

**IN THE MATTER OF the  
“Utilities Commission Act”  
S.B.C. 1980, Chapter 60**

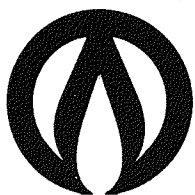
**and**

**IN THE MATTER OF an  
Application by BC Gas Utility Ltd.  
To Amend its Schedule of Rates**

**1996 Rate Design**

**Volume 1**

**Application**



**BC Gas**

**JUNE 1996**

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



BRITISH COLUMBIA  
UTILITIES COMMISSION

ORDER  
NUMBER G-98-96

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

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

An Application by BC Gas Utility Ltd.  
for Approval of its 1996 Rate Design Proposals

**BEFORE:** M.K. Jaccard, Chairperson; )  
L.R. Barr, Deputy Chairperson; and ) October 7, 1996  
F.C. Leighton, Commissioner )

**O R D E R**

**WHEREAS:**

- A. On June 7, 1996 BC Gas Utility Ltd. ("BC Gas") filed with the Commission a rate design application to amend the rates of customers in the Lower Mainland, Inland and Columbia Divisions, except those with negotiated rates, commencing January 1, 1997 ("the Application"); and
- B. After a pre-hearing conference on June 27, 1996, the Commission issued Order No. G-71-96 which included a timetable for the public review of the Application and a Notice of Public Hearing. The hearing was subsequently rescheduled to commence on September 30, 1996; and
- C. Information requests, educational workshops and settlement negotiations on the terms of gas service were completed prior to a second pre-hearing conference held September 4, 1996. The parties then proceeded with negotiations towards a second settlement package; and
- D. A proposed settlement package regarding the terms of gas service was circulated to all Registered Intervenor prior to being considered by the Commission at the public hearing held on September 30, 1996, after which the hearing was adjourned to allow for further negotiation; and
- E. A second proposed settlement package, which essentially addressed the balance of the Application, was circulated to all Registered Intervenor prior to being considered by the Commission at the public hearing which reconvened on October 7, 1996.

BRITISH COLUMBIA  
UTILITIES COMMISSION

ORDER  
NUMBER G-98-96

2

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

1. The two settlement packages are approved as discussed in the Reasons for Decision attached as Appendix A to this Order.
2. BC Gas is directed to file in a timely fashion amendments to its Gas Tariff in accordance with the approved settlement packages.
3. BC Gas is to provide customers with a brief summary of the settlement packages approved by this Order.
4. The matter of the Company's proposal for a Service Line Cost Allowance is set down for a separate public hearing to commence October 7, 1996 at 1:30 p.m. in the Commission's Hearing Room.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 17th day of October, 1996.

BY ORDER

*Original signed by:*

Dr. Mark K. Jaccard  
Chairperson

Attachment

**BC Gas Utility Ltd.  
1996 Rate Design Application**

**REASONS FOR DECISION**

**Background**

BC Gas filed its 1996 Rate Design Application on June 7, 1996 ("the Application"). After a pre-hearing conference on June 27, 1996, the Commission issued Order No. G-71-96 which established a schedule for workshops, information requests and ADR sessions. Following the workshops, a number of registered intervenors entered into a first round of negotiations with BC Gas and Commission Staff with respect to the terms of gas service contained in the Application. These negotiations were successfully concluded prior to the public hearing. After the receipt of information requests pertaining to the Application, a second pre-hearing conference was held on September 4, 1996 where it was agreed that the parties would also attempt to resolve all other Application issues through a second round of negotiations. This second round of negotiations was unsuccessful prior to the public hearing to examine the Application which commenced on September 30, 1996.

At the hearing, the parties to the first round of negotiations sought Commission approval of a settlement of the matters relating to the terms of gas service ("the first settlement package"). However, the Canadian Independent Gas Marketers Association ("CIGMA") dissented with respect to certain changes proposed to Rate Schedule 14. The reasons for CIGMA's dissent were outlined in its evidence dated September 19, 1996 and filed at the hearing as Exhibit 10B. CIGMA also dissented from the general support provided for the utility's amended 1996/97 pricing proposal for interruptible gas sales under Rate Schedules 7 and 10 ("the 7/10 pricing proposal") which had been referred to this hearing for resolution (Exhibits 4 and 4A). No evidence was submitted by CIGMA on this latter issue and CIGMA chose not to appear at the hearing. However, Commission Counsel addressed the Commission Panel to ensure that it was aware of the dissent on both issues (T. 14-15). The first settlement package had also been circulated to all registered intervenors prior to the hearing and no comments were received as a result.

After the completion of submissions, the Commission retired to consider the matters and returned with a decision to approve both the first settlement package and the 7/10 pricing proposal. At this stage of the proceedings, those parties present requested that the Commission adjourn the proceedings so that they



could resume the second round of negotiations regarding the balance of the Application. The parties advised the Commission that informal discussions had indicated a likelihood of success if formal negotiations were to be resumed. On this understanding, the public hearing was adjourned for one week until October 7, 1996

The resumed negotiations were successful, so that on October 7, 1996 the hearing focused on a second settlement package which included almost all of the other unresolved matters in the Application. At the hearing, BC Gas also requested that the Commission approve two additional items not explicitly identified in either settlement package. The first was a deferral account to cover any variation in revenue forecast due to customers electing to change rate schedules under the negotiated proposals. The second request was for the recovery of hearing costs. All parties present spoke in support of both the second settlement package and the two additional requests. The second settlement package had also been circulated to all registered intervenors prior to the hearing and no comments were received as a result.

The Commission retired to consider its decision and returned to advise that it approved the second settlement package and the two additional BC Gas requests. The matter of a "Service Line Cost Allowance" which had been included in the Application was not addressed by either settlement package because of linkages to other matters under consideration by the Commission. Consistent with the wishes of the parties present, it was decided that this matter would be heard in a separate hearing commencing at 1:30 p.m. later that same day.

## **Reasons for Decision**

### The First Settlement Package - Terms of Gas Service

This settlement package covers the proposed changes to the utility's General Terms and Conditions for gas service as well as its revised industrial tariffs and was filed as Exhibit 10 at the hearing. The Commission has approved this package based on the support shown by intervenors representing a broad range of interests including gas marketers not represented by CIGMA. The following discussion addresses CIGMA's single dissenting view with respect to the particular matter of Rate Schedule 14.

The Commission has reviewed CIGMA's evidence with respect to Schedule 14, filed prior to the commencement of the hearing, and notes that with the exception of the covering letter dated September 19, 1996, the evidence consists of correspondence from CIGMA which had been previously

filed with the Commission. The essence of the covering letter was that in CIGMA's view the BC Gas proposal for Rate Schedule 14 would result in anti-competitive behaviour on the part of the utility and discrimination towards consumers.

The utility stated that its proposals under Rate Schedule 14 were intended to offer consumers additional choices and that competitive market choices were in no way precluded by any of the terms of the schedule (T. 17-18). The utility also suggested that it had a direct incentive to encourage its industrial customers to buy gas from competing suppliers so that it could sell corresponding volumes of its own gas in the off-system market and thus realize a shareholder incentive approved for its off-system sales program. The utility suggested that this incentive would tend to have the opposite effect from that suggested by CIGMA (T. 19).

The Commission does not believe that the proposed revisions to Schedule 14 are likely to result in anti-competitive behaviour by BC Gas. Furthermore, since all prices negotiated will be subject to prior Commission approval, the Commission is not persuaded that the proposed changes to Rate Schedule 14 will result in prices which are in any way discriminatory towards consumers.

#### Schedules 7 and 10 Pricing Proposals

Schedules 7 and 10 are interruptible sales rate schedules which offer market-based prices for small and large industrial customers respectively. The rates are adjusted annually to reflect market conditions. BC Gas filed its application for approval of pricing during the 1996/97 gas year on August 27, 1996 (Exhibit 4). At the hearing, the Utility filed an amended pricing proposal which represented a general consensus of the views of participants during negotiations (Exhibit 4A).

Again, the Commission recognizes the support for the 7/10 pricing proposals shown by intervenors representing a broad range of interests including gas marketers not represented by CIGMA. In light of this support and for the reasons stated below, which address CIGMA's dissent, the Commission has approved the amended BC Gas 7/10 pricing proposals shown in Exhibit 4A.

No evidence has been provided to explain the reasons for CIGMA's objections to a 3% winter discount from market index for Schedule 10. From the Commission's perspective, Schedule 10 pricing should be set at a level that recognizes market clearing prices and thereby optimizes the revenues returned to core market customers. While the proposed discount has been reduced from 5% to 3%, and this could result in

some loss of sales volumes, the Commission is not persuaded that such a loss would be sufficient to reduce revenues overall. On the other hand, the Commission believes that without a sufficient incentive, customers might be tempted to experiment with other market options and that Schedule 10 revenues might be significantly reduced. Generally, the Commission intends to adopt a conservative approach by approving gradually lower discounts for BC Gas interruptible sales year by year until there is evidence of total revenues from these sales being eroded.

No parties opposed the removal of the fixed price option under Schedule 10 and the Commission therefore approves that change. However, the Commission is prepared to consider future arguments from consumers to re-establish a fixed price option should market prices swing more than some consumers are able to accommodate because of budget or other concerns. It should be recognized that in establishing such value-based fixed prices, there will be a tendency to err on the high side so that the convenience of such options may typically be attained only at a higher cost.

#### The Second Settlement Package - Rate Shifts

The second settlement package addressed the company's proposals for rate shifts which would collect more of its costs from residential customers and less from industrial customers based on updated cost studies contained in the Application. After studying the negotiated settlement, the Commission is satisfied that it represents a fair proposal for all customer classes and has therefore approved this second settlement package.

The results of this second settlement package received unanimous support from those parties actively participating in the hearing process who represented a broad range of interests including those of residential customers. However, following the publication of the hearing notice by the utility (Exhibit 9), the Commission did receive numerous letters of concern about the rate changes proposed in the Application, primarily from residential customers (Exhibit 7).

Many of these residential customers objected to the large increase in the monthly basic charge. Some, who used very little gas, were simply concerned (correctly) that their unit costs would rise as a result. However, many other residential customers who wrote to the Commission apparently did not understand that the increase in the basic charge was offset by a reduction in the consumption charge with the effect that there would be no effect on the bill of an average volume residential customer solely from the change to the basic charge. This misunderstanding was clearly the case in a letter where a residential customer had

calculated a 74% increase in his costs, rather than the 2.9% overall increase for the residential class proposed in the Application.

The Commission is satisfied that the majority of the customer concerns expressed in Exhibit 7 have been addressed by this settlement package. The basic charge for residential customers will now increase from the current \$6.32 to \$7 compared with the \$11 over three years proposed in the Application. More significantly, the rate shift to the residential class has been reduced from the \$11.2 million proposed in the Application to \$5.66 million, so that the overall increase now approved for the residential class is reduced from 2.9% to about 1.5%. At the other end of the customer spectrum, large industrial customers will save in excess of \$3 million per year under the settlement. Overall, the Commission is satisfied that the settlement treats all customers fairly and is consistent with the Commission's long-term objective of more closely aligning customer rates with the customer-induced costs in each of the rate classes.

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



BRITISH COLUMBIA UTILITIES COMMISSION	
ORDER NUMBER	G-102-96

TELEPHONE: (604) 660-4700  
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IN THE MATTER OF  
the Utilities Commission Act, S.B.C. 1980, c. 60, as amended

and

An Application by Squamish Gas Co. Ltd.  
Review of Utility Operations for Fiscal Periods August 6, 1991 to December 31, 1995

**BEFORE:** M.K. Jaccard, Chairperson; and )  
L.R. Barr, Deputy Chairperson ) October 10, 1996

**O R D E R**

**WHEREAS:**

- A. The Commission, by Order No. G-56-96, directed Squamish Gas Co. Ltd. ("Squamish Gas") to file an application by August 31, 1996 covering utility operations for the fiscal periods August 6, 1991 to December 31, 1995 as required by the Ministry of Employment and Investment in its letter dated May 31, 1996; and
- B. On August 30, 1996 Squamish Gas filed its Application and, by Order No. G-88-96 the Commission ordered that a pre-hearing conference be held on October 9, 1996; and
- C. As a result of information provided by the participants at the pre-hearing conference, the Commission finds that a Pre-Hearing Workshop in Squamish would provide customers with information about the Application and clarification of the issues.

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

1. A Pre-Hearing Workshop into the Squamish Gas Application will be held at 7:00 p.m. on October 24, 1996 at the Sea to Sky Hotel, 40330 Tantalus Way, Garibaldi Highlands, Squamish, B.C., as indicated in the Notice attached as Appendix A to this Order.
2. Squamish Gas is directed to attend the Pre-Hearing Workshop with informed company representatives to answer questions from customers in attendance.
3. Squamish Gas will arrange for publication of the attached Notice of Pre-Hearing Workshop in two consecutive issues of the local newspaper the Squamish Chief in advance of the October 24, 1996 Workshop. The newspaper advertisements are to be supplemented by the use of spot radio ads and community service announcements so as to provide adequate public notice to customers in the Squamish service area.

**DATED** at the City of Vancouver, in the Province of British Columbia, this 11th day of October, 1996.

BY ORDER

*Original signed by:*

Dr. Mark K. Jaccard  
Chairperson

Attachment



SIXTH FLOOR, 900 HOWE STREET, BOX 250  
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CANADA

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**SQUAMISH GAS CO. LTD.  
NOTICE OF PRE-HEARING WORKSHOP**

**Date:** Thursday, October 24, 1996  
**Time:** 7:00 p.m.  
**Location:** Sea to Sky Hotel  
40330 Tantalus Way, Garibaldi Highlands  
Squamish, B.C.

**INVITATION:**

The Public is invited to a B.C. Utilities Commission sponsored workshop at the time, location and date specified above regarding Natural gas Distribution Service by Squamish Gas.

**PURPOSE:**

Natural gas has been distributed to the Squamish area since 1991. The price of natural gas service to Squamish Gas customers has been set as a discount to heating fuel prices. The Province of British Columbia, through a Rate Stabilization Fund, has covered any revenue deficiencies of Squamish Gas in providing natural gas service, as well, any revenue surpluses experienced by Squamish Gas are remitted back to the Province of British Columbia. A condition of the Rate Stabilization Fund is a periodic review by the Commission at the costs of Squamish Gas.

Specifically, the Commission is conducting a review for the period August, 1991 through December, 1995. The workshop is intended to provide information regarding Squamish Gas costs during the subject period, the setting of natural gas prices in Squamish, other issues regarding natural gas service in Squamish, and any issues related to the provision of bottled propane service by Squamish Gas.

**INFORMATION:**

Documents related to this matter are available for review at: the Squamish Gas office at 38152 - 2nd Avenue, the Squamish Public Library at 37955 - 2nd Avenue, or the B.C. Utilities Commission office at 6th Floor - 900 Howe Street, Vancouver, B.C.

Any further information can be obtained by contacting Squamish Gas, Mr. Peter Martin, Squamish Gas Area Manager, at (604) 892-5455, Mr. J.O. Wessler at (604) 443-6626 or the B.C. Utilities Commission, Mr. Robert J. Pellatt by telephone at (604) 660-4700 or B.C. Toll-Free 1-800-663-1385.

BY ORDER

*Original signed by:*

Robert J. Pellatt  
Commission Secretary

# 1996 RATE DESIGN APPLICATION

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## **GLOSSARY OF TERMS**

### **Alberta Natural Gas (ANG)**

Alberta Natural Gas Company Ltd. The operator of a natural gas transmission line which runs from Alberta to the U.S.A. across the south east corner of British Columbia. Gas moving to the Columbia service area flows through the ANG pipeline. The East Kootenay Link running from Trail connects to the ANG pipeline at Yahk.

### **Average and Excess (A&E)**

A method of distributing utility capacity related costs whereby the costs are allocated to classes partially based on peak day consumption, and partially based on individual class total annual energy consumption.

### **Basic Charge**

A fixed monthly fee charged regardless of the quantity of gas consumed by the customer. May also be half the bimonthly fee charged customers billed bimonthly.

### **BCUC**

British Columbia Utilities Commission.

### **Burrard Thermal**

B.C. Hydro Burrard Thermal electric generating plant located on Burrard Inlet at Ioco.

### **Burnertip**

A term used to refer to the price or other characteristic of natural gas delivered to the premises or facilities of a customer. A "burnertip" price includes all costs to the customer.

### **Bypass**

See "non-captive".

### **Captive**

A term used to describe customers situated far enough from a pipeline that bypassing the distribution system would result in a rate higher than the applicable utility rate. It is also used to describe certain customers whose rates are final and do not change with changes in the utility's revenue requirements.



**Coincident Peak (CP)**

A method of allocating utility capacity related costs whereby costs are allocated according to the demand imposed on the system by various classes of customers during the system's peak day.

**Columbia (CNG)**

The portion of the BC Gas service area which formerly was Columbia Natural Gas Limited. It is located in the East Kootenays and serves customers with gas from the ANG pipeline.

**Commercial**

Customer group of BC Gas which includes businesses, institutions and large multifamily buildings.

**Commission**

British Columbia Utilities Commission.

**Cost of Gas Recovery**

The portion of the price paid by the customer to compensate BC Gas for its costs of acquiring gas supply.

**Cost of Service Margin**

From the Fully Distributed Cost study, the cost of service associated with a particular rate class less the associated cost of gas supply.

**Delivery Charge**

A unit rate for gas service, excluding the cost of gas component. This charge is collected on a volume basis.

**Demand Charge**

A fixed monthly amount charged under a rate schedule or a gas supply or service contract. The charge is effectively a reservation fee and is paid regardless of whether or not any gas flows in that month.

**Direct Purchase**

**Administration Charge**

A charge designed to recover the incremental costs associated with providing transportation service.

**East Kootenay Link**

A gas transmission pipeline running between Trail and Yahk. It connects the Inland service area with the ANG pipeline.

<b>Firm</b>	Service provided year round without curtailment.
<b>Fort Nelson (FN)</b>	The portion of the BC Gas service area which formerly was Fort Nelson Gas Ltd. It comprises the Fort Nelson and Prophet River areas of northern B.C.
<b>Fully Distributed Cost (FDC)</b>	The distribution of all gas utility costs to classes of customer.
<b>Gigajoule (GJ)</b>	A metric measure of energy. A billion joules.
<b>Inland (ING)</b>	The portion of the BC Gas service area which formerly was Inland Natural Gas Co. Ltd. It is located throughout much of the interior of the Province and serves customers with gas primarily taken from the Westcoast pipeline system.
<b>Integrated Resource Plan (IRP)</b>	The process of integrating supply side and demand-side options to create a resource mix that reliably satisfies customers short-term and long-term energy service needs at the lowest cost.
<b>Interruptible</b>	Service provided with customer curtailment due to supply or system capacity limitations.
<b>Joule</b>	A metric measure of energy equal to the amount of work done when the point of application of a force of one newton is displaced a distance of one metre in the direction of the force.
<b>Load Factor</b>	Average Day Volume divided by winter period Peak Day Volumes, expressed as a percentage.
<b>Long Run Incremental Costs</b>	The estimated cost of adding an (LRIC) additional customer today calculated recognizing the impact of future costs.
<b>LNG</b>	Liquified natural gas.

