naphtha prices increase so these producers switch to propane as a feedstock. The use of propane as a substitute fuel links its price to oil (T. 42/43).

Other factors which impact the price of propane are weather, the economy and international events. If the weather is milder than normal, inventories increase and when it is colder than normal, they decrease. Economic circumstances are reflected through increased or decreased construction use, forklift use and commercial fleet operations. Internationally the invasion of Kuwait raised concern with regard to oil supply which in turn was reflected in the price of both crude oil and propane (T. 43/44).

Mr. MacDonald considered that it would be possible to predict propane prices if one could forecast the weather, economic events and the international scene. The weather is difficult to predict so the 30 year average is used as an approximation. If the economy is on an upturn then demand for propane will be increasing. Demand will drop if the economy is on a downturn. Forecasts of crude oil are published showing high, medium and low prices based on assumptions about supply and the degree of international stability (T. 49/50 and 87/88).

Mr. MacDonald explained his view of propane prices starting at April 1990. There was a slowing economy based on information from market demands and sales figures. Demand in forklift applications, construction and commercial heating and cooking uses in the tourist trade had declined. Approaching warmer weather in the spring and summer would reduce



demand. The supply of propane was expected to increase over the next few years since natural gas production was increasing and propane is a by-product. The view was that propane prices were at least stable, if not falling over this time period (T. 54).

After the Iraq invasion of Kuwait on August 2, 1990 oil prices rose to \$40 a barrel which caused naphtha and propane prices to rise dramatically. After the outbreak of war on January 16, 1991, based on the belief that the world supply of oil was not threatened, crude oil prices began to fall as did the prices of naphtha and propane (T. 55/56).

In its filed evidence (Exhibit 11) Superior showed a supplier's price for propane of 6.634 cents per litre on July 24, 1990 which rose to a peak of 14.799 cents on October 7, 1990 before dropping to 6.25 cents on February 2, 1991. The prices do not include freight or handling fees to Squamish (T. 56). Mr. MacDonald testified that he doubted that the price of 6.25 cents per litre would be lower if weather patterns remain normal, economic conditions are the same and assuming that crude oil prices are constant (T. 57).

Squamish receives notification of price changes from Superior by two means. Mr. Martin, Manager of Squamish Gas at Squamish, gave evidence that he receives oral notice of changes from the Calgary office of Superior every second day. Mr. Thrasher, Manager of Gas Supply for BC Gas, receives written confirmation of price changes bi-weekly. Exhibit 11, filed by Superior, shows that recent price drops had occurred on January 22 and February 2, 1991 but they were not reflected in the revisions to the Application. During the hearing Mr. Martin stated that he was unaware of the change since he had not spoken to Superior in the previous two weeks. Mr. Thrasher was told orally about the price drops in late January but decided to wait for the written confirmation which arrived on February 8, 1991, one business day prior to the commencement of the hearing.

On the basis of the evidence it is apparent that Squamish has not been monitoring the propane price changes diligently. The utility should have been aware of price changes that affect its daily operations and evidence. Current information should have been filed promptly as opposed to having this critical information elicited during cross-examination.

### **3.2 Propane Source for Squamish**

Superior sold Squamish to BC Gas Inc. (formerly Inland Natural Gas Co. Ltd.) on November 25, 1987. At the time of the sale, Superior signed an agreement to supply all of the propane requirements of Squamish for at least one year. Superior's fee for this service was \$0.001 per litre. During the term of their contract, the Superior fee has increased from \$0.001 to \$0.003 per litre although this has been offset to some extent by increased charges to Superior from Squamish for its services. Superior made an undertaking at the time of the sale to ensure that Squamish was supplied with the lowest cost product and Mr. MacDonald had testified that it had complied with that undertaking. Superior has stated that its policy is to purchase at posted prices in order to be guaranteed a security of supply.

Squamish testified that it has purchased all of its propane from Superior since 1987 and it believes that Superior provides good service, a very high level of security of supply and a cost that is cheaper than Squamish could achieve using its own personnel. Mr. Thrasher stated that Squamish did not solicit tenders for the supply of propane from other marketers or brokers from 1988 to 1990 since they may not provide the same security of supply as Superior (T. 294/295). Discussions were held with Inter-City Gas in 1989 but since the services provided were considered to be less or equal to Superior there appeared to be no benefit to switching suppliers (T. 273/275/276).

