

SIXTH FLOOR, 900 HOWE STREET, BOX 250
VANCOUVER, B.C. V6Z 2N3
CANADA



BRITISH COLUMBIA
UTILITIES COMMISSION

ORDER
NUMBER G-61-95A

TELEPHONE: (604) 660-4700
BC TOLL FREE: 1-800-663-1385
FACSIMILE: (604) 660-1102

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

and

An Application by BC Gas Utility Ltd.
Reference Price Factors for Buy/Sell Energy Supply Contracts

BEFORE: M.K. Jaccard, Chairperson; and)
L.R. Barr, Deputy Chairperson) August 24, 1995

O R D E R

WHEREAS:

- A. The Commission's July 7, 1995 Decision regarding the Review of Buy/Sell Deliveries of Natural Gas to the Core Market directed each LDC to file for Commission approval its reference price calculation methodology and a preliminary price forecast as soon as possible after August 1, 1995, and not later than August 15, 1995; and
- B. On August 14, 1995 BC Gas Utility Ltd. ("BC Gas"), filed for Commission approval its buy/sell reference price methodology and a forecast of reference price factors for the 1995/96 gas contract year; and
- C. The BC Gas filing did not include the results (gains or losses) of any active gas price hedging activity in the calculation of reference prices, but requested direction from the Commission with regard to this matter; and
- D. Actual reference price factors may differ from the forecast due to the market sensitive pricing provisions included in a significant portion of BC Gas' system baseload contracts; and
- E. The Commission has reviewed the filing and finds that approval is required.

NOW THEREFORE the Commission orders as follows:

- 1. For the Lower Mainland and Inland service areas, the reference price forecast and reference price calculation methodology as set out in BC Gas' letter dated August 14, 1995, which is attached as Appendix A, are approved, subject to review with respect to the exclusion from the calculation of the results of active gas price hedging activities.
- 2. Interested parties are invited to comment to the Commission and provide evidence in support of their position by September 15, 1995 regarding whether or not the results of any active price hedging should be included in BC Gas' reference price calculation.
- 3. BC Gas is directed to calculate actual monthly demand and commodity reference price factors at 100 percent load factor using its approved methodology and to report these factors to the Commission within 20 days after the end of each month.

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4. For the Fort Nelson and Columbia service areas, in the event that the utility receives a written request from an interested party to do so, BC Gas is directed to file within 20 days, a reference price forecast for either area that is based on expected system baseload pricing for the 1995/96 gas contract year.

DATED at the City of Vancouver, in the Province of British Columbia, this 25th day of August 1995.

BY ORDER


Dr. Mark K. Jaccard
Chairperson

BC Gas Inc.

1111 West Georgia Street
Vancouver, British Columbia
Canada V6E 4M4

Tel (604) 443-6607
Fax (604) 443-6789

David M. Masuhara

Vice President
Legal & Regulatory Affairs
and Secretary



B.C. UTILITIES COMMISSION
RECEIVED & ACKNOWLEDGED

AUG 15 1995

.....FOR STAFF RESPONSE
.....FOR RESOURCE ROOM
.....INFO. TO BE FILED.....

APPENDIX A to
Order No. G-61-95A

August 14, 1995

British Columbia Utilities Commission

6th Floor, 900 Howe Street
Vancouver, BC
V6Z 2N3

ATTENTION: R.J. Pellatt, Commission Secretary

Dear Sirs/Madams:

RE: Direct Purchase Reference Prices: November 1995-October 1996

The Commission issued its Decision in the matter of the Review of Buy/Sell Deliveries of Natural Gas to the Core Market on July 7, 1995. Section 5.2 of the Decision directed "...that each LDC file for Commission approval, its reference price calculation methodology and a preliminary price forecast as soon as possible after August 1 and not later than August 15". BC Gas Utility Ltd. ("BC Gas") hereby provides that price forecast to the Commission.

This forecast is an estimate of the average reference price over the period from November 1, 1995 through October 31, 1996. BC Gas will be filing reference prices each month given that a portion of its baseload gas costs are related to different indices. It is BC Gas' intention to file its monthly reference price on or before the 10th day of the month following the month of deliveries. This is 10 days prior to the date that BC Gas issues its gas purchase statement to the A/B/M's.

It is BC Gas' expectation that once the initial methodology has been approved and the pricing formula is in place it may be unnecessary for the Commission to formally approve each monthly price.

1. Pricing Parameters

The assumptions used by BC Gas in preparing its estimate of gas pricing for the reference price calculations are as follows:

• fixed price	46 %	(1)
• NYMEX-based	31 %	(1)
• Sumas index	23 %	(1)
• NYMEX forward strip	\$1.78 US/MMBtu	(2)
• basis differential	48¢ US/MMBtu	(3)
• \$US/Cdn exchange	73¢ US/Cdn	
• average WEI tolls	65¢ Cdn/Gj	(4)
• MMBtu/Gj conversion	1.055056 MMBtu/Gj	(5)

Notes:

- (1) estimate based on current agreements
- (2) the forward strip for the November 1995 (1 year) period has varied between roughly \$1.72 - 1.82 US/MMBtu since mid-June (see attached chart)
- (3) reflects typical market values over the past few months; only used on floating basis and index-based contracts
- (4) based on average acid gas (Huntingdon delivery point); will change in 1996 if NEB-approved toll is adjusted
- (5) as utilized by Westcoast

As noted earlier, BC Gas will generate a monthly reference price, beginning in December 1995 (for November deliveries), that will incorporate actuals for the various parameters that change each month. Those factors include:

- NYMEX settlement prices
- Sumas index prices
- exchange rate conversions
- WEI demand tolls
- WEI commodity tolls (motor fuel tax)
- WEI fuel gas ratios

2. Impacts of LDC Hedging

All of the assumptions listed in Section #1 do not reflect any financial hedging impacts on gas costs. BC Gas has not yet completed its hedging activities for the 1995/96 contract year. There is considerable debate, however, on whether or not such impacts should be reflected in the LDC reference price.