<b>Lower Mainland (LM)</b>	The portion of the BC Gas' service area which formerly was the Lower Mainland Gas Division of B.C. Hydro. It is located in the Lower Mainland and Fraser Valley and serves customers with gas primarily taken from the Westcoast pipeline system.
<b>Margin</b>	Charge for utility services calculated as the burner-tip rate less the gas cost recovery.
<b>Minimum Charge</b>	The minimum charge to be paid per month usually linked to a specified quantity of gas consumed by the customer.
<b>Megajoule (MJ)</b>	A metric measure of energy. A million joules.
<b>National Energy Board (NEB)</b>	The federal energy regulatory body whose responsibilities include the regulation of inter-provincial and international pipelines and the export of natural gas.
<b>Non-coincident Peak (NCP)</b>	A method of allocating utility capacity related costs whereby the maximum rates of consumption for all classes are added together irrespective of the time of occurrence to find the aggregate non-coincident demand.
<b>Non-captive</b>	Customers close enough to a pipeline that bypassing the distribution system would result in a rate lower than the applicable utility rate.
<b>O &amp; M</b>	Operating & Maintenance expenses of the utility.
<b>Phase A</b>	A BC Gas rate design application and hearing dealing with methodology to allocate the gas supply costs for Inland and Lower Mainland. It resulted in the Phase A Decision of February 21, 1992 in which the Lower Mainland and Inland Division gas supply cost allocation methodology and class gas cost recovery were approved.

<b>Phase B</b>	A BC Gas rate design application and hearing filed in 1993 which dealt with the allocation of costs between rate classes as well as intra-rate design changes.
<b>Pacific Coast Energy Corporation (PCEC)</b>	A pipeline company with its starting point at the BC Gas station near Ioco and its terminus in Victoria. The company transports gas for distribution to the Sunshine Coast, Texada Island, Powell River and parts of Vancouver Island.
<b>Petajoule (PJ)</b>	A metric measure of energy. $10^{15}$ joules.
<b>Residential</b>	Class of customers including single family residences and multi-family buildings with less than 4 units.
<b>Seasonal Rate</b>	A rate which varies on a seasonal basis. Typically, the application of higher rates during the winter months of November through March reflecting the greater demand for system capacity.
<b>Transportation service (T-service)</b>	A gas delivery service provided by a pipeline or local distribution utility to customers who purchase natural gas from producers or marketers.
<b>Terajoule (TJ)</b>	A metric measure of heat. A thousand gigajoules.
<b>Valley</b>	Pipeline and distribution system capacity available during off peak periods.
<b>Westcoast (WEI)</b>	Westcoast Energy Inc. The operator of natural gas gathering, processing and transmission pipeline facilities located primarily in the Fort Nelson and Fort St. John areas of the province. The transmission facilities are from those areas, and from Alberta, to the international boundary at Huntingdon in the Lower Mainland. The BC Gas facilities

interconnect with the Westcoast facilities at many locations, with major interconnections at Savona and Huntingdon.

IN THE MATTER OF the Utilities  
Commission Act SBC 1980, Chapter 60  
and amendments thereto

and

IN THE MATTER OF an Application by BC Gas Utility Ltd.  
to implement certain rate design changes

To: British Columbia Utilities Commission  
Sixth Floor, 900 Howe Street  
Vancouver, British Columbia  
V6Z 2N3

## APPLICATION

BC Gas Utility Ltd. ("BC Gas") hereby applies for approval of the various proposals set out in this Application and in the two volumes to which this Application pertains. These matters include:

## RESIDENTIAL AND COMMERCIAL TARIFFS

1. An Order approving the proposed rates as set out in Volume 1, Tab 4.

## INDUSTRIAL TARIFFS

2. An Order approving proposed amendments to the industrial tariffs and service agreements as set out in Volume 1, Tab 5.
3. An Order approving the termination of industrial Rate Schedules 8 and 13 as discussed in Volume 1, Tab 5.

1       **GENERAL TERMS AND CONDITIONS**

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- 3       4.    An Order approving amendments to the General Terms and
- 4           Conditions found at Volume 1, Tab 3B.

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7       **SERVICE LINE COST ALLOWANCE**

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- 9       5.    An Order approving the proposed Service Line Cost
- 10       Allowance set out in Volume 1, Tab 4.

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12       **DEFERRAL ACCOUNTS**

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- 14       6.    An Order approving the elimination of Rider 4 and an
- 15       Order directing the disposition of the Non-Core Margin
- 16       Increase deferral account as discussed in the Written
- 17       Evidence of David Masuhara in Volume 1 under Tab 8.

- 18
- 19       7.    An Order approving the establishment of a deferral
- 20       account to address the possibility of revenue losses due
- 21       to customers shifting between rate classes as a result of
- 22       the implementation of the rate design proposals set out
- 23       in this Application.

- 24
- 25       8.    An Order approving recovery of BC Gas, Commission and
- 26       Participant hearing costs and other costs the Commission
- 27       deems appropriate related to the Application.

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30       **RATE DESIGN IMPLEMENTATION**

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- 32       9.    The Company seeks an effective date for the industrial
- 33       terms and conditions of November 1, 1996 and an effective
- 34       date of January 1, 1997 for all other proposed rates and
- 35       tariffs.

1       **PUBLIC PROCESS**  
2

3       10. The Company seeks approval to adopt a public process to  
4       facilitate an understanding of the proposals, to receive  
5       comments, and to develop a specific list of issues and  
6       concerns to be more fully addressed in the public  
7       hearing.  
8  
9

10       In support of this Application, BC Gas has filed material in  
11       Volumes 1 and 2 demonstrating that the proposals contained  
12       herein are just and reasonable, and not unduly discriminatory,  
13       or unduly preferential.  
14

15       All of which is respectfully submitted.  
16

17       Dated at Vancouver, British Columbia, this 5th day of June,  
18       1996.  
19

20       BC GAS UTILITY LTD.

21       Per:

22         
23       \_\_\_\_\_  
24       David M. Masuhara  
25  
26  
27  
28  
29  
30

31       All notices and communications with regard to this Application  
32       should be sent to:  
33

34               BC Gas Utility Ltd.  
35               Attention: D.M. Masuhara  
36               1111 West Georgia Street  
37               Vancouver, B.C.  
38               V6E 4M4  
39               Phone:               (604) 443-6607  
40               FAX:               (604) 443-6904



## APPLICATION OUTLINE

### 1.0 DESCRIPTION AND HISTORY OF BC GAS UTILITY LTD.

BC Gas Utility Ltd. ("BC Gas" or "the Company") is the largest distributor of natural gas in British Columbia. BC Gas distributes natural gas to more than 700,000 residential, commercial and industrial customers. The areas of the province served by the Company include the Greater Vancouver and Fraser Valley regions and much of the interior of the Province including the East and West Kootenay's, the Okanagan and Cariboo regions. A BC Gas system map is included under Tab 3A.

BC Gas Utility Ltd. was formed on July 1, 1989 by the amalgamation of Inland Natural Gas Co. Ltd., B.C. Gas Inc., Columbia Natural Gas Limited and Fort Nelson Gas Ltd. The amalgamated entity was then called "BC Gas Inc." Prior to that date, the companies each distributed natural gas within the province.

On July 1, 1993, the businesses regulated by the British Columbia Utilities Commission (the "BCUC" or the "Commission") were separated from the other businesses of the BC Gas group of companies. The name of the regulated entity was changed to "BC Gas Utility Ltd.". BC Gas Utility Ltd. operates the natural gas distribution business and its parent, BC Gas Inc., owns BC Gas Utility Ltd. as well as investments and businesses not regulated by the BCUC.

#### Applications Filed With the BCUC

In November 1991, the first Revenue Requirement Application of the amalgamated BC Gas was filed with the BCUC. This was followed in December 1991 with a filing of the Company's Rate Design Phase A Application dealing with the allocation of gas

1 costs to rate classes. The Phase A Application was approved  
2 by the Commission in its February 1992 Decision. In August  
3 1992 the BCUC rendered its Decision on the November 1991  
4 Revenue Requirement Application.

5  
6 BC Gas filed its Rate Design Phase B Application in April  
7 1993. Fort Nelson was not included as part of the Phase B  
8 proceeding. The Phase B Application dealt with the allocation  
9 of costs, other than gas supply costs, between rate classes.  
10 The Commission approved much of the application in its  
11 Decision of October 1993. The Phase B Application also  
12 addressed a number of rate design issues that resulted in the  
13 establishment of a revised and common set of rates and General  
14 Terms and Conditions to be applied across the BC Gas service  
15 area (other than Fort Nelson). BC Gas removed the declining  
16 rate structure in its core market delivery margins and  
17 received approval for increases to the core market basic  
18 charges. The Commission also ordered BC Gas to introduce a  
19 seasonal differential into its residential and commercial  
20 margins. The Commission supported the proposal of BC Gas to  
21 price interruptible service at a discount from firm service  
22 based on the value of service. The revised rates industrial  
23 rates came into effect on November 1, 1993 and the new  
24 residential and commercial rates came into effect on January  
25 1, 1994.

26  
27 In November 1993, BC Gas filed a Revenue Requirement  
28 Application for 1994 and 1995. Subsequent to the filing, the  
29 Commission ordered a public hearing to consider the  
30 appropriate return on common equity and capital structure for  
31 BC Gas, Pacific Northern Gas Ltd. and West Kootenay Power Ltd.  
32 The Commission issued its Decision on June 10, 1994, which  
33 also addressed adjustment mechanisms to be used for the  
34 determination of the return on common equity and capital  
35 structure in future years.

1 BC Gas filed a Revenue Requirement Application for 1996, 1997,  
2 and 1998 on July 4, 1995. With the support of the Commission,  
3 BC Gas entered into a negotiated settlement process similar to  
4 the alternative dispute resolution (ADR) process for the 1994  
5 and 1995 test years. On November 14, 1995, the Commission  
6 held a public hearing where the impact of the October 27, 1995  
7 tentative negotiated settlement reached among the participants  
8 of the ADR process was explored and approved in its entirety.  
9

10 In December 1995, the Commission approved January 1, 1996 rate  
11 changes resulting from the previously approved 1996 test year  
12 decision, the 1996 return on equity pursuant to the authorized  
13 adjustment mechanism and 1996 gas cost changes flowed through  
14 on the basis of the Phase A Rate Design methodology. For  
15 1996, residential customers are experiencing a rate reduction  
16 of approximately 8% as a result of offsetting the 1996 margin  
17 increase with credits accumulated in the Gas Cost  
18 Reconciliation Account (GCRA) and with lower 1996 gas supply  
19 costs. As agreed upon in the ADR settlement, 50% of the 1996  
20 non-core margin increase, amounting to approximately \$775,000,  
21 applicable to Rate Schedule 7, 8, 22, 22A, 22B, 25 and 27  
22 captive customers is being deferred.  
23

## 24 2.0 RATE DESIGN OBJECTIVES

25

26 Consistent with the Company's commitment under the 1996/1997  
27 Revenue Requirement Settlement, BC Gas has undertaken a review  
28 of the appropriate level and structure of each class of rates  
29 related to the utility's margins.  
30

31 In developing the rate proposals in this application, BC Gas  
32 had regard to generally accepted rate design principles,  
33 including those outlined below.

1. Fairness - Under the proposed rates similar customers pay the same margins for utility services and the rate proposals better align rates with the "user-pay" philosophy.
2. Economic Efficiency - The rate design proposal better aligns the rates with fully distributed and long run incremental costs for each class. The proposal recognizes the rate classes which use the system more efficiently and considers the price of competing energy sources.
3. Stability - The BC Gas proposal achieves greater stability in annual bills and revenues through a better alignment of rates and costs. The proposal maintains the same general rate classes as were established in Phase B.
4. Customer Impact - Where rate proposals could significantly increase customers' bills, consideration has been given to a phase-in of the rate proposals.
5. Ease of Understandability and Administration - The proposals set out in this application maintain the same rate structures and classifications as were established in the Phase B Decision. In addition, steps have been taken to clarify and simplify the existing menu of industrial tariffs and terms and conditions.
6. Recovering the Revenue Requirement - The proposed rates are established to provide sufficient revenues to recover costs.

1     **3.0   STUDIES**

2  
3     In considering the appropriate rate design for BC Gas, the  
4     following studies were undertaken to assist in determining an  
5     appropriate rate level and structure for customer classes.  
6

7     1. Detailed revenue models which illustrate the impact of  
8       proposed rates on utility revenues. Summary tables are  
9       provided in Volume 1, Tab 3C.

10  
11    2. A fully distributed cost of service ("FDC") study filed in  
12       Volume 2, Tab 2;

13  
14    3. A long-run incremental cost study filed in Volume 2, Tab  
15       1;

16  
17    4. A study of the price of competitive energy filed in Volume  
18       2, Tab 3;

19  
20    5. A survey of gas rates charged in other jurisdictions in  
21       Canada and the U.S. Northwest, filed Volume 2, Tab 4.

22  
23    Each of these studies have been used as a tool to assist in  
24    the determination of an appropriate level and structure of  
25    each class of rates for BC Gas.

26  
27    BC Gas worked closely with Barakat & Chamberlin Inc., a  
28    consulting firm with expertise in FDC and LRIC analysis and  
29    rate design, in developing the above studies and the rate  
30    proposals they support. Barakat & Chamberlin's report is  
31    included in this application in Volume 1, Tab 7.

1     **4.0   RATE DESIGN PROPOSALS**

2  
3     **4.1   COST STUDIES**

4  
5     The review of BC Gas' rates was conducted using the  
6     conventional approaches of analyzing rates through fully  
7     distributed cost of service studies ("FDC"), long run  
8     incremental cost studies ("LRIC"), price of competitive energy  
9     studies, and utility revenue model analyses. The purpose of  
10    the rate design review is to help determine if cost burdens  
11    are properly borne by each class, if rates reflect the proper  
12    economic signals, if rates will provide stability both for the  
13    customer and for the utility, if the rates promote simplicity  
14    and administrative ease and allow for the recovery of the  
15    revenue requirement.

16  
17    Similar to Phase B, FDC studies were conducted utilizing  
18    coincident peak, non-coincident peak and average and excess  
19    demand methodologies. These studies indicate that there is an  
20    under-recovery of costs from the residential class. While  
21    embedded cost studies are not a sufficient basis to serve as  
22    the sole or exclusive element for the determination of rates,  
23    they are an important consideration. In particular, any  
24    significant departure in the setting of firm rates to  
25    customers from the costs to serve them may serve to create the  
26    appearance of unfairness or inequity. Accordingly, to  
27    overcome unfairness or inequity, the rates proposed have  
28    sought to bring a closer relationship between revenues to  
29    costs.

30  
31    All of the FDC studies indicate that under present rates, Rate  
32    5/25 revenue to cost ratios are well in excess of the  
33    generally accepted range of reasonableness of 90% to 110%.  
34    For example, the coincident peak method indicates that the  
35    revenue to cost ratio is 186% for the Rate 5/25 class. This

1 is due, in part, to an updating of the load factors for the  
2 various rate classes. General Firm Industrial load factors  
3 were previously estimated at 45%. BC Gas' recent review  
4 indicates that a 65% load factor is more appropriate for cost  
5 allocation purposes. The load factors for all other rate  
6 classes remain unchanged. The residential customer class  
7 revenue to cost ratios are the lowest relative to all other  
8 rate classes under all of the cost allocation methods. Under  
9 the coincident peak approach, the revenue to cost ratio for  
10 residential customers is approximately 87% whereas the revenue  
11 to cost ratios for all other firm rate classes aside from Rate  
12 5/25 are within or reasonably close to the 90% to 110% range.

13  
14 As a result, a reduction in cost recovery from Rate 5/25  
15 should be made up by increases to the residential rates.  
16 Because interruptible delivery margins are based on a discount  
17 from the general firm industrial service delivery margins, a  
18 reduction to Rate 5/25 cost recovery implies further rate  
19 reductions for the interruptible rates and therefore a larger  
20 reallocation to the residential customer class. However, as  
21 revenue responsibility is reallocated more towards the  
22 residential customer class, the Rate 1 revenue cost ratio  
23 moves upwards to eventually fall within the 90% to 110% target  
24 range. At that point, it becomes increasingly difficult to  
25 justify further realignment of revenue responsibility to this  
26 customer class based on revenue to cost ratios.

#### 27 28 **4.2 REVENUE REALIGNMENT**

29  
30 BC Gas followed an iterative approach in developing the  
31 proposed revenue realignment. A number of scenarios were  
32 examined that evaluated various reductions to the Rate 5/25  
33 delivery margins, proportionate discounts associated with the  
34 interruptible delivery margins and commensurate increases to  
35 the residential customer class. The final decision as to what

1 amount of revenue realignment was appropriate was based on a  
2 balancing of a number of factors including the level of the  
3 various resultant revenue to cost ratios relative to the 90%  
4 to 110% range, the customer bill impacts associated with the  
5 rate reductions and offsetting rate increases, the customer  
6 acceptability associated with the magnitude of the proposed  
7 revenue realignment, and the consistency of these rate  
8 proposals with the general rate design principles outlined  
9 above.

10  
11 After weighing these competing factors, BC Gas decided that a  
12 reduction of \$4.2 million in cost recovery from the Rate 5/25  
13 would be the most appropriate choice of the many different  
14 options for correcting the over-recovery of costs from these  
15 rate classes. This reduction brings the Rate 5/25 revenue to  
16 cost ratios under the coincident peak method in line with the  
17 estimated revenue to cost ratios for the Rate 3 customers at  
18 117%. While outside of the target range of 90% to 110%, this  
19 level of margin reallocation represents an appropriate  
20 compromise between the various competing factors described  
21 earlier.

22  
23 Once the residential rates are increased by the \$4.2 million  
24 Rate 5/25 rate reduction (plus associated interruptible rate  
25 reductions discussed below) the resulting residential revenue  
26 to cost ratio increases to 92% - within the 90% to 100% target  
27 range. The total proposed \$11.2 million revenue realignment  
28 represents a 5.4% increase in margin or a 2.9% increase in the  
29 burner-tip price of gas to the residential customer class (see  
30 Tab 3C, Table 1.2 for revenue impact calculations).

31  
32 The proposed reduction of \$4.2 million to the Rate 5/25 class  
33 represents a 37% reduction in their margins. Table 1.1 found  
34 under Tab 3C provides margin impact calculations. BC Gas  
35 anticipates that with these significant rate reductions, a



1 large number of customers could be expected to seek to  
2 transfer from the Rate 3 Large Commercial service to Rate  
3 5/25. This would result in a deterioration of both the Rate  
4 3 and Rate 5/25 load factors used to establish the rates and  
5 therefore a higher allocation of costs to both rate classes.  
6 The resultant revenue to cost ratios under proposed rates for  
7 both rate classes would fall from the 117% level. BC Gas is  
8 of the view that further reductions from those proposed in  
9 this application to the Rate 5/25 rates are not justified  
10 since the revenue to cost ratios may decrease as a result of  
11 customer migration at this time. Further reductions would  
12 only create the potential for significant lost revenues and  
13 the need for future rate increases.

14  
15 While it is difficult to accurately forecast which customers  
16 would be likely to transfer from Rate 3 to Rate 5/25 and what  
17 their individual load factors would be, the potential number  
18 of candidates is larger than the current size of the Rate 5/25  
19 customer class. Given the potential destabilizing effects of  
20 further reductions to this customer class, BC Gas advocates  
21 that a cautious approach be taken and that the class load  
22 factors be monitored and re-evaluated in the future to  
23 determine if further adjustments beyond those recommended in  
24 this application are warranted.