Squamish considered buying and shipping all of its propane needs and accordingly contacted Amoco Canada Ltd., Petro-Canada Ltd., Imperial Oil Ltd. and other suppliers who were willing to provide propane at prices equal to Superior but would need minimum volume commitments (T. 276/277). The transportation aspect would also be a problem for Squamish since it would be expensive and difficult to arrange for tank cars and trucks to ship propane from different supply sources (T. 277/278). The Applicant stated that to provide the same service as Superior would require Squamish to hire an additional employee at an estimated cost of \$50,000 per annum but would not provide lower propane prices and would result in a reduced security of supply due to a smaller supply network compared to Superior (T. 278). Other transportation services were not solicited.

It is apparent that Squamish by itself could not justify hiring an employee to undertake the function performed by Superior or a similar company. However, it does have access through its parent company to significant resources with regard to oil and gas prices in general and this should be used in assessing the performance of marketers of propane. Only one employee of the witness panel was a full time employee of Squamish.

### **3.3 Propane Price Forecasting**

In Exhibit 1, Squamish was estimating an average delivered price of 13.5 cents per litre for the year ending 1990 and forecasting an average delivered price of 17 cents for the six months ending June 30, 1991. This forecast was subsequently revised to 15 cents per litre. During the hearing, based on evidence supplied by Superior, it was apparent that the delivered price had fallen to 10 cents per litre.

On the basis of the evidence and concerns expressed on page 5 of this Decision, it is apparent that a significantly greater effort must be made to understand and forecast the market for propane. As stated in Section 3.2, the Commission is cognizant of the resources of BC Gas and is concerned, in view of the inter-relationship of natural gas and propane, that the panel comprised predominately of senior BC Gas personnel did not display a better knowledge of the market. Steps must be taken to overcome this.

### **3.4 Fixed Price Contract**

Squamish experienced a propane price spike in early 1989 and 1990 which they believed could indicate some price instability (T. 29). As a result Squamish requested that Superior solicit bids for a fixed price contract for half of the 1990/91 Squamish supply. One bid was received at a delivered price slightly over 10 cents which represented a 10 to 15 percent premium over the existing spot price (T. 32). At that time Squamish forecasted an average delivered price of approximately 9 cents (T. 30). Squamish decided to reject the fixed price contract and to continue purchasing on the short-term basis because in their view this approach had benefited Squamish customers since the purchase of the utility by BC Gas Inc. (T. 26). It is unclear from the evidence how they reached this conclusion.

Commission staff prepared an analysis based on information supplied by Squamish prior to the hearing which showed a projected cost of \$202,774.14 was incurred by rejecting the fixed price contract (T. 235/236). Counsel for Squamish recalculated the cost based on the current delivered price of 10 cents per litre for the months of February, March and April 1991 to arrive at a cost slightly less than \$120,000 (T. 354). Squamish stated that events in the Persian Gulf have had an impact on propane prices and if they had not occurred then customers would have been better off by purchasing on a short-term basis (T. 237/238).

The Commission believes that the utility has not fully assessed the risk of using spot short-term purchases. In view of the price trends occurring in late 1989 and early 1990, Squamish would have been prudent in executing a fixed price contract for at least a portion of their gas supply.

### **3.5 Propane Purchase Price Deferral Account**

Exhibit 5, Tab 1 shows the monthly activity in the Propane Purchase Deferral Account. Squamish updated the amounts to show a debit balance of approximately \$138,000 at January 31, 1991 (T. 16/17). The debit balance in the deferral account has resulted from the monthly average propane prices exceeding the cost of propane that is recovered in the rates. The deferral account, apart from fluctuations in the cost of propane, is recovering a credit of \$0.096 per Ccf.

Squamish stated that it applied on December 13, 1990 for an increase to the Rider to reduce the deferral account balance to zero by July 1, 1991 when natural gas arrives (T. 150). It was the evidence of Squamish that it might be fair and reasonable for the propane customers to pick up the propane deferral account balance (T. 340). This approach as set forth in Revision 1 of the December Application would have resulted in a 28 percent increase in rates.