Although not intended to be a detailed review of the alternatives, BC Gas has summarized some of the key arguments relating to this issue.

- **Exclude Hedging**
 - the price paid to baseload suppliers does not reflect any hedging adjustments
 - hedging may be instituted for gas price volatility reasons, to capture savings from previous levels of gas costs, or to avoid price shocks from rapidly increasing prices
 - baseload suppliers should not be at risk of displacement resulting from hedging decisions by the LDC
 - the "savings" for a customer are a function of the difference between the price paid by the LDC (on average to its suppliers) and the costs incurred by the A/B/M customers in purchasing the supply
 - if buy/sell was replaced by "bundled T-service", then hedging impacts would be irrelevant since non-system supply could not be hedged
 - the reference price structure could be significantly impacted part way through a contract year, potentially impairing (as opposed to improving) a customer's "savings"
 - paying a hedge to both the A/B/M and the financial institution would skew the hedged ratio
- **Include Hedging**
 - the impact of the hedging transaction is reflected in the actual gas costs (ie. the sales rate to customers reflects the hedge-inclusive costs)
 - if prices are hedged passively (ie. through a fixed price from the producer) that is reflected in the reference price

BC Gas is not making a formal recommendation at this time on whether or not to include the hedging impacts in its reference price. However, BC Gas requests that the Commission either determine that this should be an individual LDC consideration or that the Commission issue a decision as part of its approval of the reference price.

3. Reference Price and Price Factors
(effective November 1, 1995)

Price Factor	Huntingdon (\$/Gj)	Savona (\$/Gj)	Station #2 (\$/Gj)
Reference Price (@100% LF)	1.682	1.600	1.496
Unit Fixed Charge	0.933	0.851	0.747
Unit Commodity Charge	0.749	0.749	0.749
Westcoast Commodity Tolls	0.022	0.015	0.007

Notes:

- (1) Reference Price is calculated by adding the Unit Commodity Charge to the load factor adjusted Unit Fixed Charge. Prices are actually paid on the basis of the individual components; filing assumes a 100% load factor.
- (2) Unit Fixed Charge is paid on the Daily Contract Quantity each day that the gas is available (whether taken or not).
- (3) Unit Commodity Charge is paid on each unit of gas delivered to BC Gas plus any units delivered to Transporter (ie. Westcoast) for fuel gas; excludes WEI commodity tolls (motor fuel tax).
- (4) Westcoast Commodity Tolls are paid on each unit of gas delivered to BC Gas only and will be based on an average heat content and raw to residue ratio.

As an example calculation, BC Gas will assume a DCQ of 1,000 Gj/d delivered to Station #2 for the month of November, 1995 assuming a 100% load factor for the month (based on the table of estimated values set out above).

Stations #2 Example

$$\begin{aligned}
 \text{Demand charges} &= \text{DCQ} \times \# \text{ of days} \times \text{Unit Fixed Charge} \\
 &= 1000 \times 30 \times 0.747 \\
 &= \$22,410
 \end{aligned}$$

$$\begin{aligned}
 \text{Commodity charges} &= \text{DCQ} \times \# \text{ of days} \times \text{Unit Commodity Charge} \\
 &= 1,000 \times 30 \times 0.749 \\
 &= \$22,470
 \end{aligned}$$

Fuel gas = delivered quantity x fuel ratio*
 x Unit Commodity Charge
 = 30,000 x 3% x 0.749
 = \$674.10

* assume 3%

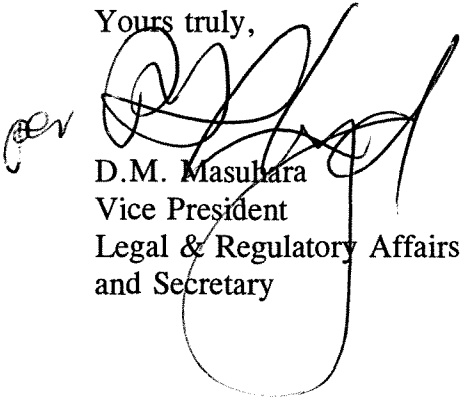
WEI Commodity = delivered quantity x WEI Tolls
Tolls = 30,000 x 0.007
 = \$210

Total payments = demand charges + commodity charges +
 fuel gas + commodity tolls
 = 22,410 + 22,470 + 674.10 + 210
 = \$45,764.10 (excluding GST)

This filing is made pursuant to section 5.2 of the Decision and is designed to provide a reasonable forecast of BC Gas' average reference price for the 1995/96 contract year beginning November 1, 1995. Individual monthly reference prices will be filed during the year on or before the 10th day of the month following the month of deliveries.

Any questions related to this filing should be directed to Mr. Hank Petranik, Manager-Gas Purchasing at (604) 443-6975.

Yours truly,



D.M. Masuhara
Vice President
Legal & Regulatory Affairs
and Secretary