25  
26 Reductions to Rate 7/27 and Rate 22 associated with the \$4.2  
27 million margin reduction for Rate 5/25 amount to reductions of  
28 \$2.6 million and \$4.3 million respectively. These reductions  
29 are broken down by rate class in Table 1.1 of Tab 3C. The  
30 proposed small and large interruptible rates reflect the  
31 relative value and quality of small and large interruptible  
32 service. The total transfer in revenues to the residential  
33 customer class is \$11.2 million. While resulting in  
34 significant reductions to the various industrial rate  
35 schedules, the proposed revenue realignment limits the average

1 residential revenue increase to 2.9%. BC Gas submits that  
2 this proposed reallocation of margin strikes an appropriate  
3 balance between the various and conflicting rate design  
4 objectives.

#### 6 4.3 INDUSTRIAL RATE PROPOSALS

8 BC Gas is proposing to eliminate two of the current industrial  
9 rate schedules and to simplify the existing transportation  
10 service options. In addition, BC Gas is proposing to  
11 eliminate the fixed gas price option offered under Schedule  
12 10, reduce the transportation service administration fees, and  
13 to permit the grouping of customers for gas supply purposes.

15 Consistent with the goal of maintaining the stability and  
16 integrity of the rate classifications, BC Gas is proposing to  
17 amend the applicability criteria for Rate 5/25. At present  
18 rates, the crossover points (the volume at which one rate  
19 becomes relatively less expensive than the other) between Rate  
20 3 and Rate Schedules 5 and 25 are at about 5,500 and 16,000 GJ  
21 per year respectively (the different crossover points reflect  
22 that gas costs are excluded from the Rate 25 comparison). The  
23 current applicability criteria for Rate 5 requires at least a  
24 50% process load as a proxy for a high load factor. However,  
25 under the proposed rates, the rate crossover points move to  
26 1,500 and 6,000 GJ per year for Rate 5 and 25.

28 BC Gas proposes to amend the applicability criteria for Rate  
29 5/25 to better reflect load factor by requiring the customer's  
30 Baseload Quantity to be at least 75% of the customer's annual  
31 usage and at least a 5,000 GJ minimum annual volume. The  
32 Baseload Quantity is defined as the lower of the customer's  
33 July or August gas volume multiplied by twelve months to  
34 derive an annual Baseload Quantity. The 75% baseload  
35 requirement corresponds to a load factor of approximately 50%.

1 This modification allows high load factor loads, such as some  
2 greenhouses, access to this Rate 5/25 even though they may not  
3 be technically process loads as was previously required.  
4 These proposals are intended to maintain the existing volume  
5 and load factor relationship between Rate 3 and 5/25 and  
6 ensure that the same applicability criteria apply equally to  
7 firm sales and firm transportation service.

8  
9 The proposed reduction in Rate 5/25 margin also requires that  
10 the interruptible rates be reduced since they are priced as a  
11 discount from firm service. BC Gas is proposing to maintain  
12 the same relative relationship between firm and small and  
13 large interruptible rates by offering the same proportionate  
14 discounts from firm service for interruptible service as are  
15 currently in place. The proposed modifications to the  
16 industrial tariffs are addressed more fully in Volume 1, Tab  
17 5.

#### 18 19 **4.4 RESIDENTIAL, COMMERCIAL AND SEASONAL RATE PROPOSALS**

20  
21 For customers who require firm gas service, BC Gas proposes to  
22 maintain the current two-part seasonal rate structure, but to  
23 also establish higher basic charges consistent with the  
24 customer related costs as set out in the FDC and LRIC studies.  
25 The commodity charges would be reduced to offset the increased  
26 basic charge revenue. Tables 2.1 and 2.2 included under Tab  
27 3C show the revenue neutral impact of the proposed increases  
28 to the basic charges and associated reductions in delivery  
29 charges proposed in this application.

30  
31 BC Gas is also proposing to amend the Rate 4 firm seasonal  
32 service rate structure to link the delivery margins to a  
33 comparable firm service schedule (Rate 5/25) and link the gas  
34 cost allocation to the summer gas costs available under the  
35 interruptible sales schedule (Rate 7). Details on the

1 proposed residential, commercial and seasonal rate proposals  
2 are found in Volume 1 under Tab 4.

## 4 **5.0 GENERAL TERMS AND CONDITIONS**

5  
6 BC Gas proposes to make several changes to parts of the  
7 General Terms and Conditions. Revised tariff sheets showing  
8 the proposed edits or additions to the current General Terms  
9 and Conditions are included in Volume 1 under Tab 3B. The  
10 terms and conditions BC Gas proposes to amend are discussed  
11 below:

### 13 **1. Definitions - Basic Charge**

14 The proposed change adds clarity to the definition of  
15 basic charge and is consistent with BC Gas' existing  
16 policy.

### 18 **2. Section 5 - Application Fees and Charges**

19 BC Gas is proposing to add a new clause that allows the  
20 Company to charge those customers requesting the utility  
21 to identify the load or premises being served by a meter  
22 set in cases where the meter sets are found to be properly  
23 identified or where the meter sets were improperly  
24 identified as a result of the customer's actions.

### 26 **3. Section 11 - Meter Sets and Metering**

27 BC Gas is proposing to amend Section 11 to accommodate  
28 customers requesting non-standard metering equipment. For  
29 example, some customers have requested the installation of  
30 daily metering equipment to use with their energy  
31 management systems even though daily metering is not  
32 required for billing purposes. The proposed amendments  
33 will clarify the Company's policy with respect to directly  
34 charging those customer requesting non-standard equipment  
35 or meter relocation.

1 4. Section 15 - Promotions and Incentives

2 BC Gas proposes to clarify the wording of this clause to  
3 allow for the provision of services related to gas  
4 appliances and accessories.

5  
6 5. Section 16 - Billing

7 BC Gas is proposing to add a new clause to allow the  
8 Company to charge customers or others for providing  
9 historical billing information.

10  
11 6. Section 19 - Back-Billing

12 BC Gas proposes to amend clause 19.5 referring to  
13 Tampering/Fraud in response to a number of recent  
14 incidents to more clearly specify the customer's  
15 obligation to make the Company aware of under-billing.

16  
17 7. Section 23 - Discontinuance and Refusal of Service

18 BC Gas proposes to add a clause allowing the Company to  
19 refuse or discontinue service if the land on which the  
20 customer's premises is situated is contaminated. The  
21 purpose of this clause is to protect BC Gas from assuming  
22 liability for the clean-up of contamination it did not  
23 cause and protect the health and safety of its workers in  
24 installing service lines.

25  
26 7. Section 24 - Limitations on Liability

27 BC Gas proposes to amend clause 24.1 as it relates to the  
28 Company's liability in cases of negligence.

29  
30 **6.0 PUBLIC PROCESS**

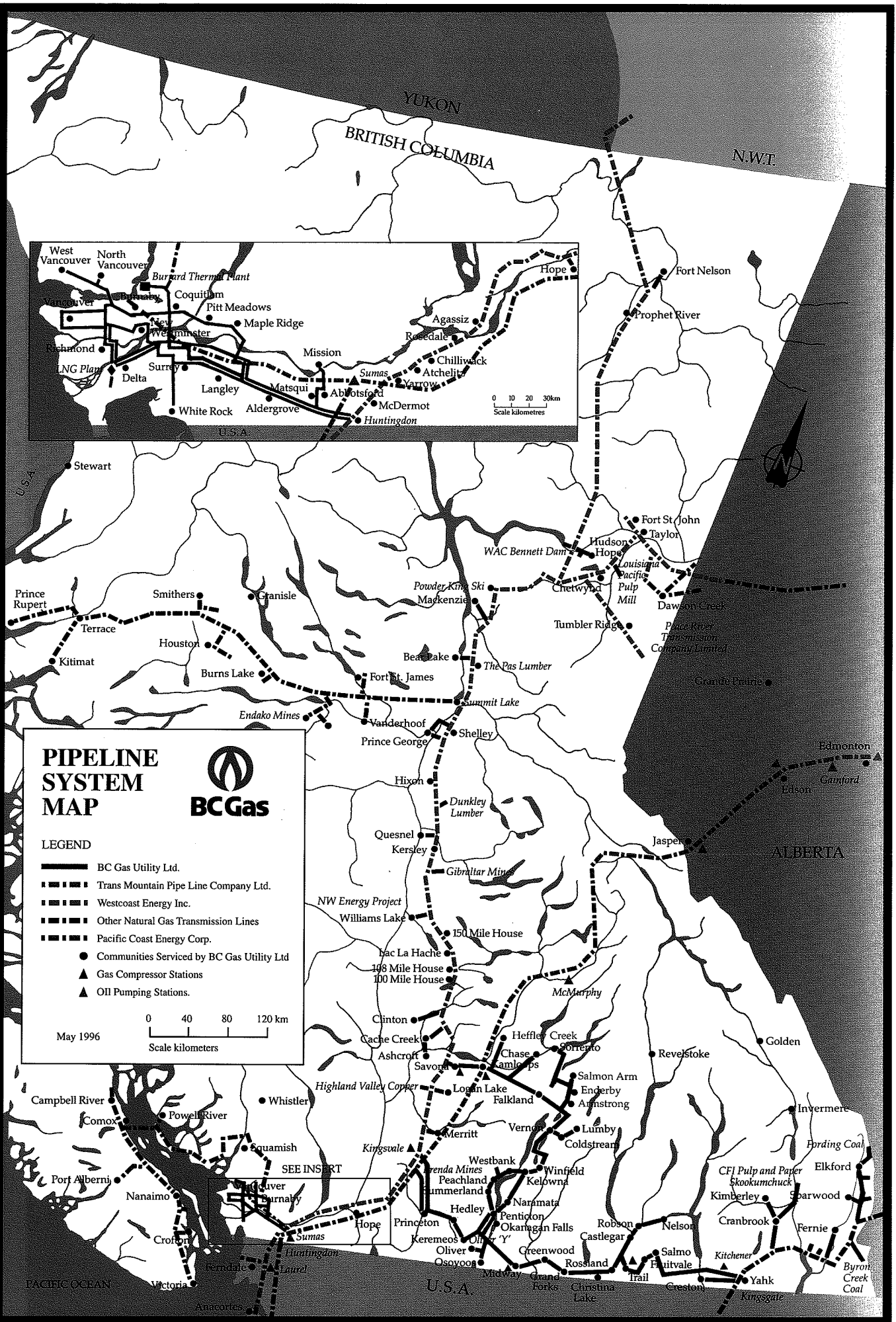
31  
32 The Company, in this application, has put forward proposals  
33 which, in its view, are in the interest of its customer  
34 groups. BC Gas has met with a number of its customers groups  
35 and their representatives prior to the filing of this

1 application. Support of exploring alternative approaches for  
2 addressing rate design issues outside of the formal hearing  
3 process were expressed during these meetings.

4  
5 BC Gas requests that the Commission give consideration to a  
6 pre-hearing conference, at which time issues and concerns can  
7 be reviewed and at which consideration can be given to the  
8 best means of resolving those issues or concerns. From a  
9 practical perspective, it may be that certain matters should  
10 be considered at the hearing, whereas others would be more  
11 appropriately resolved by a less formal process.

12  
13 **7.0 CONCLUSION**

14  
15 The rate design proposals in this application are the result  
16 of the consideration and analyses of numerous factors. They  
17 include detailed cost studies, competitive price studies,  
18 industrial complaints, tariff reviews and previous Commission  
19 decisions and directives. The proposals seek to balance the  
20 numerous factors which go into establishing just and  
21 reasonable rates and should be adopted.



**PIPELINE  
SYSTEM  
MAP**



**LEGEND**

- BC Gas Utility Ltd.
- Trans Mountain Pipe Line Company Ltd.
- Westcoast Energy Inc.
- Other Natural Gas Transmission Lines
- Pacific Coast Energy Corp.
- Communities Served by BC Gas Utility Ltd
- Gas Compressor Stations
- Oil Pumping Stations.

0 40 80 120 km  
Scale kilometers

May 1996

BC Gas General Terms and Conditions  
Definitions

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## Definitions

Unless the context indicates otherwise, in the General Terms and Conditions the following words have the following meanings

***Adjustment Factor*** Means a factor, or combination of factors, which converts gas meter data to gigajoules or cubic metres for billing purposes.

***Basic Charge*** Means a fixed charge required to be paid by a Customer for Service during a prescribed period as specified in the applicable Rate Schedule whether Gas is consumed or not. | C

***BC Gas*** Means BC Gas Utility Ltd.

***Commercial Service*** Means the provision of firm Gas supplied to one delivery point and through one Meter Set for use in approved appliances in commercial, institutional or small industrial operations.

***Customer*** Means a Person who is being provided Service or who has filed an application for Service with BC Gas that has been approved by BC Gas.

***Day*** Means any period of 24 consecutive hours beginning and ending at 8:00 a.m. Pacific Standard Time or as otherwise specified in the Service Agreement.

***Delivery Point*** Means the outlet of the Meter Set unless otherwise specified in the Service Agreement.

***Delivery Pressure*** Means the pressure of the Gas at the Delivery Point.

***Gas*** Means natural gas or propane.

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BC Gas General Terms and Conditions  
Definitions

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<b><i>Gas Service</i></b>	Means the delivery of Gas through a Meter Set.
<b><i>General Terms &amp; Conditions</i></b>	Means these terms and conditions.
<b><i>Gigajoule</i></b>	Means a measure of energy equal to one billion joules used for billing purposes.
<b><i>Heat Content</i></b>	Means the quantity of energy per unit volume of Gas measured under standardized conditions and expressed in megajoules per cubic metre (MJ/m <sup>3</sup> ).
<b><i>Landlord</i></b>	A Person who, being the owner of a property, has leased or rented it to another person, called the tenant.
<b><i>Main</i></b>	Means pipes used to carry Gas for general or collective use for the purposes of distribution.
<b><i>Main Extension</i></b>	Means an extension of one of BC Gas' mains with low, distribution, intermediate or transmission pressures, and includes tapping of transmission pipelines, the installation of any required pressure regulating facilities and upgrading of existing mains, or pressure regulating facilities on private property, but does not include the installation of Service Lines or Meter Sets.
<b><i>Meter Set</i></b>	Means an assembly of BC Gas owned metering and ancillary equipment and piping.
<b><i>Month</i></b>	Means a period of time, for billing purposes, of 27 to 34 consecutive Days.

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## 5. Application Fees and Charges

5.1 **Application Fee** - An applicant for Service must pay the applicable application fee set out in the Standard Fees and Charges Schedule.

5.2 **Application Fee for Manifold Meters** - Where a new Service Line is required to serve more than one customer at a Premises and the Service is provided with Gas meters connected to a meter manifold, the application fee for manifold meters set out in the Standard Fees and Charges Schedule will apply.

5.3 **Waiver of Application Fee** - The application fee

- (a) will be waived by BC Gas if Service to a Customer is reactivated after it was discontinued for any of the reasons described in Section 13.2 (Right to Restrict), and
- (b) may be waived by BC Gas if a Landlord requires Gas Service for a short period between the time a previous Tenant moves out and a new Tenant moves in.

5.4 **Reactivation Charges** - If

- (a) Service is terminated
  - (i) at the request of a Customer, or
  - (ii) for any of the reasons described in Section 23 (Discontinuance of Service and Refusal of Service), or
  - (iii) to permit Customers to make alterations to their Premises, and
- (b) the same Customer or the spouse, employee, contractor, agent or partner of the same Customer requests reactivation of Service to the Premises within one Year,

the applicant for reactivation must pay the greater of

- (i) the costs BC Gas incurs in re-activating the Service, or

| c

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BC Gas General Terms and Conditions  
Section 5

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- (ii) the sum of the minimum charges set out in the applicable Rate Schedule which would have been paid by the Customer between the time of termination and the time of reactivation of Service.

**5.5 Identifying Load or Premises Served by Meter Sets -** If a Customer requests BC Gas to identify the Meter Set that serves the Premises and/or load after the Meter Set was installed, the Customer will pay the cost BC Gas incurs in re-identifying the Meter Set where

- (a) the Meter Set is found to be properly identified, or
- (b) the Meter Set is found to be improperly identified as a result of Customer activity including
  - (i) a change in the legal civic address of the Premises
  - (ii) renovating or partitioning the Premises, or
  - (iii) rerouting Gas lines after the Delivery Point.

N

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BC Gas General Terms and Conditions  
Section 11

## 11. Meter Sets & Metering

- 11.1 **Installation** - In order to bill the Customer for Gas delivered, BC Gas will install one or more Meter Sets on the Customer's Premises. Unless approved by BC Gas, all Meter Sets will be located outside the Customer's Premises at locations designated by BC Gas.
- 11.2 **Measurement** - The quantity of Gas delivered to the Premises will be metered using apparatus approved by Consumer and Corporate Affairs Canada. The amount of Gas registered by the Meter Set during each billing period will be converted to Gigajoules in accordance with the Electricity and Gas Inspection Act and rounded to the nearest one-tenth of a Gigajoule.
- 11.3 **Testing Meters** - If a Customer applies for the testing of a Meter Set and
- (a) the Meter Set is found to be recording incorrectly, the cost of removing, replacing and testing the meter will be borne by BC Gas subject to Section 24.4 (Responsibility for Meter Set), and
  - (b) if the testing indicates that the Meter Set is recording correctly, as defined by the Electricity and Gas Inspection Act, the Customer must pay BC Gas for the cost of removing, replacing and testing the Meter Set as set out in the Standard Fees and Charges Schedule.
- 11.4 **Defective Meter Set** - If a Meter Set ceases to register, BC Gas will estimate the volume of Gas delivered to the Customer according to the procedures set out in Section 16.6 (Incorrect Register).
- 11.5 **Protection of Equipment** - The Customer must take reasonable care of and protect all Meter Sets and related equipment on the Customer's Premises. The Customer's responsibility for expense, risk and liability with respect to all Meter Sets and related equipment is set out in Section 24.4 (Responsibility for Meter Set).
- 11.6 **No Unauthorized Changes** - No Meter Sets or related equipment will be installed, connected, moved or disconnected except by BC Gas' authorized employees, contractors or agents or by other Persons with BC Gas' written permission.
- 11.7 **Removal of Meter Set** - At the termination of a Service Agreement, BC Gas may disconnect or remove a Meter Set from the Premises if a new Customer is not expected to apply for Service for the Premises within a reasonable time.

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BC Gas General Terms and Conditions  
Section 11

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- 11.8 **Customer Requested Meter Relocation or Modifications** - Any change in the location of a Meter Set or related equipment, or any modifications to the Meter Set, including automatic and/or remote meter reading | C
- (a) must be approved by BC Gas in writing, and
- (b) will be made at the expense of the Customer if the change or modification is requested by the Customer or necessitated by the actions of the Customer. If any of the changes to the Meter Set or related equipment require BC Gas to incur ongoing incremental operating and maintenance costs, BC Gas may recover these costs from the Customer through a monthly charge. | C
- 11.9 **Delivery Pressure** - The normal Delivery Pressure is 1.75 kPa. BC Gas may charge Customers who require Delivery Pressure at other than the normal Delivery Pressure the additional costs associated with providing other than the normal Delivery Pressure.
- 11.10 **Customer Requested Mobile Service** - The Customer will be charged the cost of providing temporary mobile Gas Service if the request for such service is made by or brought on by the actions of the Customer. | N

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BC Gas General Terms and Conditions  
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**15. Promotions and Incentives**

- 15.1 **Promotion of Gas Appliances** - BC Gas may promote, sell, rent, lease, or finance natural Gas vehicle equipment, Gas appliances and related accessories and services on a cash or finance plan basis and make reasonable charges for these Services.