Squamish proposed Revision 2, which would not increase the Rider from the October 1, 1990 level but would extend the recovery period from June 30, 1991 to October 1992 and produce a rate increase of 7.6 percent (Exhibit 3, Tab 8, Pages 4 to 4.2). The utility did not endorse this revision since it could require a contribution from the Provincial

Government as part of the conversion to natural gas (T. 340/341). Prior to filing Exhibit 5 on February 8, 1991, it appeared to Squamish that Revision 2 would recover the propane deferral balance and also reduce the required rate increase.

Revision 3 was included in Exhibit 5 and proposed that no increase in the Rider occur since the balance in the propane deferral account would be offset against the deferred income tax balance. By February 8, 1991 Squamish became aware that the price of propane had dropped drastically and the current delivered price to Squamish was 10 cents per litre. Exhibit 11, filed by Superior, showed a significant drop in price on January 22, 1991. This information was not provided to the Commission prior to the hearing. Squamish projected that if the average delivered price was 11 cents from February 1, to June 30, 1991 (approximately \$0.01 per litre higher than the current price) then the propane deferral account balance should be zero on June 30, 1991 (T. 136).

The utility believed there were three options for dealing with the projected net credit balance, if any, of the deferral accounts. The first would be an immediate refund to the propane customers, the second would be a refund over time and the third would be a reduction of rate base. Each option was viewed as benefiting customers to different degrees (T. 335).

The Commission believes that the propane deferral account balance will reduce to zero by June 30, 1991 and may even generate a small credit balance if the economy in general does not improve.

### **3.6 Change to Flow-Through Income Taxes**

Squamish currently collects deferred taxes in its rates but has proposed a change to flow-through income taxes on January 1, 1991 (T. 13). The utility gave evidence that there was nothing forcing them to change, except that their application for an Energy Project Certificate for the Vancouver Island project was based on flow-through income taxes (T. 321). The Applicant proposes to maintain the existing rates and flow through \$6,400 to the earned return. The existing forecast return on equity is 8.48 percent for 1991.

### **3.7 Propane Storage Facilities**

Squamish currently uses four 30,000 gallon storage tanks which at full capacity provides seven days supply during the peak winter period. To increase storage to a three month supply, Squamish estimates that twenty 30,000 gallon storage tanks would be required. The utility considers the cost to be prohibitive and accordingly did not pursue this option.

When Squamish converts to natural gas, the utility has three options for the existing storage tanks. Option 1 is to provide peak shaving to the natural gas system in general; Option 2 is to provide peak shaving for the Squamish customers; Option 3 is to sell or lease the storage tanks to Superior. At this time a decision has not been made (T. 302/303/304). At the time the disposition or lease of the storage tanks is settled, the amount of the proceeds shall be reported to the Commission for direction.

### **4.0 NATURAL GAS CONVERSION**

Many intervenors were concerned about the conversion of the propane system to natural gas and its effect on prices. The Applicant gave evidence that the price of natural gas would be equivalent to 85 percent of the price of light fuel oil. The evidence was that with fuel oil at 45 cents per litre (current price) the equivalent natural gas price would be 38 cents per litre, which is slightly higher than the price the Applicant estimated for bottled propane (37.68 cents per litre). Subsequent to the hearing the Applicant revised its calculations to include an adjustment for heat value of fuel oil compared to propane. The revised estimate determined that natural gas would be set at 26.3 cents per litre.

### **5.0 DECISION**

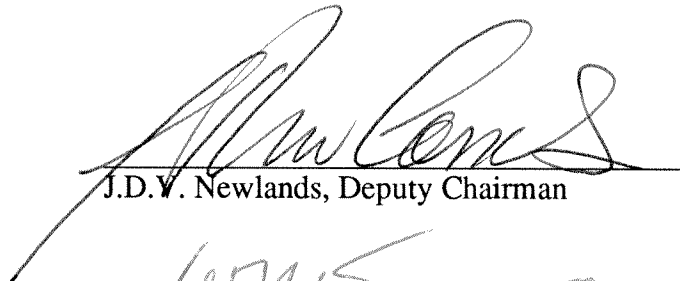
1. The December Application has been significantly revised by Squamish to remove the request for an increase in the permanent rate and the Rider. The Commission believes that the recent drop in propane prices removes the requirement for an additional permanent rate increase. Evidence was provided that if delivered propane prices average 11 cents per litre from February 1 to June 30, 1991 then the propane deferral account will have a zero balance. Based on the current delivered