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## 16. Billing

- 16.1 **Basis for Billing** - BC Gas will bill the Customer in accordance with the Customer's Service Agreement, the Rate Schedule under which the Customer is provided Service, and the fees and charges contained in the General Terms and Conditions.
- 16.2 **Meter Measurement** - BC Gas will measure the quantity of Gas delivered to a Customer using a Meter Set and the starting point for measuring delivered quantities during each billing period will be the finishing point of the preceding billing period.
- 16.3 **Multiple Meters** - Gas Service to each Meter Set will be billed separately for Customers who have more than one Meter Set on their Premises.
- 16.4 **Estimates** - For billing purposes, BC Gas may estimate the Customer's meter readings if, for any reason, BC Gas does not obtain a meter reading.
- 16.5 **Estimated Final Reading** - If a Service Agreement is terminated under Section 8.1 (Termination by Customer), BC Gas may estimate the final meter reading for final billing.
- 16.6 **Incorrect Register** - If any Meter Set has failed to measure the delivered quantity of Gas correctly, BC Gas may estimate the meter reading for billing purposes, subject to Section 19 (Back-Billing).
- 16.7 **Bills Issued** - BC Gas may bill a Customer as often as BC Gas considers necessary but generally will bill on a monthly or bi-monthly basis.
- 16.8 **Bill Due Dates** - The Customer must pay BC Gas' bill for Service on or before the due date shown on the bill which will be
  - (a) the first business Day after the twenty-first calendar Day following the billing date, or
  - (b) such other period as may be agreed upon by the Customer and BC Gas.
- 16.9 **Historical Billing Information** - Customers who request historical billing information may be charged the cost of processing and providing the information.

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## 19. Back-Billing

- 19.1 **When Required** - BC Gas may, in the circumstances specified herein, charge, demand, collect or receive from its Customers in respect of a regulated Service rendered hereunder a greater or lesser compensation than that specified in the subsisting schedules applicable to that Service.

In the case of a minor adjustment to a Customer's bill, such as an estimated bill or an equal payment plan billing, such adjustments do not require back-billing treatment to be applied.

- 19.2 **Definition** - Back-billing means the rebilling by BC Gas for Services rendered to a Customer because the original billings are discovered to be either too high (over-billed) or too low (under-billed). The discovery may be made by either the Customer or BC Gas, and may result from the conduct of an inspection under provisions of the federal statute, the Electricity and Gas Inspection Act ("EGI Act"). The cause of the billing error may include any of the following non-exhaustive reasons or combination thereof:

- (a) stopped meter
- (b) metering equipment failure
- (c) missing meter now found
- (d) switched meters
- (e) double metering
- (f) incorrect meter connections
- (g) incorrect use of any prescribed apparatus respecting the registration of a meter
- (h) incorrect meter multiplier
- (i) the application of an incorrect rate
- (j) incorrect reading of meters or data processing
- (k) tampering, fraud, theft or any other criminal act.

- 19.3 **Application of Act** - Whenever the dispute procedure of the EGI Act is invoked, the provisions of that Act apply, except those which purport to determine the nature and extent of legal liability flowing from metering or billing errors.

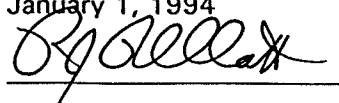
- 19.4 **Billing Basis** - Where metering or billing errors occur and the dispute procedure under the EGI Act is not invoked, the consumption and demand will be based upon the records of BC Gas for the Customer, or the Customer's own records to the extent they are available and accurate, or if not available, reasonable and fair estimates may be made by BC Gas. Such estimates will be on a consistent basis within each Customer class or according to a contract with the Customer, if applicable.

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- 19.5 **Tampering/Fraud** - If there are reasonable grounds to believe that the Customer has tampered with or otherwise used BC Gas' Service in an unauthorized way, or there is evidence of fraud, theft or other criminal acts, or if a reasonable Customer should have known of the under-billing and failed to promptly bring it to the attention of BC Gas, then the extent of back-billing will be for the duration of the unauthorized use, subject to the applicable limitation period provided by law, and the provisions of Sections 19.8 (Under-Billing) to 19.11 (Changes in Occupancy), below, do not apply.

In addition, the Customer is liable for the direct (unburdened) administrative costs incurred by BC Gas in the investigation of any incident of tampering, including the direct costs of repair, or replacement of equipment.

Under-billing resulting from circumstances described above will bear interest at the rate normally charged by BC Gas on unpaid accounts from the date of the original under-billed invoice until the amount under-billed is paid in full.

- 19.6 **Remedying Problem** - In every case of under-billing or over-billing, the cause of the error will be remedied without delay, and the Customer will be promptly notified of the error and of the effect upon the Customer's ongoing bill.
- 19.7 **Over-billing** - In every case of over-billing, BC Gas will refund to the Customer all money incorrectly collected for the duration of the error, subject to the applicable limitation period provided by law. Simple interest, computed at the short-term bank loan rate applicable to BC Gas on a Monthly basis, will be paid to the Customer.
- 19.8 **Under-billing** - Subject to Section 19.5 (Tampering/Fraud), above, in every case of under-billing, BC Gas will back-bill the Customer for the shorter of
- (a) the duration of the error; or
  - (b) six months for Residential or Commercial Service; and
  - (c) one Year for all other Customers or as set out in a special or individually negotiated contract with BC Gas.
- 19.9 **Terms of Repayment** - Subject to Section 19.5 (Tampering/Fraud), above, in all cases of under-billing, BC Gas will offer the Customer reasonable terms of repayment. If requested by the Customer, the repayment term will be equivalent in length to the back-billing period. The repayment will be interest free and in equal instalments corresponding to the normal billing cycle. However, delinquency in payment of such instalments will be subject to the usual late payment charges.
- 19.10 **Disputed Back-bills** - Subject to Section 19.5 (Tampering/Fraud), above, if a Customer disputes a portion of a back-billing due to under-billing based upon either consumption, demand or duration of the error, BC Gas will not threaten or cause the

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discontinuance of Service for the Customer's failure to pay that portion of the back-billing, unless there are no reasonable grounds for the Customer to dispute that portion of the back-billing. The undisputed portion of the bill shall be paid by the Customer and BC Gas may threaten or cause the discontinuance of Service if such undisputed portion of the bill is not paid.

- 19.11 Changes in Occupancy** - Subject to Section 19.5 (Tampering/Fraud), above, back-billing in all instances where changes of occupancy have occurred, BC Gas will make a reasonable attempt to locate the former Customer. If, after a period of one Year, such Customer cannot be located, the applicable over or under billing will be cancelled.

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## 23. Discontinuance of Service and Refusal of Service

**23.1 Discontinuance With Notice and Refusal Without Notice** - BC Gas may discontinue Service to a Customer with at least 48 hours written notice to the Customer or Customer's Premises, or may refuse Service for any of the following reasons:

- (a) the Customer has not fully paid BC Gas' bill with respect to Services on or before the due date,
- (b) the Customer or applicant has failed to pay any required security deposit, equivalent form of security, or post a guarantee or required increase in it by the specified date,
- (c) the Customer or applicant has failed to pay BC Gas' bill in respect of another Premises on or before the due date,
- (d) the Customer or applicant occupies the Premises with another occupant who has failed to pay BC Gas' bill, security deposit, or required increase in the security deposit in respect of an other Premises which was occupied by that occupant and the Customer at the same time,
- (e) the Customer or applicant is in receivership or bankruptcy, or operating under the protection of any insolvency legislation and has failed to pay any outstanding bills to BC Gas, | C
- (f) the Customer has failed to apply for Service, or | C
- (g) the land on which the Customer's or applicant's Premises is situated contains contamination which, for the purpose of this Section, means the presence in the soil, sediment or groundwater of special waste or another substance in quantities or concentrations exceeding criteria, standards or conditions established by the British Columbia Ministry of Environment, Lands and Parks or as prescribed by present and future laws, rules, regulations and orders of any other legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over the environment. | N

**23.2 Discontinuance or Refusal Without Notice** - BC Gas may discontinue without notice or refuse the supply of Gas or Service to a Customer for any of the following reasons:

- (a) the Customer or applicant has failed to provide reference information and identification acceptable to BC Gas, when applying for Service or at any subsequent time on request by BC Gas,

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- (b) the Customer has defective pipe, appliances, or Gas fittings in the Premises,
- (c) the Customer uses Gas in such a manner as in BC Gas' opinion
  - (i) may lead to a dangerous situation, or
  - (ii) may cause undue or abnormal fluctuations in the Gas pressure in BC Gas' Gas transmission or distribution system,
- (d) the Customer fails to make modifications or additions to the Customer's equipment which have been required by BC Gas in order to prevent the danger or to control the undue or abnormal fluctuations described under paragraph (c),
- (e) the Customer breaches any of the terms and conditions upon which Service is provided to the Customer by BC Gas,
- (f) the Customer fraudulently misrepresents to BC Gas its use of Gas or the volume delivered,
- (g) the Customer vacates the Premises,
- (h) the Customer's Service Agreement is terminated for any reason, or
- (i) the Customer stops consuming Gas on the Premises.

**23.3 Application to Former Tariffs - Section 23.1 (Discontinuance With Notice and Refusal Without Notice), parts (c), (d) and (e), apply to bills rendered under these General Terms and Conditions and under the following former tariffs:**

Lower Mainland - Gas Tariff,  
Inland - Gas Tariff B.C.E.C. No. 2,  
Columbia - Gas Tariff B.C.U.C. No.1.

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## 24. Limitations on Liability

- 24.1 **Responsibility for Delivery of Gas** - BC Gas, its employees, contractors or agents are not responsible for any loss, damage, costs or injury (including death) incurred by any Customer or any Person claiming by or through the Customer caused by or resulting from, directly or indirectly, any discontinuance, suspension or interruption of, or failure or defect in the supply or delivery or transportation of, or refusal to supply, deliver or transport Gas unless any loss, damage, costs or injury (including death) is directly attributable to the negligence or willful misconduct of BC Gas, its employees, contractors or agents. | C
- 24.2 **Responsibility Before Delivery Point** - The Customer is responsible for all expense, risk and liability with respect to
- (a) the use or presence of Gas before it passes the Delivery Point in the Customer's Premises, and
  - (b) BC Gas-owned facilities serving the Customer's Premises
- if any loss or damage caused by or resulting from failure to meet that responsibility is caused, or contributed to, by the act or omission of the Customer or a Person for whom the Customer is responsible.
- 24.3 **Responsibility After Delivery Point** - The Customer is responsible for all expense, risk and liability with respect to the use or presence of Gas after it passes the Delivery Point.
- 24.4 **Responsibility for Meter Set** - The Customer is responsible for all expense, risk and liability with respect to all Meter Sets or related equipment at the Customer's Premises unless any loss or damage is
- (a) directly attributable to the negligence of BC Gas, its employees, contractors or agents, or
  - (b) caused by or resulting from a defect in the equipment. The Customer must prove that negligence or defect.

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- 24.5 **Customer Indemnification** - The Customer must indemnify and hold harmless BC Gas, its employees, contractors or agents from all claims, loss, damage, costs or injury, including death, suffered by the Customer or any Person claiming by or through the Customer or any third party caused by or resulting from the use of Gas by the Customer or the presence of Gas in the Customer's Premises, or from the Customer or Customer's employees, agents or contractors damaging BC Gas' facilities.

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TABLE #1

B C G A S - R A      E S I G N 1 9 9 6

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Budget Year 1996

## Tariffs

	Budget				After Margin Shift							
	Basic Charge	Admin. Charge	Delivery		Basic Charge	Change	Admin. Charge	Change	Delivery		Change	Change
			Summer	Winter					Summer	Winter		
Rate 1	\$6.320	\$0.000	\$1.268	\$2.535	\$6.665	5.5%	\$0.000	0.0%	\$1.337	\$2.673	5.5%	5.5%
Rate 2	\$12.640	\$0.000	\$1.021	\$2.041	\$12.640	0.0%	\$0.000	0.0%	\$1.021	\$2.041	0.0%	0.0%
Rate 3	\$12.640	\$0.000	\$1.021	\$2.041	\$12.640	0.0%	\$0.000	0.0%	\$1.021	\$2.041	0.0%	0.0%
Rate 4	\$366.000	\$0.000	\$0.733	\$0.733	\$273.813	-25.2%	\$0.000	0.0%	\$0.548	\$0.548	-25.2%	-25.2%
Rate 5/25 (*)	\$366.000	\$213.000	\$0.853	\$1.645	\$240.590	-34.3%	\$100.000	-53.1%	\$0.561	\$1.081	-34.3%	-34.3%
Rate 7/27 (*)	\$851.000	\$213.000	\$0.853	\$1.159	\$600.000	-29.5%	\$100.000	-53.1%	\$0.520	\$0.770	-39.0%	-33.6%
Rate 22 (Captive)	\$1,643.000	\$608.000	\$0.671	\$0.976	\$2,500.000	52.2%	\$100.000	-83.6%	\$0.340	\$0.670	-49.3%	-31.4%
Rate 22 A (Captive)	\$3,284.000	\$608.000	\$0.671	\$0.671	\$3,284.000	0.0%	\$100.000	-83.6%	\$0.671	\$0.671	0.0%	0.0%
Rate 22 B (Captive)	\$3,345.000	\$608.000	\$0.550	\$0.793	\$3,345.000	0.0%	\$100.000	-83.6%	\$0.550	\$0.793	0.0%	0.0%

TABLE #1.1

MARGIN IMPACTS OF MARGIN SHIFT OF \$11,192.7 THOUSANDS

		Accounts	Energy in TJ's			Margin in '000 of \$										
			Summer	Winter	Annual	Budget			After Margin Shift							
						Summer	Winter	Annual	Unit	Summer		Winter		Annual		
										Change	Unit Change	Change	Unit Change	Change	Unit Change	
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
1																
2	Rate 1	640,729	24,267.3	49,906.9	74,174.2	\$57,749.9	\$144,246.8	\$201,996.7	\$2.723	\$60,953.3	5.5%	\$152,236.2	5.5%	\$213,189.5	\$2.874	5.5%
3	Rate 2	67,420	6,835.4	14,533.2	21,368.6	\$12,580.2	\$33,266.6	\$45,846.7	\$2.146	\$12,580.2	0.0%	\$33,266.6	0.0%	\$45,846.7	\$2.146	0.0%
4	Rate 3	6,200	10,652.6	17,180.4	27,833.0	\$11,242.4	\$35,119.9	\$46,362.4	\$1.666	\$11,242.4	0.0%	\$35,119.9	0.0%	\$46,362.4	\$1.666	0.0%
5	Rate 4	65	419.9	0.0	419.9	\$464.6	\$0.0	\$464.6	\$1.106	\$345.1	-25.7%	\$0.0	0.0%	\$345.1	\$0.822	-25.7%
6	Rate 5/25	250	4,340.0	4,147.3	8,487.4	\$4,286.9	\$7,183.8	\$11,470.7	\$1.351	\$2,671.6	-37.7%	\$4,594.6	-36.0%	\$7,266.2	\$0.856	-36.7%
7	Rate 7/27	98	3,266.5	2,904.7	6,171.2	\$3,423.9	\$3,822.1	\$7,246.0	\$1.174	\$2,133.9	-37.7%	\$2,547.7	-33.3%	\$4,681.6	\$0.759	-35.4%
8	Rate 22 (Captive)	21	7,905.5	6,069.8	13,975.3	\$5,703.1	\$6,225.2	\$11,928.4	\$0.854	\$3,181.4	-44.2%	\$4,546.2	-27.0%	\$7,727.6	\$0.553	-35.2%
9	Rate 22 A (Captive)	11	5,134.5	4,626.9	9,761.4	\$2,192.9	\$1,806.2	\$3,999.1	\$0.410	\$2,153.8	-1.8%	\$1,778.3	-1.5%	\$3,932.0	\$0.403	-1.7%
10	Rate 22 B (Captive)	6	2,122.5	2,231.3	4,353.8	\$886.6	\$702.8	\$1,589.4	\$0.365	\$865.3	-2.4%	\$687.5	-2.2%	\$1,552.8	\$0.357	-2.3%
11																
12	Total	714,800	64,944.3	101,600.5	166,544.8	\$98,530.4	\$232,373.4	\$330,903.9	\$1.987	\$96,126.8	-2.4%	\$234,777.1	1.0%	\$330,903.9	\$1.987	0.0%

TABLE #1.2

REVENUE IMPACTS OF MARGIN SHIFT OF \$11,192.7 THOUSANDS

19		Accounts	Energy in TJ's			Revenue in '000 of \$											
20						Budget			After Margin Shift								
21			Summer	Winter	Annual	Summer	Winter	Annual	Unit	Summer	Change	Winter	Change	Annual	Annual	Annual	
22															Unit	Change	
23			(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
24																	
25																	
26	Rate 1		640,729	24,267.3	49,906.9	74,174.2	\$119,581.6	\$271,189.3	\$390,770.9	\$5.268	\$122,784.9	2.7%	\$279,178.7	2.9%	\$401,963.6	\$5.419	2.9%
27	Rate 2		67,420	6,835.4	14,533.2	21,368.6	\$30,959.6	\$72,212.7	\$103,172.2	\$4.828	\$30,959.6	0.0%	\$72,212.7	0.0%	\$103,172.2	\$4.828	0.0%
28	Rate 3		6,200	10,652.6	17,180.4	27,833.0	\$36,535.6	\$75,831.8	\$112,367.4	\$4.037	\$36,535.6	0.0%	\$75,831.8	0.0%	\$112,367.4	\$4.037	0.0%
29	Rate 4		65	419.9	0.0	419.9	\$945.1	\$0.0	\$945.1	\$2.251	\$825.7	-12.6%	\$0.0	0.0%	\$825.7	\$1.966	-12.6%
30	Rate 5		181	1,854.5	1,707.8	3,562.3	\$5,646.3	\$6,443.3	\$12,089.5	\$3.394	\$4,945.3	-12.4%	\$5,367.2	-16.7%	\$10,312.5	\$2.895	-14.7%
31																	
32	Total		714,595	44,029.7	83,328.3	127,358.0	\$193,668.1	\$425,677.1	\$619,345.2	\$4.863	\$196,051.1	1.2%	\$432,590.4	1.6%	\$628,641.4	\$4.936	1.5%

(\*) Administration Charge applies only to Rates 25 and 27

TABLE #2

## Tariffs

	After Margin Shift				After Revenue Neutral Tariff Adjustment							
	Basic Charge	Admin. Charge	Delivery Summer	Charge Winter	Basic Charge		Admin. Charge		Delivery		Charge	
					Change		Change		Summer		Winter	Change
Rate 1	\$6.665	\$0.000	\$1.337	\$2.673	\$9.000	35.0%	\$0.000	0.0%	\$1.194	-10.7%	\$2.388	-10.7%
Rate 2	\$12.640	\$0.000	\$1.021	\$2.041	\$15.000	18.7%	\$0.000	0.0%	\$0.969	-5.1%	\$1.936	-5.1%
Rate 3	\$12.640	\$0.000	\$1.021	\$2.041	\$75.000	493.4%	\$0.000	0.0%	\$0.919	-10.0%	\$1.838	-10.0%
Rate 4	\$273.813	\$0.000	\$0.548	\$0.548	\$300.000	9.6%	\$0.000	0.0%	\$0.520	-5.2%	\$1.050	91.5%
Rate 5/25 (*)	\$240.590	\$100.000	\$0.561	\$1.081	\$300.000	24.7%	\$100.000	0.0%	\$0.520	-7.3%	\$1.050	-2.9%
Rate 7/27 (*)	\$600.000	\$100.000	\$0.520	\$0.770	\$600.000	0.0%	\$100.000	0.0%	\$0.520	0.0%	\$0.770	0.0%
Rate 22 (Captive)	\$2,500.000	\$100.000	\$0.340	\$0.670	\$2,500.000	0.0%	\$100.000	0.0%	\$0.340	0.0%	\$0.670	0.0%
Rate 22 A (Captive)	\$3,284.000	\$100.000	\$0.671	\$0.671	\$3,284.000	0.0%	\$100.000	0.0%	\$0.671	0.0%	\$0.671	0.0%
Rate 22 B (Captive)	\$3,345.000	\$100.000	\$0.550	\$0.793	\$3,345.000	0.0%	\$100.000	0.0%	\$0.550	0.0%	\$0.793	0.0%

TABLE #2.1

## MARGIN IMPACTS OF MARGIN SHIFT AND TARIFF ADJUSTMENT

Accounts		Energy in TJ's			Margin in '000 of \$											
		Summer	Winter	Annual	After Margin Shift			Unit	After Revenue Neutral Tariff Adjustment							
					Summer	Winter	Annual		Summer Change	Winter Change	Annual Unit Change					
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)		
1																
2	Rate 1	640,729	24,267.3	49,906.9	74,174.2	\$60,953.3	\$152,236.2	\$213,189.5	\$2.874	\$67,820.6	11.3%	\$145,368.9	-4.5%	\$213,189.5	\$2.874	0.0%
3	Rate 2	67,420	6,835.4	14,533.2	21,368.6	\$12,580.2	\$33,266.6	\$45,846.7	\$2.146	\$13,314.4	5.8%	\$32,532.3	-2.2%	\$45,846.7	\$2.146	0.0%
4	Rate 3	6,200	10,652.6	17,180.4	27,833.0	\$11,242.4	\$35,119.9	\$46,362.4	\$1.666	\$12,823.8	14.1%	\$33,538.5	-4.5%	\$46,362.4	\$1.666	0.0%
5	Rate 4	65	419.9	0.0	419.9	\$345.1	\$0.0	\$345.1	\$0.822	\$345.1	0.0%	\$0.0	0.0%	\$345.1	\$0.822	0.0%
6	Rate 5/25	250	4,340.0	4,147.3	8,487.4	\$2,671.6	\$4,594.6	\$7,266.2	\$0.856	\$2,671.6	0.0%	\$4,594.6	0.0%	\$7,266.2	\$0.856	0.0%
7	Rate 7/27	98	3,266.5	2,904.7	6,171.2	\$2,133.9	\$2,547.7	\$4,681.6	\$0.759	\$2,133.9	0.0%	\$2,547.7	0.0%	\$4,681.6	\$0.759	0.0%
8	Rate 22 (Captive)	21	7,905.5	6,069.8	13,975.3	\$3,181.4	\$4,546.2	\$7,727.6	\$0.553	\$3,181.4	0.0%	\$4,546.2	0.0%	\$7,727.6	\$0.553	0.0%
9	Rate 22 A (Captive)	11	5,134.5	4,626.9	9,761.4	\$2,153.8	\$1,778.3	\$3,932.0	\$0.403	\$2,153.8	0.0%	\$1,778.3	0.0%	\$3,932.0	\$0.403	0.0%
10	Rate 22 B (Captive)	6	2,122.5	2,231.3	4,353.8	\$865.3	\$687.5	\$1,552.8	\$0.357	\$865.3	0.0%	\$687.5	0.0%	\$1,552.8	\$0.357	0.0%
11																
12	Total	714,800	64,944.3	101,600.5	166,544.8	\$96,126.8	\$234,777.1	\$330,903.9	\$1.987	\$105,309.8	9.6%	\$225,594.1	-3.9%	\$330,903.9	\$1.987	0.0%
13																
14																

TABLE #2.2

## REVENUE IMPACTS OF MARGIN SHIFT AND TARIFF ADJUSTMENT

		Accounts	Energy in TJ's			Revenue in '000 of \$										
			Summer	Winter	Annual	After Margin Shift			Annual Unit	After Revenue Neutral Tariff Adjustment			Annual Unit	Annual Change		
						Summer	Winter	Annual		Summer Change	Winter	Annual				
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
26	Rate 1	640,729	24,267.3	49,906.9	74,174.2	\$122,784.9	\$279,178.7	\$401,963.6	\$5.419	\$129,652.2	5.6%	\$272,311.4	-2.5%	\$401,963.6	\$5.419	0.0%
27	Rate 2	67,420	6,835.4	14,533.2	21,368.6	\$30,959.6	\$72,212.7	\$103,172.2	\$4.828	\$31,693.8	2.4%	\$71,478.4	-1.0%	\$103,172.2	\$4.828	0.0%
28	Rate 3	6,200	10,652.6	17,180.4	27,833.0	\$36,535.6	\$75,831.8	\$112,367.4	\$4.037	\$38,117.0	4.3%	\$74,250.4	-2.1%	\$112,367.4	\$4.037	0.0%
29	Rate 4	65	419.9	0.0	419.9	\$825.7	\$0.0	\$825.7	\$1.966	\$825.7	0.0%	\$0.0	0.0%	\$825.7	\$1.966	0.0%
30	Rate 5	181	1,854.5	1,707.8	3,562.3	\$4,945.3	\$5,367.2	\$10,312.5	\$2.895	\$4,945.1	0.0%	\$5,367.4	0.0%	\$10,312.5	\$2.895	0.0%
31																
32	Total	714,595	44,029.7	83,328.3	127,358.0	\$196,051.1	\$432,590.4	\$628,641.4	\$4.936	\$205,233.8	4.7%	\$423,407.6	-2.1%	\$628,641.4	\$4.936	0.0%

(\*) Administration Charge applies only to Rates 25 and 27



## PROPOSAL TO REVISE RESIDENTIAL, COMMERCIAL AND SEASONAL SERVICE RATES

### 1.0 INTRODUCTION

This section focuses on the costs and revenues associated with the delivery of gas to residential and commercial customers. In addition, the last segment of this section addresses seasonal service customers served under BC Gas' Rate Schedule 4. Consideration is also given in this section to the February 16, 1996 BCUC Decision regarding Utility System Extension Tests, as it relates to rate design issues.

BC Gas provides a variety of services in delivering gas to customers' residences and places of business. The costs associated with providing these services, both capital and operating, are recovered through rates. As the natural gas marketplace becomes more competitive, it will be increasingly important that the components of the overall rates are better aligned with the costs they are intended to recover.

A number of factors are considered in examining the alignment between rates and costs. These are outlined below.

1. The costs of providing service to residential and commercial are mostly fixed. The cost of serving each customer does not vary significantly with that customer's consumption unless the change in consumption causes the Company to incur costs to increase peak capacity.

2. The current rate structure for residential and commercial customers includes a basic monthly charge and a per gigajoule (GJ) delivery charge. For a residential customer, only 25% to 35% of the utility costs are recovered through the basic monthly charge. In other words, customer revenue is largely dependent on

1 consumption even though the bulk of the costs of service  
2 are not. As a result, customers with above average  
3 consumption contribute more to the Company's costs than  
4 the cost of serving them. Conversely, customers with  
5 below average consumption contribute less than the cost of  
6 serving them. BC Gas is of the view that this imbalance  
7 should be addressed.

8  
9 3. The costs for new service line connections can vary  
10 significantly between customers, often as a result of  
11 terrain. While the Company employs an economic test to  
12 compare expected revenues to the specific costs of main  
13 extensions necessary to connect new customers, BC Gas does  
14 not currently use an economic test for service line  
15 connections to existing mains.

16  
17 4. If uneconomic customers (i.e. customers whose forecast  
18 revenue does not cover their cost of delivery service) are  
19 added, there will be upward pressure on the rates charged  
20 to all other customers in future revenue requirements.

21  
22 5. BC Gas believes it is not reasonable to require other  
23 customers to absorb the costs of serving uneconomic  
24 customers. In addition, competition from electricity and  
25 other energy forms will make it increasingly difficult to  
26 pass on these higher costs to other customers.

27  
28 6. Demand-side management, more efficient appliances,  
29 improved construction materials and techniques, as well as  
30 a more stringent building code could reduce energy  
31 consumption in the future. This could lead to reduced  
32 revenue recovery from consumption-based rates and cause  
33 the need for further rate increases.

1 In view of these factors, BC Gas proposes to continue the  
2 process started in its 1993 Phase B Rate Design Application to  
3 gradually improve the alignment of its rates and charges with  
4 the costs it incurs to serve individual customers. This  
5 alignment will occur by increasing basic monthly charges and  
6 applying a more stringent service line connection policy  
7 consistent with the Commission's directions set out in the  
8 Utility System Extension Tests Decision.

9  
10 **2.0 ALIGNING RATES AND COSTS**

11  
12 BC Gas believes the proper alignment of rates and costs should  
13 occur in two ways. First, the fixed and variable rates should  
14 more closely correspond to the level of fixed and variable  
15 costs associated with serving each customer. Second, the  
16 capital invested by the utility in connecting new customers  
17 should be limited to reflect the expected revenues to be  
18 collected from those customers. A discussion of these two  
19 distinct issues is useful.

20  
21 To provide its customers with service, BC Gas makes  
22 substantial capital investments. These capital costs include:

- 23  
24 - the cost of connecting new customers to the distribution  
25 system. These are the cost of the capital invested in the  
26 gas main, service line, and meter set necessary to deliver  
27 gas to each customer;  
28  
29 - the cost of system improvements to provide increased  
30 capacity and meet necessary safety and reliability  
31 standards;  
32  
33 - the cost of alterations to the system to accommodate  
34 actions by third parties (e.g. road alterations); and

- 1 - the cost of the necessary support infrastructure including  
2 buildings, computer systems, etc.

3  
4 These capital costs have been financed by debt and equity and  
5 the financing costs must be paid on a regular basis. In other  
6 words, these financing costs are incurred each month or each  
7 year regardless of the quantity of gas delivered. In  
8 addition, BC Gas incurs considerable costs to operate and  
9 maintain the distribution system. These include:

- 10  
11 - meter reading and inspection costs;  
12  
13 - billing costs, including bill production, distribution, and  
14 payment processing; and  
15  
16 - operating and maintenance costs such as leak surveys,  
17 corrosion protection and general administrative costs.

18  
19 Similar to capital costs, operating and maintenance costs are  
20 substantially fixed, with few expenses affected by throughput  
21 (eg. exceptions include items such as gas odourant  
22 requirements which are less with reduced throughput). Under  
23 the current rate structure, customers who use more gas pay  
24 more for service. As a result, most of the cost of serving  
25 customers (aside from gas cost) do not depend on consumption  
26 whereas the revenue per customer does. Given that customer  
27 costs are generally not consumption-dependent, this rate  
28 structure allows some low consumption users to consume gas  
29 without covering the cost of providing them service. A  
30 typical example would be a fireplace only installation in a  
31 single family dwelling. If these customers are not covering  
32 the cost of serving them, it follows that other users in rate  
33 class, or customers in other rate classes, are paying for  
34 these costs.

1 A consequence of having some customers paying less than their  
2 cost of service is that if they are not offset by enough  
3 customers paying more than their cost of service, there will  
4 be upward pressure on rates during subsequent revenue  
5 requirement applications.

6  
7 Therefore, there are two related problems with consumption-  
8 based rates:

9  
10 1. If the Company's connection policy does not properly  
11 screen them, consumption-based rates may allow uneconomic  
12 customers to connect to the system, which can contribute  
13 to the need for rate increases; and

14  
15 2. Consumption-based rates cause higher consumption customers  
16 to pay more than lower consumption users even though most  
17 of the costs to serve each customer are the same or  
18 similar.

19  
20 Both of these problems can be addressed by moving to a rate  
21 structure which is much less consumption-dependent, where each  
22 customer pays a basic monthly charge to cover most of the  
23 fixed costs of providing service, plus a consumption-based  
24 charge to cover any remaining costs of service, plus a  
25 commodity charge for the cost of the gas consumed. The other  
26 area where the imbalance of rates and costs can also be  
27 addressed is in the Service Line Cost Allowance proposal which  
28 is discussed later in Section 4.0 of this Tab.

29  
30 It should be noted that consumption-based rates also create  
31 difficulties when the Company uses its Main Extension Test to  
32 evaluate applications to extend the gas distribution system.  
33 The Main Extension Test is applied to assess the economic  
34 viability of proposed extensions to the gas distribution  
35 system. One of the key elements of the test is the forecast

1 of revenues to be received from the customers to be served by  
2 the main extension. The revenue forecast is made using the  
3 current rate structure of BC Gas, which, as noted earlier, is  
4 largely dependent on consumption. Therefore, both the number  
5 of customers and the use per customer are important in  
6 forecasting the revenue stream for a proposed main extension.

7  
8 The number of customers projected to connect to the main  
9 extension is relatively straightforward, as most potential  
10 customers can reasonably predict whether they will connect  
11 and, if so, in which year. Vacant lots and changes of  
12 ownership can introduce some level of uncertainty.

13  
14 Use per account for a main extension can be more difficult to  
15 project. Potential customers can be very optimistic in  
16 predicting the number of end uses that they will connect. In  
17 fact, they have a vested interest in taking an optimistic  
18 approach, as it increases the likelihood that the main  
19 extension will be built and decreases the amount of any  
20 customer contributions towards construction costs. However,  
21 once the main extension is constructed, if fewer end uses are  
22 connected by the customer, or the customer takes longer than  
23 predicted to connect some of the end uses, the present value  
24 of the revenue stream will be reduced. In the case of a  
25 contributory main extension, it can result in a situation  
26 where the customers being served do not fully cover the cost  
27 of the main extension. Increasing the basic monthly charge  
28 and reducing the delivery charge reduces this likelihood.

### 29 30 **3.0 PROPOSED CHANGES TO THE BASIC MONTHLY CHARGES**

31  
32 To improve the alignment of rates with costs, BC Gas proposes  
33 to increase the basic monthly charge for Rate 1,2 and 3  
34 customers. The 1996 Fully Distributed Cost (FDC) Study (filed  
35 under Volume 2, Tab 2 of this application) shows the monthly

customer cost for Rates 1, 2, and 3 and other BC Gas rate classes. The Long Run Incremental Cost (LRIC) Study (Volume 2, Tab 1) indicates the cost of serving future gas demand resulting from new customers attaching to the BC Gas system as well as increased demand from existing customers. Study results, along with the current basic monthly charges for Rates 1,2 and 3 customers, are shown in the following table.

**TABLE 1**

<b>Rate</b>	<b>FDC Study</b>	<b>LRIC Study</b>	<b>Current Basic</b>
<b><u>Class</u></b>	<b><u>Monthly</u></b>	<b><u>Monthly</u></b>	<b><u>Monthly Charge</u></b>
	<b><u>Cust. Cost</u></b>	<b><u>Cust. Cost</u></b>	
Rate 1			
Residential	\$17.59	\$21.00	\$ 6.32
Rate 2			
Small Commercial	\$22.66	\$22.00	\$12.64
Rate 3			
Large Commercial	\$84.05	\$52.00	\$12.64

Table 1 shows that the basic monthly charges in each rate class are much less than the monthly customer costs determined in the FDC study and less than the long run incremental costs estimated in the LRIC study. Raising basic monthly charges so that they approach the monthly fixed cost, along with a more rigorous connection policy, will address the problems discussed above associated with consumption based rates.

BC Gas has undertaken a survey of basic monthly charges for Canadian gas utilities to provide a basis for comparison of the basic charges proposed in this application. The survey

1 indicates that residential rates range from \$5.00 to \$14.00  
2 per month, with an average of \$9.16, and that most Canadian  
3 utilities have higher residential basic monthly charges than  
4 BC Gas. BC Gas' proposed basic charges would fall in the  
5 mid-range of basic charges in place in other jurisdictions in  
6 Canada. A similar analysis of Small Commercial (Rate 2) rates  
7 indicates that BC Gas' proposal to increase the monthly basic  
8 charge is also consistent with rates charged by other Canadian  
9 utilities. The increase in Rate 3 - Large Commercial basic  
10 monthly charge is discussed below in section 3.3. Full  
11 results of the survey are provided under Volume 2, Tab 4.

12  
13 The planned transition to higher basic monthly charges must  
14 address the issue of existing customers' expectations. In  
15 particular, to avoid significant bill impacts for smaller  
16 volume customers, BC Gas proposes to phase-in the higher basic  
17 monthly charges over three years. Using Rate 1 as an example,  
18 the basic monthly charge would move to \$9 for 1997, \$10 for  
19 1998 and \$11 for 1999. In each year, the per GJ delivery  
20 charge would be adjusted in order to maintain revenue  
21 neutrality.

22  
23 BC Gas proposes to increase the Basic Monthly Charges for  
24 Rates 1, 2 and 3 as follows:



**TABLE 2**

**Proposed Basic Charge Phase-In**

<u>Rate Class</u>	<u>Current Basic Monthly Charge</u>	<u>Proposed Basic Monthly Charge (effective dates)</u>		
		<u>97/1/1</u>	<u>98/1/1</u>	<u>99/1/1</u>
Rate 1				
Residential	\$ 6.32	\$ 9.00	\$10.00	\$11.00
Rate 2				
Small Commercial	\$12.64	\$15.00	\$17.00	\$20.00
Rate 3				
Large Commercial	\$12.64	\$75.00	\$75.00	\$75.00

BC Gas proposes to maintain the current seasonal rate structure for Rates 1, 2 and 3. However, the winter/summer per GJ delivery charges for each rate class will be adjusted to ensure revenue neutrality. The summer/winter delivery charges for 1997 which reflect the combined impact of the proposed margin shift and higher basic charges are set out in Table 3 below:

**TABLE 3**

**Proposed Delivery Charges  
(excluding Cost of Gas)**

	<u>Current</u>		<u>Proposed</u>	
	<u>Summer</u>	<u>Winter</u>	<u>Summer</u>	<u>Winter</u>
Rate 1				
Residential	\$1.268	\$2.535	\$1.195	\$2.388
Rate 2				
Small Commercial	\$1.021	\$2.041	\$0.969	\$1.936
Rate 3				
Large Commercial	\$1.021	\$2.041	\$0.919	\$1.838

1       **3.1   CUSTOMER SURVEY**

2  
3       BC Gas conducted two surveys of residential (Rate 1) customers  
4       to obtain feedback regarding the proposed increase of the  
5       basic monthly charge. The first survey was conducted by an  
6       independent research company during the week of May 20th, 1996  
7       and utilized 300 individual, 5 minute telephone calls to  
8       current BC Gas customers picked randomly from the Company's  
9       billing information database. The interviewer asked four  
10      questions regarding the acceptability of increasing the basic  
11      monthly charge.