prices of 10 cents per litre along with forecast delivered prices of 10 to 12 cents for that period, a change in the Rider cannot be justified. The Commission directs that the existing rates inclusive of the Rider of \$0.096 per Ccf remain in effect until the date that natural gas service commences and any credit balance in the propane deferral account be returned to the customers.

2. The Commission is concerned by the testimony which shows that information concerning price changes was not diligently gathered by the utility. Significant price changes occurred on January 22 and February 2, 1991 which were apparently not known or confirmed in writing to the Applicant, and which were subsequently not relayed to the Commission. These price changes represent important aspects of this hearing in regards to the possible permanent rate increase and change in the Rider. Steps must be taken to eliminate this problem in the future.
3. The Commission is concerned that Squamish has not solicited bids from other suppliers and transportation companies to support its contention that Superior is providing the best quality of service at the lowest cost. If propane service was to be continued at Squamish, the Commission would order this be done.
4. The request to change from deferred to flow-through income taxes is approved effective with the date that natural gas service commences.
5. The Commission concurs with the Applicant that additional storage in the amount considered is not cost effective.
6. On the basis of the evidence, the relief sought and granted, the Commission directs that the cost of this proceeding be borne by Squamish Gas Co. Ltd.

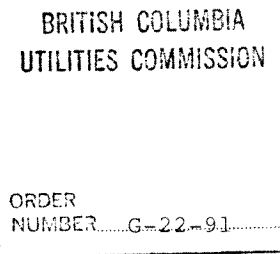
7. In view of the evidence presented in this proceeding Squamish is to provide to the Commission a report on its monthly purchase of propane (supplier, volume, price, delivery charge) and the impact on the deferral account within 30 days after each month end effective March 1, 1991. This directive is to remain in effect until Squamish is converted to a natural gas system.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 27<sup>th</sup> day of February, 1991.

  
J.D.V. Newlands, Deputy Chairman

  
W.M. Swanson, Q.C., Commissioner





IN THE MATTER OF the Utilities Commission  
Act, S.B.C. 1980, c. 60, as amended

and

IN THE MATTER OF an Application by  
Squamish Gas Co. Ltd.

BEFORE: J.D.V. Newlands, )  
Deputy Chairman and )  
Chairman of the Division; and ) February 27, 1991  
W.M. Swanson, Q.C. )  
Commissioner )

**O R D E R**

**WHEREAS:**

- A. On December 13, 1990 Squamish Gas Co. Ltd. ("Squamish Gas") applied for Commission approval, pursuant to Section 67(2) of the Utilities Commission Act, of amendments to its Gas Tariff, Rate Schedule 1 - General Service Rate to allow for a pass-through of an increase in propane product costs from its supplier, effective with consumption January 1, 1991; and
- B. On December 20, 1990 the Commission, by Order No. G-113-90, set the Application down for public hearing to commence February 11, 1991 in Squamish, B.C.; and
- C. The public hearing pertaining to the Squamish Gas Rate Application proceeded before the Commission on February 11 and 12, 1991 at Squamish, B.C.; and
- D. The Commission has considered the Application and evidence adduced thereon all as set forth in a Decision issued concurrently with this Order.

**NOW THEREFORE** the Commission hereby orders as follows:

- 1. The Application by Squamish Gas to pass through a cost of gas increase to Rate Schedule 1 - General Service Rate customers is denied. The present rates including Rider 1 are to remain in effect until the date that natural gas service commences.
- 2. Squamish Gas will comply with the several directions incorporated in the Commission Decision.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 1<sup>st</sup> day of March, 1991.

BY ORDER

W.M. Swanson, Q.C.  
Commissioner

BCUC/Orders/SQG RS#1-Gen.Svce.Rate