12  
13      The second survey was a "mall intercept" type which was also  
14      conducted by an independent research firm at three Lower  
15      Mainland area shopping malls during the May 25/26 weekend  
16      (Delta, Langley and Burnaby). 150 customers were interviewed  
17      for approximately 5 minutes each, using charts to visually  
18      indicate the proposed increase in the basic monthly charge and  
19      the resulting annual bill impacts.

20  
21      BC Gas has reviewed the results of the two surveys and  
22      believes that, in general, most customers responding to the  
23      survey consider increasing the basic monthly charge to be  
24      acceptable and appropriate from a user-pay perspective.  
25      Furthermore, most customers surveyed support a gradual  
26      transition to higher basic monthly charges.

27  
28      **3.2   Bill Impact Analysis**

29  
30      BC Gas analyzed the impact the proposed increase in basic  
31      monthly charges would have on customers at various levels of  
32      annual consumption for Rate Schedules 1, 2 and 3. To  
33      determine the changes to customers' annual bills, the Company  
34      determined the separate impact of the proposed increased basic  
35      monthly charge, the impact of the reallocation of \$11.2  
36      million of margin to residential customers, and the overall  
37      impact on the "burner-tip" price which includes the basic

charge, the delivery charge, and the commodity cost of gas (no changes to gas costs are included in the bill impact analysis).

For the purposes of this analysis, BC Gas categorized customers in Rates 1, 2 and 3 into three groups by annual consumption patterns. The three groups are High, Medium and Low. The following tables summarize the impact of the proposed increased basic monthly charges and the proposed \$11.2 million reallocation to the residential margin.

The tables use the Lower Mainland gas costs to calculate annual bills but are indicative of the bill impacts for other customers throughout the BC Gas service area.

**TABLE 4**  
**RATE 1 BILL IMPACTS**

Annual Consumption Category	Current Annual Bill \$/year	Annual Bill Increase/Decrease		
		\$11.2 Million Margin Reallocation \$/%	Basic Charge Increase \$/%	Combined Margin Reallocation & Basic Charge Increase \$/%
High (180 GJ/yr.)	\$922	\$25/2.7%	(\$17)/-1.8%	\$10/1.1%
Med. (120 GJ/yr.)	\$640	\$18/2.8%	(\$1)/-0.1%	\$17/2.7%
Low (50 GJ/yr.)	\$358	\$11/3.1%	\$16/4.4%	\$25/6.9%

**TABLE 5**  
**RATE 2 BILL IMPACTS**

Annual Consumption Category	Current Annual Bill \$/year	Annual Bill Increase/Decrease \$/%
High (1,000 GJ/yr.)	\$4,586	(\$59)/-1.3%
Med. (300 GJ/yr.)	\$1,482	\$2/0.1%
Low (100 GJ/yr.)	\$595	\$20/3.3%

**TABLE 6**  
**RATE 3 BILL IMPACTS**

Annual Consumption Category	Current Annual Bill \$/year	Annual Bill Increase/Decrease \$/%
High (6,000 GJ/yr.)	\$24,362	(\$233)/-1.0%
Med. (4,000 GJ/yr.)	\$16,292	\$94/0.6%
Low (2,000 GJ/yr.)	\$8,222	\$421/5.1%

BC Gas considers the annual bill impacts resulting from the combination of increased basic monthly charges and margin reallocation to be reasonable given the percentage of dollar impacts.

**3.3 INCREASE TO LARGE COMMERCIAL BASIC MONTHLY CHARGE**

It should be noted that the proposed increased basic monthly charge for Large Commercial (Rate 3) represents a substantial increase to the basic charge for this rate class and does not provide the same phase-in as proposed for Rate 1 and 2. BC Gas is proposing this larger basic monthly charge for Rate 3 customers to alleviate problems that have arisen since the 1993 Phase B Decision. Currently, the only distinction between the burner tip rates for Rates 2 and 3 is the gas cost recovery component. The gas cost is lower for Rate 3 customers on the basis of a higher average load factor for that group of customers. With basic monthly charges and delivery charges the same for Rates 2 and 3, commercial customers below the 2,000 GJ per year consumption level (the current cut off point for Rate 2 and 3 customers) consistently seek to migrate to Rate 3 to benefit from the lower gas cost recovery component.

Similarly, customers migrating from Rate 3 to Rate 2 experience significant changes to their annual bills. The proposed Rate 3 basic charge ensures that customers are essentially indifferent between Rate 2 and Rate 3 at an annual volume of about 1,500 gigajoules. The proposed increase to \$75.00 for the Rate 3 basic monthly charge with a matching drop in the delivery charge makes rate selection self administered by individual customers based on their own gas use and consumption patterns and reduces the volatility in customers bills.

**4.0 PROPOSED SERVICE LINE COST ALLOWANCE**

The discussion regarding basic monthly charges assumes that the capital cost of connecting new customers is similar for all customers in a given rate class. In reality, the cost of installing a new service line can vary from customer to customer, usually because of the length of pipe required, the

1 terrain, or the landscaping of the property. Since the rates  
2 only recover a limited investment in the service line, it  
3 follows that customers with very high service line costs may  
4 not be covering the costs to serve them.

5  
6 While the Main Extension test addresses customers being served  
7 off of new mains or main extensions, service lines for in-fill  
8 customers (i.e. customers connecting to existing mains) are  
9 not subject to the Main Extension Test. The cost of serving  
10 in-fill customers includes incremental operating and  
11 maintenance expenses (O&M) and capital expenditures, with the  
12 exception of the costs for the main which already exists. It  
13 is not administratively practical to apply a comprehensive  
14 Main Extension type of test for the thousands of in-fill  
15 customers BC Gas connects each year. However, BC Gas believes  
16 that the economic viability of in-fill customers can be  
17 reasonably assured without incurring the cost of administering  
18 a full economic test; if the projected revenues can be  
19 expected to match a given level of expenditure. The use of a  
20 higher basic monthly charge will move toward satisfying the  
21 revenue condition for each new customer, and a Service Line  
22 Cost Allowance could be established to limit the incremental  
23 capital spending on new in-fill customers.

24  
25 BC Gas currently charges an Application for Service fee of \$85  
26 which is intended to recover the administrative costs of  
27 opening a new customer account. In addition, a customer may  
28 be charged for excess service line length, and miscellaneous  
29 costs such as frost charges. BC Gas proposes to retain the  
30 \$85 fee, but to replace the excess length charge, and other  
31 miscellaneous charges, with a Service Line Cost Allowance. As  
32 directed by the BCUC, BC Gas also plans to implement a finance  
33 plan for contributions.

34  
35 The purpose of the Service Line Cost Allowance is to reduce  
36 the costs borne by BC Gas for connecting customers with  
37 extraordinary installation costs. The proposed Service Line

1 Cost Allowance would require customers whose service line  
2 installation costs are significantly higher than average to  
3 contribute to the cost of the service line connection. BC Gas  
4 proposes to prepare an analysis of the service line  
5 installations attached over the last five years to establish  
6 a representative distribution of service line costs for the BC  
7 Gas system. Based on this analysis, a reasonable Service Line  
8 Allowance will be developed that limits the capital invested  
9 for each Service Line. BC Gas will provide further analysis  
10 in this regard as it becomes available.

11  
12 The Service Line Cost Allowance has been proposed instead of  
13 a large Connection Fee, because large up-front connection fees  
14 act as a barrier to entry for some decision-makers wishing to  
15 connect to the natural gas system. This barrier is  
16 particularly troublesome in multi-family complexes where the  
17 builder, who pays the connection fee, does not benefit from  
18 the lower cost of using gas in the future. This issue was  
19 discussed during the 1995 Utility System Extension Proceedings  
20 at Volume 1 pages 101 to 103. A Service Line Cost Allowance  
21 does not produce the same barrier and is therefore the  
22 preferred option.

#### 23 24 **5.0 RATE SCHEDULE 4 - SEASONAL SERVICE**

25  
26 BC Gas serves a relatively small number of customers under  
27 Rate Schedule 4 - Seasonal Service. While there are  
28 relatively few customers served under this rate schedule,  
29 these customers have unique use characteristics that justify  
30 a separate rate classification. Examples of Rate 4 customers  
31 include asphalt plants and municipal outdoor swimming pools.  
32 The customers require firm gas delivery during non-peak  
33 periods which distinguishes them from firm service customers  
34 who require service year round and interruptible customers who  
35 can either switch to a back-up fuel or cease operations should  
36 BC Gas need to interrupt their service.

1 In the 1993 Phase B Rate Design Application, BC Gas  
2 established the current Rate 4 rates by assigning a 150% load  
3 factor to this group. BC Gas recommends that the basis for  
4 establishing rates for Rate Schedule 4 should be changed to  
5 correspond to the other rate schedules offered by BC Gas.

6  
7 First, Schedule 4 customers consume gas during off-peak  
8 periods in the same manner as Rate 7 - General Interruptible  
9 Service customers. There is little difference between the  
10 demands for gas commodity placed on BC Gas by either group of  
11 customers. However, the current gas cost allocation prices  
12 Rate 4 gas costs differently than the gas prices offered under  
13 the summer Rate 7 rates. Since Rate 7 gas prices are market-  
14 based, it is difficult to justify a different price for Rate  
15 4 gas prices than those offered to Rate 7 customers.

16  
17 Second, even though the gas delivery requirements of Rate 4  
18 customers is discontinued during the five winter months  
19 (November through March), they require firm service during the  
20 seven summer months. Rate 4 customers are not required to be  
21 interruptible. Therefore, the Rate 4 delivery margin should  
22 be adjusted to reflect the delivery margin recovered from  
23 comparable firm customers.

24  
25 Rate 4 Gas Cost Recovery Charge

26  
27 BC Gas proposes that the Gas Cost Recovery Charge per  
28 gigajoule be adjusted to the equivalent charge for Rate  
29 Schedule 7 - General Interruptible Service. This change will  
30 result in an increase in gas commodity costs for Rate 4  
31 customers. BC Gas considers this adjustment appropriate  
32 given that the gas supply requirements of Rates 4 and 7 are  
33 similar. Rate 4 customers, particularly asphalt plants, often  
34 request service be extended for a few days or weeks beyond the  
35 normal April 1st to October 31st Off-Peak season. This  
36 extension of service request most often comes from asphalt  
37 plant operations and stems from warmer than normal weather



1 conditions that allow paving projects to begin earlier than  
2 April 1st or continue beyond October 31st. In cases where BC  
3 Gas extends Rate 4 service beyond the off-peak period, BC Gas  
4 proposes to charge the Rate 7 winter gas costs.

5  
6 Rate 4 Delivery Charge  
7

8 BC Gas proposes that the Delivery Charge per gigajoule be  
9 adjusted to the equivalent charge for Rate Schedule 5 -  
10 General Firm Service. This change will better reflect the  
11 firm delivery requirements of Rate 4 Seasonal customers and,  
12 as a result of the reduction in Rate 5 delivery charges  
13 proposed in this Application, will result in a reduction in  
14 the delivery charges for Rate 4 customers.

15  
16 For those periods where BC Gas extends Rate 4 service beyond  
17 the normal off-peak season, BC Gas proposes to apply the  
18 equivalent Rate 5 winter delivery margins. Extension of the  
19 service beyond the normal off-peak season will continue to be  
20 at the sole discretion of BC Gas and customers may not take  
21 service during the Peak season without express prior approval  
22 from the Company. Penalties for unauthorized use of gas  
23 during the peak period will be charged at the \$20.00 UOR rate  
24 established in the Rate 7 table of charges.

25  
26 A revised Rate Schedule 4 is included under Volume 1, Tab 5.

## PROPOSAL TO REVISE INDUSTRIAL RATES AND SERVICE TARIFFS

### 1.0 INTRODUCTION

In addition to its examination of rates, the Company's objective with respect to the industrial initiatives in this Rate Design Application, has been to continue the process of tariff rationalization, simplification and where possible, an improvement in customer choice and flexibility. BC Gas believes the proposed revisions are consistent with this objective.

In this Application, BC Gas proposes changes to industrial rates, terms and conditions. The rate schedules affected are:

Rate Schedule 5 - General Firm Service  
Rate Schedule 7 - General Interruptible Service  
Rate Schedule 8 - Large Volume Interruptible Services  
Rate Schedule 10 - Large Volume Interruptible Sales  
Rate Schedule 13 - Interruptible Peaking Sales  
Rate Schedule 14 - Interruptible Backstopping Sales  
Rate Schedule 22 - Large Volume Transportation  
Rate Schedule 22A - Large Volume Transportation  
(Existing Inland Shippers)  
Rate Schedule 22B - Large Volume Transportation  
(Existing Columbia Shippers)  
Rate Schedule 25 - General Firm Transportation  
Rate Schedule 27 - General Interruptible Transportation

While many changes are being proposed, including substantial reductions in delivery charges, for the most part current service options remain unchanged.

The more significant changes include:

a) Inter-rate class and inter-service (firm & interruptible)

1 grouping. Long sought by customers and marketers alike,  
2 this ability now becomes available with the changes made  
3 to Rate Schedules 22, 25 and 27. Customers, whether they  
4 purchase firm or interruptible gas, or whether they are  
5 small volume or large volume customers, can now group gas  
6 management functions and take full advantage of each  
7 member's load diversification benefits;

8  
9 b) Revisions to Schedule 10 Large Volume Interruptible Sales  
10 that remove the "fixed price" component;

11  
12 c) Revisions to Schedule 14 Backstopping Sales, now retitled  
13 "Industrial Gas Sales", which permit customers to arrange  
14 for customized supply beyond the present day to day, or  
15 week to week, spot market transactions which have usually  
16 been used to backstop curtailments of Schedule 10 supply;

17  
18 c) Discontinuance of Schedules 8 and 13; i.e. bundled Large  
19 Volume Interruptible Service and Interruptible Peaking  
20 Sales; and

21  
22 d) Reduced administration fees that reflect projected cost  
23 reductions anticipated as a result of the new nomination  
24 and grouping guidelines.

25  
26 BC Gas has also eliminated a number of tariff requirements  
27 which are no longer considered necessary. The Company is of  
28 the view that industrial customers are sufficiently  
29 knowledgeable about the alternatives and the risks and rewards  
30 associated with making their own supply and transportation  
31 arrangements, that it is no longer necessary for the utility  
32 to direct how and in what manner Customer's should contract  
33 their upstream supply and transportation service.  
34

1 In the material that follows, details of the changes referred  
2 to above, and other industrial initiatives are provided.

3  
4 **2.0 SCHEDULES INTRODUCED IN 1993**

5  
6 In 1993, BC Gas faced significant challenges in its effort to  
7 reconcile the diverse rates, terms and conditions of  
8 industrial service between its Inland, Columbia and Lower  
9 Mainland service areas. Much time was spent in developing  
10 more "customer friendly" market responsive tariffs that  
11 offered a range of services and operating terms more closely  
12 matching the needs of customers. The final product was a set  
13 of consolidated sales and transportation tariffs with common  
14 terms and conditions applicable to industrial customers within  
15 the BC Gas service territory. They were:

16  
17 1) Schedule 5 - General Firm Service

18  
19 This rate schedule is a bundled option for general firm  
20 industrial customers that combines gas supply and  
21 transportation into a single firm service. Schedule 5  
22 arose from an amalgamation of the former Lower Mainland  
23 Schedule 2209 and the Inland Schedule 5.

24  
25 2) Schedules 7 and 8 - General & Large Volume Interruptible  
26 Service. These schedules were developed as "bundled"  
27 interruptible service options that allowed customers to  
28 purchase interruptible gas and combine it with  
29 interruptible transportation service in one package.  
30 Both the commodity gas price and delivery charges were  
31 set on a postage stamp basis throughout the Company's  
32 service areas.

33  
34 Most Schedule 7 (small volume interruptible) customers

1 are located in the Lower Mainland. Since the Phase B  
2 Decision in 1993, many of these customers have opted to  
3 arrange their own gas supplies and now contract with BC  
4 Gas for transportation service only.

5  
6 Schedule 8 was intended to provide large volume  
7 industrials with the same kind of administration free  
8 service offered to small volume customers under Schedule  
9 7. Despite the initial concerns that an option like this  
10 be available, Schedule 8 has never received much support.

- 11  
12 3) Schedules 10, 13 and 14 - Interruptible Sales to Large  
13 Volume Customers, including Peaking and Backstopping  
14 Service. These schedules were developed as gas commodity  
15 sales only. Sales under these rate schedules occur at  
16 the interconnection point between the facilities of BC  
17 Gas and the upstream transmission pipelines that deliver  
18 gas to the Company. Gas is sold at market prices, which  
19 in the case of Schedule 14 are typically reflective of  
20 the Company's purchase price, or at an index or fixed  
21 price reflective of the market, i.e. Schedule 10.

22  
23 BC Gas has retained a significant percentage of the large  
24 volume interruptible sales market under Schedule 10  
25 because gas sold under that schedule has been priced "at  
26 the market". Reliable suppliers that provide service at  
27 a level customers expect, will often find that small  
28 variations in price alone will not cause a customer to  
29 switch.

30  
31 Schedules 13 and 14 contain no minimum charges and are  
32 strictly optional supplies that a customer purchases only  
33 when it chooses. Accordingly, most industrial customers  
34 have elected to execute Schedule 13 and 14 agreements

1 "just in case". While Schedule 14 has proven successful  
2 by providing customers with a backstopping option  
3 previously not available, it has at the same time made  
4 Schedule 13 somewhat redundant.

- 5  
6 4) Schedules 22, 22A and 22B - Large Volume Transportation  
7 Service. Service under these rate schedules is for  
8 large volume (12,000 GJ per month or greater) customers.  
9 The 1993 tariffs introduced for the first time the  
10 concept of a monthly basic charge and a transportation  
11 administration fee.

12  
13 The 22A and 22B designations refer to large volume  
14 industrial customers located in the Inland and Columbia  
15 service areas respectively. As a result of the Phase B  
16 proceedings, the rate structure for both groups changed  
17 significantly.

18  
19 Both Inland and Columbia Schedule 22A and 22B customers  
20 contract for a combination of firm and interruptible  
21 service. About 80% or more of their total gas  
22 consumption is firm.

23  
24 Customers served under Schedule 22 are generally Lower  
25 Mainland large volume interruptibles. Rates under this  
26 Schedule are negotiable for firm service and volumetric,  
27 with a seasonal differential, for interruptible service.  
28 When determining firm service rates, for large volume  
29 customers, the Company bases its negotiations on the  
30 General Firm industrial rate as a benchmark. Over 95% of  
31 gas transported under Schedule 22 is interruptible.

- 32  
33 5) Schedules 25 and 27 - General Firm and Interruptible  
34 Service. These schedules are used by customers who wish

to transport gas within the Company's distribution system on either a firm or an interruptible basis and who have monthly volumes of less than 12,000 GJ.

### 3.0 REVISIONS

The following is an overview of the key revisions BC Gas proposes to make, effective November 1, 1996, with respect to the industrial Rate Schedules.

In order to assist customers with their own review of the proposed revisions to the Rate Schedules, BC Gas has provided blacklined copies of each tariff setting out specifically where and what revisions are being proposed.

#### 3.1 Rate 5

Rate Schedule 5 customers, together with those receiving service under Rate Schedules 7, 25 and 27, will see decreases in the order of 35% under the rates proposed in this Application. If the current delivery charge proposals in this Application receive the Commission's approval, Rate 5 and 7 customers will receive some \$3.2 million in 1997 rate reductions. This is approximately \$0.46 per GJ in the average delivery charge.

Service under Rate Schedule 5 is for firm customers who purchase gas from BC Gas. With the exception of the rates themselves, most of the revisions that have been made to Schedule 5 have focused on improving clarity and consistency amongst the various rate schedules offered to industrial customers.

One revision to be noted relates to the change in the

1 applicability of Rate 5. As discussed in other sections of  
2 this filing, the rates and rate structures proposed for the  
3 Rate 5 and Rate 25 group of customers were developed using a  
4 class average load factor of 65%. However, since the rates  
5 are variable, (i.e. the delivery charge is volumetric), BC Gas  
6 must ensure that customers appropriately qualify, hence the  
7 revisions to the applicability section in Rate 5 and 25. For  
8 further discussion of the "applicability provisions" see  
9 section 3.9 on Rate Schedule 25 and pages 10 and 11 of Tab 3  
10 of this Volume.

### 11 12 **3.2 Rate 7**

13  
14 As with Rate Schedule 5, most of the revisions to this  
15 Schedule has been made for clarity and consistency.

16  
17 For Rate 7, the most notable revision has been the deletion of  
18 clause 2.1 (e) which requires as a condition of service that

19  
20 *"the customer has and continues to have, to the*  
21 *satisfaction of BC Gas, an alternative fuel burning*  
22 *installation..."*

23  
24 BC Gas believes conditions or directives of this type are out  
25 of place in the current market environment. Industrial  
26 customers are capable, and far better equipped, to assess and  
27 accept the costs and benefits of their actions rather than  
28 have the utility dictate such terms.

### 29 30 **3.3 Rate Schedule 8**

31  
32 This is currently a "burner-tip" bundled service option  
33 available to large volume customers who wish to contract for  
34 a combined gas supply and transportation service from BC Gas.



1 However, the current premium embedded in the rate over its  
2 transportation service equivalent, and the provincial tax  
3 savings a customer realizes through the separate purchase of  
4 gas, are significant economic factors that far outweigh the  
5 administrative benefit customers derive from contracting for  
6 bundled service.

7  
8 In the year that immediately followed implementation of the  
9 Phase B rate design initiatives, only 2 of 20+ large volume  
10 customers in the Lower Mainland availed themselves of the  
11 service under Rate Schedule 8. In the second year, only one  
12 customer elected Schedule 8 service. At present there are no  
13 customers under contract for Schedule 8 bundled service.

14  
15 Given the increasing awareness and sophistication of large  
16 volume industrial customers, as well as lack of interest in  
17 the service, BC Gas believes it would not be unduly harmful or  
18 restrictive to discontinue Rate Schedule 8 at this time.

#### 19 20 **3.4 Rate Schedule 10**

21  
22 This schedule will continue to be used as BC Gas' primary  
23 vehicle for commodity sales to large volume industrial  
24 customers. Transactions under Schedule 10 occur at the  
25 interconnection point between the facilities of BC Gas and the  
26 facilities of upstream transmission pipelines. In order to  
27 transport gas to the customer's facilities a separate  
28 transportation agreement under Schedule 22 must be in place.

29  
30 The most significant change to Schedule 10 deals with the  
31 removal of the "fixed price" option. Over the past two years  
32 a declining percentage of the Company's Schedule 10 sales have  
33 taken place at the fixed prices posted each fall. Most  
34 customers have elected the index price option as their

1 preferred choice. Notwithstanding the proposed change to  
2 Schedule 10, customers will still be able to contract for  
3 supply at a fixed price, but do so under Schedule 14.

4  
5 Since 1993 the restrictive nature of the exclusivity clause  
6 has been an issue respecting Schedule 10 that has been  
7 repeatedly raised by customers and marketers. However, BC Gas  
8 believes Schedule 10 was not the proper vehicle to adequately  
9 address their concerns. The exclusivity provision in Schedule  
10 10 remains unchanged but Schedule 14 has been revised to now  
11 make it possible for customers to purchase gas from BC Gas on  
12 any basis they wish. This will allow customers to be free to  
13 make other supply arrangements without being in contravention  
14 of an exclusivity provision. Under Schedule 14 customers will  
15 be free to change supplier from day to day, week to week, and  
16 month to month.

17  
18 As a consequence of the changes to Schedule 14 the provision  
19 of Priority 1 Curtailment sales under Schedule 10 is no longer  
20 necessary. It is proposed that arrangements of this nature  
21 will now be contracted under Schedule 14 as well.

### 22 23 **3.5 Rate Schedule 13**

24  
25 This sales option was presented in the Phase B proceedings as  
26 a means by which customers could access "into the gas day"  
27 peaking gas supplies. In other words, during those periods  
28 when regular interruptible gas supplies are under curtailment,  
29 or a customer is limited to the volume of gas authorized by  
30 its direct supplier, small amounts of gas might be released on  
31 a first come first served basis as Rate Schedule 13 peaking  
32 gas if conditions on the Company's system during the gas day  
33 allowed the gas to be released. While at first it was thought  
34 the service might offer customers a reasonable opportunity to

1 access emergency peaking gas, operational considerations as  
2 well as the availability of prior day supply options, i.e.  
3 Schedule 14, served to make Schedule 13 of little practical  
4 value. In fact, while all Large Volume customers have  
5 executed Schedule 13 agreements in order to have the ability  
6 to access such supplies if the need arises, no sales have  
7 actually ever taken place under this schedule since its  
8 inception in 1993.

9  
10 BC Gas believes its Schedule 14 option, as well as other  
11 market alternatives have proven successful in providing  
12 adequate and timely supply alternatives prior to the start of  
13 a "gas day". In addition, there are provisions within the  
14 Rate Schedule 22, 25 and 27 that also deal with  
15 (transportation) supply shortages caused by a customer's  
16 supplier and which permit the customer to access  
17 "backstopping" gas. Accordingly BC Gas proposes to  
18 discontinue Rate Schedule 13 effective November 1, 1996.

### 19 20 **3.6 Rate Schedule 14**

21  
22 Formerly titled "Interruptible Backstopping Sales", this  
23 schedule has been used primarily to make spot gas available  
24 during periods when Schedule 10 supplies had been curtailed.  
25 This was done by aggregating the gas needs of Schedule 10  
26 customers during such periods and by purchasing from third  
27 parties, when available, an equivalent amount of spot gas.  
28 The transactions flow through at cost.

29  
30 However, changing markets and increasing customer awareness  
31 now require that suppliers provide more flexible and creative  
32 approaches to commodity sales. Accordingly, BC Gas proposes  
33 to revise schedule 14 so that BC Gas can remain a credible  
34 supply alternative for customers. Schedule 14 now retitled

1 "Industrial Gas Sales", has been redrafted specifically with  
2 the intent of providing customers increased choice and  
3 flexibility. When customers are looking to arrange customized  
4 supply and pricing, such as non-exclusive arrangements with BC  
5 Gas, they will now be able to do so using Schedule 14. This  
6 might include such things as, but is not necessarily limited  
7 to:

- 8
- 9 a) index pricing variations (i.e. daily or weekly vs  
10 monthly);
  - 11
  - 12 b) spot supply options (daily, weekly, monthly or longer) or  
13 combination thereof; and
  - 14
  - 15 d) fixed price arrangements etc.
  - 16

17 The price for gas sold under Schedule 14 will take into  
18 consideration a variety of factors such as timing (i.e. at  
19 what point in the contract year customers are requesting a  
20 fixed price), the customer's total annual volume and the  
21 customer's specific load factor.

22

23 BC Gas believe customers will find this new flexibility an  
24 attractive feature enabling them to shape their supply  
25 according to their needs, not according to a predetermined  
26 inflexible standard.

27

### 28 3.7 Rate Schedule 22

29

30 With respect to the terms and conditions of service, the only  
31 significant change involves the introduction of grouping.  
32 Unlike Rate Schedules 25 and 27 which have been able to group  
33 for the purpose of balancing their supplies on the BC Gas  
34 system, the Company's large industrials have required to

1 nominate and balance on an individual basis. With this  
2 Application that changes. As will be discussed further in the  
3 sections dealing with Rate Schedules 25 and 27, large volume  
4 customers will now also be able to group together, issuing a  
5 single aggregate nomination and balancing the groups gas  
6 supply as if for one large industrial.

7  
8 Overall, rates for Schedule 22 have been decreased  
9 substantially, about 35% on average, or about \$0.30/GJ for  
10 interruptible service and about the same for firm service. In  
11 keeping with the minimum volume qualifier, BC Gas has  
12 increased the basic charge to \$2500 from the present \$1643,  
13 but has reflected this adjustment in the delivery charge which  
14 will now average approximately \$0.48/GJ on an annual basis,  
15 depending on load factor.

16  
17 Tariff wording changes have been made in the interest of  
18 increasing clarity and removing impediments. The Company  
19 expects that most changes will be welcomed and supported by  
20 customers.

### 21 22 **3.8 Rate Schedule 22A**

23  
24 In this Application, BC Gas proposes to maintain Schedule 22A  
25 rates at their present levels with the exception of the  
26 transportation administration fee, presently \$608 per month,  
27 which will be reduced to match that set for all other  
28 transportation customers i.e. \$100 per month. These rates  
29 will, as in the past, continue to be subject to periodic  
30 revenue requirement adjustments as filed by the Company. No  
31 changes are being proposed for Schedule 22A non-captive,  
32 customers who have entered into long term fixed price "bypass"  
33 equivalent rates.

34

1 With respect to the terms and conditions of service, there are  
2 no material changes to Schedule 22A, although by reference,  
3 most of the contractual terms and conditions within Schedule  
4 22 will continue to be applicable to Schedule 22A shippers.

5  
6 **3.9 Schedule 22B**

7  
8 Prior to the Phase B proceeding, the Columbia large  
9 industrials were each assigned customer specific costs that  
10 were recovered by way of individual monthly demand charges.  
11 The customers were grouped into a rate adjustment model which  
12 effectively caused each customer's demand charge to be a  
13 function of all the others within the model. Essentially, the  
14 model acted to adjust rates for all the customers in the group  
15 when a change to demand occurred in order to ensure revenue  
16 from this customer group remained stable.

17  
18 As part of the Phase B proceedings, the Commission approved a  
19 proposal that the Company and its customers negotiate a new  
20 rate structure and develop rates that resulted in fair  
21 treatment for all customers. BC Gas and its customers  
22 negotiated and produced a demand/commodity rate structure  
23 similar to that in the Inland service area. The Commission  
24 subsequently approved this rate structure in 1994.

25  
26 In this Application, BC Gas proposes to maintain the existing  
27 Schedule 22B rates at their existing levels subject to  
28 periodic adjustment resulting from revenue requirement  
29 applications. As with other transportation customers, it is  
30 proposed that there be a reduction in the monthly  
31 administration fee under Schedule 22B from its present level  
32 of \$608.00 per month down to \$100.00 per month.

33  
34 Other than those items noted in the Rate Schedule 22B clause

1 3.2 "Inapplicable Terms and Conditions", all other terms and  
2 conditions of Schedule 22 will continue to apply to Schedule  
3 22B.

4  
5 **3.10 Rate Schedule 25**  
6

7 This is the Company's general firm industrial transportation  
8 service option. The customers on this rate schedule consist  
9 of industrials who require uninterrupted transportation  
10 service year round. Except for the rate reductions proposed  
11 for this rate class, little of a material nature has been  
12 changed with respect to Schedule 25. However some notable  
13 features include:  
14

- 15 1. Grouping - previously, grouping simply meant that these  
16 customers could group gas supply and other upstream  
17 components for the benefit of several customers at one  
18 time. However, nominations and gas imbalance inventories  
19 were maintained on a customer by customer basis on the BC  
20 Gas system.  
21

22 The new provisions will now permit customers or their  
23 agents to group several customers together and to  
24 nominate and manage their gas imbalance inventories on an  
25 aggregate basis on the BC Gas System. In addition it  
26 will also now permit Schedule 25 customers to group with  
27 interruptible or large volume customers. By  
28 consolidating all members of a group into one aggregate  
29 nomination and gas inventory record, the administration  
30 function for BC Gas is simplified, hence the substantial  
31 reduction in administration fees. The new tariff wording  
32 also enables small volume customers to group with large  
33 volume customers, firm to group with interruptible, or  
34 any combination as the case may be. This means customers

1 and their agents will be able to take better advantage of  
2 the upstream gas supply diversity benefits that will be  
3 available from grouping a wide variety of loads together.  
4

- 5 2. Balancing - Schedule 25 customers will continue to be  
6 balanced on a monthly basis. However, if a Schedule 25  
7 customer wishes to group with a large industrial, that  
8 customer will be subject to the same Schedule 22  
9 balancing provisions as those for the large volume  
10 industrial. In addition, in keeping with the Company's  
11 objective to withdraw from setting gas supply guidelines  
12 for customers and their agents, BC Gas will no longer be  
13 providing firm peaking as part of its Schedule 25  
14 service. BC Gas will provide as much balancing gas as  
15 needed, subject to curtailment when that gas is required  
16 by the core market. BC Gas believes sufficient market  
17 alternatives now exist for customers and their agents to  
18 economically contract for peak day supplies from other  
19 sources. BC Gas believes it is inappropriate and  
20 unnecessary for BC Gas to supply transportation customers  
21 with "needle peaking" gas from the core market's supply  
22 portfolio.  
23

- 24 3. Rates - as referred to elsewhere in this application,  
25 revenue to cost ratios from the FDC study for the Rate  
26 5/25 class of customers are high. This required  
27 attention, and the proposals in this Application result  
28 in rate reductions of approximately 35% for the class.  
29 However, in order to ensure that only high load factor  
30 customers qualify for these rate schedules a revision to  
31 the applicability section of the tariff is now required.  
32 In addition, in order to maintain the integrity of the  
33 rate class and protect against customer migrations from  
34 Rate 3 which could threaten the rate stability of each



1 class, BC Gas is also incorporating a minimum consumption  
2 qualifier of 5,000 GJ per annum which is the economic  
3 cross-over point under the current rate schedule.

4  
5 Basic charges have been set at \$300 per month which is  
6 closer to the class customer cost of approximately \$232  
7 in the FDC study than the current \$366 per month. The  
8 delivery charges continue to be split on a 2:1  
9 winter/summer ratio.

10  
11 As discussed earlier, the new group nomination and  
12 balancing procedures are expected to significantly reduce  
13 the administration costs of BC Gas thereby resulting in  
14 the \$100 per month charge. This reduction should serve  
15 to greatly enhance the competitive options for smaller  
16 volume customers.

17  
18 **3.11 Rate Schedule 27**

19  
20 As the interruptible service equivalent of Schedule 25, this  
21 Schedule is available to customers who are prepared to accept  
22 capacity curtailments about once or twice a year by switching  
23 to an alternative fuel or by accommodating the service  
24 interruption by other means. As a General Interruptible  
25 Service the customers utilizing this rate schedule are  
26 typically smaller volume (less than 12,000 GJ per month)  
27 accounts.

28  
29 As with Rate Schedule 25, the most significant changes  
30 proposed for this schedule relate to Grouping, Balancing and  
31 Rates. With respect to Grouping and Balancing, the discussion  
32 in the Schedule 25 section above applies equally to Schedule  
33 27.

34

1 The rate reduction proposed by way of this Application for the  
2 Rate 7/27 customer class amounts to some 35% or \$2.6 million  
3 in total. This decrease is the equivalent of approximately  
4 \$0.35 per GJ in the delivery charge. The basic charge of \$600  
5 per month and the administration fee have been determined in  
6 much the same manner as for Schedule 25. For a detailed  
7 discussion of the methodology used to establish the per unit  
8 delivery charges, refer to section 4.2 under this Tab.

9  
10 **4.0 RATES AND RATE STRUCTURE**

11  
12 **4.1 Demand Metered Rates**

13  
14 BC Gas proposes that all rate changes, whether basic, delivery  
15 or administration charges become effective January, 1997. All  
16 other proposals related to the Company's industrial service  
17 offerings are proposed to take effect November 1, 1996.

18  
19 As part of the Company's Phase B Rate Design Application BC  
20 Gas applied for seasonal rates for its industrial service  
21 schedules. During the hearing, BC Gas indicated that it  
22 intended to examine demand metered rates for possible  
23 implementation by the Company at its next rate design filing.  
24 Since that time BC Gas has undertaken a more detailed review  
25 of this issue and after careful consideration, has concluded  
26 that implementation of a demand/commodity rate structure for  
27 small volume firm industrial service (Rate Schedules 5 and 25)  
28 would not be appropriate at this time. A variety of factors  
29 influenced this conclusion. They are:

- 30  
31 1. Class Load Factor - While demand/commodity rate  
32 structures are generally a good way of sending customers  
33 the appropriate price signals about their individual use  
34 of facilities, class load factors of approximately 65%

1 for Rate 5 and Rate 25 customers suggest a  
2 demand/commodity rate structure in and of itself may not  
3 necessarily yield significant changes in customer peak  
4 day consumption patterns in this particular case.  
5

- 6 2. Peak Day Factor - this customer class represents in  
7 aggregate less than 4% of the utility's peak system  
8 throughput. Consequently, any demand side management  
9 impact of imposing demand metered rates will be limited.  
10

- 11  
12 3. Service Differentiation (supply and transport vs  
13 transport only) - based on the Company's LRIC study the  
14 most significant benefit from DSM peak shaving  
15 initiatives is derived by way of the utility shaving its  
16 peak day gas supply needs. While some benefit is also  
17 derived by way of lower capital costs associated with  
18 peak shaving demand on the Company's distribution system,  
19 by far the greater benefit comes from the supply side.  
20 Since over half the peak day demand of this group (3.5%)  
21 are transportation customers, a significant impact can  
22 only come from about half that amount, i.e. 1.0 - 1.5%.  
23

- 24 4. Metering - to properly implement demand metered rates  
25 requires fitting all affected customers with daily  
26 metering capability. While this may be a desired  
27 objective (for various other reasons) for some customers,  
28 irrespective of the rate structure, it may not  
29 necessarily be required for every customer within the  
30 class. Accordingly, implementing demand metered rates  
31 could promote the expenditure of capital without clear  
32 benefits.  
33  
34

## 4.2 Interruptible Rates

Service	Schedule	Delivery Charges		
		Winter	Summer	Average
Firm	5/25/22	\$1.05	\$0.52	\$0.78
Interruptible	7/27	\$0.77	\$0.52	\$0.64
Interruptible	22	\$0.67	\$0.34	\$0.48

Note: the above rates do not include the effects of revenue requirement increases or riders.

BC Gas proposes to maintain the same relative relationship between small and large volume interruptible rates by offering the same proportionate discounts from firm service as are currently in place. That approach was tested against the methodology used in the Phase B proceeding where a discount was established on the basis of a customer's avoided costs plus incentive. BC Gas concluded that both methodologies produces similar results.

To re-create the methodology used in the Phase B proceeding the following analysis was conducted.

### Discount Methodology:

1.	Proposed Average Firm Rate	\$0.78
	Alternative Fuel Discount <sup>1</sup>	(0.04)
	Incentive Adjustment <sup>2</sup>	<u>(0.10)</u>
2.	Proposed Average General Interruptible Rate	0.64
	Service Priority/Differentiation <sup>3</sup>	<u>(0.12)</u>
3.	Proposed Large Volume Interruptible Rate	<u>0.52<sup>4</sup></u>
	(before Basic Charge adjustment)	

1. Alternative Fuel Discount - typical incremental fuel costs for propane, oil or diesel can range from \$7.00 -

1       \$9.00/GJ net of avoided gas cost. For distribution  
2       capacity, curtailments are estimated at about 1 - 2 days  
3       per annum. An approximate discount of \$0.04/GJ;  $(\$8.00$   
4        $+ 365)/2$  days would be required to offset the alternative  
5       fuel costs.

- 6  
7       2.   Incentive Adjustment - customers, irrespective of the  
8       level of curtailment, must provide adequate backup  
9       facilities in the event of service operation. The  
10      capital costs associated with these facilities varies  
11      depending upon the type of backup fuel used. Typical  
12      systems are propane/air, oil and diesel. Some customers  
13      elect not to construct or maintain backup facilities, but  
14      choose rather to assume the risk of production losses.

15  
16      BC Gas investigated the costs of various backup fuel  
17      systems. Based on the Company's analysis, the avoided  
18      cost of a propane/air system installed is approximately  
19      \$0.06/GJ, on average, on an annualized basis. By  
20      incorporating an additional 5% incentive, i.e.  $(\$0.78 \times$   
21       $0.05) = \$0.04$ ; not only to cover the customers avoided  
22      capital costs, but also to provide an encouragement to  
23      consider interruptible service, it would bring the amount  
24      of an "Incentive Adjustment to about \$0.10/GJ.

- 25  
26      3.   Service Priority/Differentiation - This discount would  
27      give recognition to the added costs related to  
28      alternative fuel, productivity hardships and gas  
29      management differences (daily vs monthly balancing)  
30      associated with large volume interruptible service.  
31      However, trying to develop a precise relationship is  
32      difficult and would require a high degree of judgement.  
33      Since even a one or two day variation in curtailment can  
34      result in added fuel costs of about \$0.02 - \$0.04/GJ, BC

Gas believes an aggregate discount of \$0.12/GJ would be quite fair and reasonable.

4. Basic Charge Differential - The difference between \$0.52/GJ and the proposed rate of \$0.48/GJ relates to the level of the basic charge. With delivery charges at the \$0.52/GJ level, basic charges would have been set at the FDC "customer related" cost of about \$1,000. However, upon closer examination it became apparent that a basic charge of \$1,000 would be in conflict with the spirit of the 12,000 GJ/month minimum quantity qualification since the cross-over between the small and large interruptible rate structures would occur as low as 10,000 GJ/month. Consequently, the basic charge for large volume customers was set at \$2,500, causing the cross-over to be at 12,000 GJ/month. To maintain revenue neutrality within the rate class, an equivalent unit rate decrease representing the basic charge adjustment needed to be made, hence the \$0.04/GJ decrease in the delivery charge from \$0.52/GJ to \$0.48/GJ.

The Company's LRIC study provides useful information that points in general support of the rates and level of the discounts. Current LRIC estimates suggest the value of peak day capacity on BC Gas' system to be ~~\$83~~<sup>\$89</sup> per GJ, or put another way, suggest a maximum discount for interruptible capacity, assuming operation at 100% LF, of ~~\$0.23~~<sup>\$0.24</sup> per GJ (i.e. ~~\$83.00~~<sup>\$89</sup> ÷ 365). Given a load factor of 65% for the rate 5/25 customer class, this discount escalates to a maximum of ~~\$0.35~~<sup>\$0.369</sup>. The weighted average discount for General and Large Volume interruptible service is about \$0.25/GJ. When that weighted average of \$0.25 is compared to the maximum discount of \$0.35/GJ derived from the 65% load factor firm price, it indicates the discounts being proposed neither equal nor

1 exceed the maximum that should be offered with actual firm  
2 load factors of 65%.

3  
4 Furthermore, information provided by the FDC studies also  
5 supports a large volume/small volume differential. The FDC  
6 study indicates that on a unit basis, a difference exists  
7 between the distribution costs associated with serving small  
8 volume customers versus large volume customers. Similarly,  
9 the FDC study also indicates that the demand-related costs, on  
10 a non-coincident peak basis, of serving small versus large  
11 interruptibles also differ. The FDC study suggests that small  
12 volume interruptibles, which tend to have lower load factors,  
13 derive greater value from the excess capacity available on the  
14 system.

15  
16 BC Gas has concluded that the proportionate discounting  
17 methodology, when tested against the Phase B approach,  
18 produces interruptible rates that are fair and reasonable and  
19 which represent an acceptable estimate of the value of  
20 interruptible service.

#### 21 22 **4.3 Transportation Administration Fees**

23  
24 An issue that has received attention in the past is that of  
25 transportation administration fees. Customers and marketers  
26 have repeatedly asked that BC Gas re-examine its methodology  
27 and the appropriateness of the administration fees in the  
28 context of present day circumstances.

29  
30 As recently as June 1995, BC Gas submitted, in response to  
31 Commission Order G-42-94, a review of administration fees then  
32 in effect. However, since that time, customers and marketers  
33 have regularly appealed to BC Gas to further review the  
34 administration process, the Company's methodology and its

1     appropriateness.

2  
3     While BC Gas does not believe current circumstances warrant  
4     any material change in fees, the Company does believe the  
5     proposed changes to the Company's transportation service,  
6     which will permit large scale grouping of customers, will have  
7     a significant effect on the overall administration of  
8     transportation service and should therefore be reflected in  
9     the fees proposed.

10  
11    The review of costs and fees conducted last year was a  
12    detailed but difficult analysis requiring a large degree of  
13    judgment in some areas. It was undertaken on then known  
14    operating conditions. At this time the full extent of the  
15    administrative benefits that will accrue to BC Gas from the  
16    operation of the group nomination and balancing procedures  
17    cannot be determined. BC Gas does believe however, that the  
18    benefits will be significant. Accordingly, BC Gas proposes to  
19    reduce administration fees to \$100.00 per month per customer  
20    to reflect the anticipated efficiencies that will accrue.  
21    Revisions to the tariffs as now proposed, or the creation of  
22    new ones that create other alternatives, may add to the costs.

23  
24    While the new administration fees are based on judgment, it is  
25    the Company's intent to implement the new balancing and  
26    grouping features of the tariff and to test and evaluate the  
27    new procedures after a reasonable length of time.

#### 28 29    **4.4   GROUPING/BALANCING**

30  
31    In this Application, BC Gas has addressed appeals from  
32    customers and their agents to revise the present  
33    transportation tariffs in order to accommodate the grouping of  
34    inter-class (small volume vs large volume) and inter-service



1 (firm vs interruptible) customers for the purposes of reducing  
2 the administration component of the utility's transportation  
3 service.

4  
5 The revisions to Rate Schedules 22, 25 and 27 meet that  
6 objective. The revisions not only accomplish the goal of  
7 enabling different customer combinations to group together,  
8 but has permitted BC Gas to bring about standardization of  
9 some of the terms and conditions of Schedules 25, 27 and 22.

10  
11 One of the previous benefits made available to transportation  
12 customers served under Schedules 25 and 27 and which BC Gas  
13 has retained is that of monthly balancing. Large volume  
14 customers under Schedule 22 will also continue with their  
15 present balancing arrangements, including the generous  
16 tolerances (i.e. 20% for under-ordering, unlimited if over-  
17 ordering). However, as stated earlier, where small volume  
18 customers wish to group with large volume customers, the  
19 balancing provisions under the large volume tariff, Schedule  
20 22, must apply.

21  
22 BC Gas acknowledges that the Schedule 22 balancing provisions  
23 are not quite as generous as those offered within Schedules 25  
24 and 27. However, BC Gas believes that the ability of small  
25 volume customers to group with a larger more diverse customer  
26 base will eliminate these concerns. In addition, despite the  
27 load management opportunities that wider scale grouping will  
28 bring, BC Gas has chosen not to impose tighter daily balancing  
29 tolerances at this time, although nomination and inventory  
30 management practices will be reviewed periodically to  
31 determine whether tighter tolerances should be considered.  
32 Consequently, agents and their customer groups will continue  
33 to enjoy generous balancing tolerances.

**BC Gas Utility Ltd.**

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6904

**David M. Masuhara**

Vice President  
Legal & Regulatory Affairs  
and Secretary



July 2, 1996

British Columbia Utilities Commission  
6th Floor - 900 Howe Street  
Vancouver, British Columbia  
V6Z 2N3

Attention: R.J. Pellatt  
Commission Secretary

Dear Sirs:

**RE: 1996 Rate Design Application**


The attached pages included in BC Gas' 1996 Rate Design Application have been revised to correct typographical errors. Please replace the first table labelled "Proposed Industrial Delivery Changes" in Volume 1, Tab 5, page 25. The second sheet replaces Volume 2, Tab 3, page 41.

BC Gas apologizes for any confusion caused by these changes. A copy of these revisions will be provided to all registered intervenors in this proceeding.

All of which is respectfully submitted.

Yours very truly,

BC GAS UTILITY LTD.



David M. Masuhara

**BC Gas Inc.**

1111 West Georgia Street  
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**David M. Masuhara**  
Vice President  
Legal & Regulatory Affairs  
and Secretary

EX-5

**BCGas**

July 25, 1996

Letter to all Intervenors

BC Gas' letter to intervenors, dated July 19, informed intervenors of the meetings scheduled for July 31 and August 1 to resolve outstanding issues related to Rates 5/25 and the wording of the terms and conditions of the industrial rate schedules. The attached package of information provides BC Gas' responses to a number of requests for further information relating to these issues and includes revised industrial rate schedules with changes from the Rate Design Application Workshops and the Negotiation Sessions.

**A. INDUSTRIAL TARIFF SCHEDULES**

The attached revised rate schedules reflect the amended wording as discussed by the parties participating in the negotiation sessions held on July 18 and 19th. In cases where no consensus was reached, BC Gas has provided what we believe is the most appropriate wording. The proposed changes to the revised rate schedules will be reviewed at the meeting at the Commission's offices on July 31st and August 1st. Please note that we have not included a revised Shipper Agent Agreement as it is still under review. Depending on the outcome of this review, additional changes to the "Principal Obligant" section of rate schedules 10, 14, 22, 25 and 27 may be required. We will circulate any additional changes in advance of next week's meetings.

**B. LIMITATIONS OF LIABILITY**

We have also included a revised definition section and amendments to Sections 23.1 (g) and 24 of the General Terms and Conditions of BC Gas. To the extent that the limitation of liability wording of the industrial rate schedules has been revised it is reflected in the enclosed rate schedules.

**C. LOAD FACTOR AND APPLICABILITY ISSUES**

The proposed Rate 5/25 applicability criteria and other issues related to the Rate 5/25 applicability were raised by some of the intervenors at the workshops and at the negotiation sessions. BC Gas has reviewed:

- 1) the appropriateness of the 65% load factor for FDC purposes
- 2) the appropriateness of the 65% load factor for gas cost allocation
- 3) the minimum 50% load factor criterion
- 4) the annual base load quantity calculation as a proxy for load factor
- 5) the creation of a Rate 23 Transportation service
- 6) the creation of a Rate 24 Seasonal Transportation service

Each of these issues are discussed separately below.

### **1) 65% Load Factor For FDC Purposes**

In response to a number of inquiries from intervenors, BC Gas has reviewed its analyses of the 65% load factor calculation for Rate 5 customers based on its regression analyses and is satisfied that the results of the load factor study are correct. Accordingly, BC Gas proposes to continue to base its FDC allocations on the 65% load factor assumption. The supporting materials for the 65% load factor calculation were circulated at the July 16 workshop.

Some parties requested BC Gas to also compare the results of the regression analysis using daily metered data rather than monthly data. BC Gas is preparing this additional analysis using daily metered information which we expect will further support the load factor analyses. The daily metered load factor analyses will be circulated as soon as possible and will be discussed at next week's meetings.

### **2) 65% Load Factor For Gas Cost Allocation Purposes**

While BC Gas continues to be of the view that a 65% load factor is appropriate for pricing the monopoly delivery service component of the rate, BC Gas agrees with the views expressed by some intervenors that this load factor may not be appropriate for pricing the cost of gas when competitive options are available for T-service customers. In this regard, we note that the proposed applicability criteria seek to limit access to Rate 5/25 to customers with a minimum 50% load factor. BC Gas shares the concern expressed by some intervenors that the 65% load factor may result in too low a gas cost allocation for a large number of Rate 5 customers.

Conversely, using a lower load factor for pricing gas may result in too high a gas cost for some high load factor Rate 5 customers. However, if gas costs from BC Gas are too high, customers have the option to contract directly for cheaper gas supplies. BC Gas also notes that at a 65% load factor, the gas price for Rate 5 would be lower than the Buy/Sell reference price. This would result in the case where Rate 5 gas prices would be lower than the price paid for Buy/Sell gas supplies. Accordingly, BC Gas recommends that a load factor of 50% (equal to the minimum load factor required for Rate 5/25 service) be

used for gas cost allocation purposes. This will result in an increase in the cost of gas from the rates filed in the Application for Rate 5 customers and a small reduction for Rate 1, 2 and 3 customers. A table showing the revised gas costs based on the 50% load factor is attached and labelled Attachment 1.

### **3) Minimum 50% Load Factor Applicability Criterion**

BC Gas continues to strongly advocate the need for load factor and minimum volume stipulations in the applicability requirements in order to maintain the integrity of the rate classes. In particular, BC Gas notes that the revenue forecasts, including the proposed rate reductions for Rate 5/25, reflect the current load factor and customer mix. Without the proposed applicability constraints, BC Gas anticipates significant customer migration from Rate 3 to Rate 5/25, an erosion of both Rate 3 and 5/25 load factors and unrecovered delivery margins.

Notwithstanding these concerns, a number of intervenors indicated that the proposed 50% minimum load factor criterion for Rate 5/25 would be unduly onerous for their existing customer groups. BC Gas is in the process of reviewing the existing customer lists for Rate 5 and 25 to evaluate the impact of the minimum load factor criterion on all existing customers. The preliminary results of this analysis confirms that a large majority of current Rate 5/25 customers meet the 50% load factor criterion. Given the relatively few customers that could be affected, BC Gas proposes that those customers who do not meet but are relatively close to meeting the applicability criterion should be grandfathered to avoid any undue hardship on those few customers from the change in applicability. BC Gas' complete analysis of the applicability criteria will be provided prior to next week's meetings.

### **4) Annual Baseload Quantity as a proxy for Load Factor**

In the Application, BC Gas proposed to replace the current requirement for a minimum of 50% process load with an applicability criterion more closely aligned with load factor. The calculation of load factor used by BC Gas requires a relatively complex and administratively cumbersome regression analysis. BC Gas advocated using a proxy for load factor that is not based on regression analysis. Instead BC Gas suggested that a customer's Annual Baseload Quantity could be compared to their total annual use where the Annual Baseload Quantity was the minimum of the July or August use, multiplied by 12. It was determined that a 75% Annual Baseload Quantity was roughly equivalent to a 50% load factor. Further analysis suggests that a 70% Annual Baseload Quantity may be more appropriate and that using the average of the July and August gas consumption may reduce the impact of anomalous summer monthly gas usage.

Some intervenors have suggested that a simpler and more common method for estimating load factor is to divide the annual daily average gas use by the product of the monthly volume of gas during the month of maximum use divided by the number of days in that month and multiplied by 1.25. BC Gas is also evaluating this alternative. The preliminary analysis shows that this approach yields substantially the same results as the Annual Baseload Quantity approach as well as the regression analysis. The full results of these analyses will be provided prior to next week's meeting.

#### **5) Rate 23 Transportation Service**

It has been suggested that it might be appropriate to create a transportation tariff parallel to Rate 3 for transportation customers that do not satisfy the applicability requirements of Rate 25. BC Gas agrees with this suggestion and is evaluating the administrative and gas supply related issues associated with developing a transportation service for large commercial customers.

BC Gas is of the view that all transportation customers must be daily (demand) metered. BC Gas does not consider the Rate 3 customer class to be a sufficiently heterogeneous customer class that the need for daily metering can be avoided. This is particularly true when viewed in conjunction with Rate 25 which would allow access to the best load factor customers only. The remaining Rate 23 customers could have significantly different peak load requirements than the average Rate 3 customer. This would put an undue burden on the utility's residential and commercial sales customers. BC Gas is presently developing its proposal for recovering the cost for the incremental transportation administration, and capital and installation costs for a schedule 23 rate class.

#### **6) Rate 24 Seasonal Transportation Service**

It was recommended that BC Gas investigate the option of developing a Rate 24 parallel to Rate 4. While Rate 4 represents only a relatively small number of customers and throughput, BC Gas notes there are reasons to address this issue in this Application. At the present time, Rate 4 customers may avail themselves of direct purchases through a Buy/Sell arrangement. However, BC Gas notes that under this arrangement, the price paid by the customer for gas under Rate 4 is less than the BC Gas Reference Price. This anomalous result is at odds with the intent of Buy/Sells and is best rectified by the services in lieu of a buy/sell arrangement.

BC Gas proposes to address this issue in greater detail at the next scheduled meetings July 31st and August 1st.

All intervenors having an interest in any of these issues are encouraged to participate in the discussions to be held at the Commission's offices on July 31st and August 1st.

Yours very truly,

BC GAS UTILITY LTD.

*for*   
David M. Masuhara

R45SHFC

1

25/07/96

16:20

## BC GAS UTILITY LTD.

## 1996 RATE DESIGN APPLICATION

## COST OF GAS SHIFTS ARISING FROM SCHEDULES 4 AND 5 CHANGES (1)

Line No.	Particulars	1996 Volumes (TJ)	Unit Gas Cost - (\$/GJ)		Gas Cost Shift (2) x (5) (\$000)
			Existing	Revised	
	(1)	(2)	(3)	(4)	(5)
1	<b>Lower Mainland Service Area</b>				
2	Schedule 1 - Residential	54,524.2	\$2.5911	\$2.5943	\$0.0032
3	Schedule 2 - Small Commercial	15,123.1	2.7330	2.7366	0.0036
4	Schedule 3 - Large Commercial	23,265.4	2.3925	2.3955	0.0030
5	Schedule 4 - Seasonal	242.2	1.1656	1.3500	0.1844
6	Schedule 5 - General Firm	2,339.7	2.0120	1.8778	(0.1342)
7	Schedule 6 - NGV and VRA	777.8	1.3450	1.3430	(0.0020)
8	Total Lower Mainland	96,272.4			27.8
9					
10	<b>Inland Service Area</b>				
11	Schedule 1 - Residential	17,559.5	2.4045	2.4072	0.0027
12	Schedule 2 - Small Commercial	5,429.8	2.5331	2.5361	0.0030
13	Schedule 3 - Large Commercial	4,101.6	2.2247	2.2271	0.0024
14	Schedule 4 - Seasonal	177.7	1.1154	1.3500	0.2346
15	Schedule 5 - General Firm	1,157.2	1.8802	1.7583	(0.1219)
16	Schedule 6 - NGV and VRA	76.8	1.2787	1.2761	(0.0026)
17	Total Inland	28,502.6			(26.1)
18					
19	<b>Columbia Service Area</b>				
20	Schedule 1 - Residential	1,997.3	2.4328	2.4353	0.0025
21	Schedule 2 - Small Commercial	742.1	2.5624	2.5654	0.0030
22	Schedule 3 - Large Commercial	400.1	2.2502	2.2537	0.0035
23	Schedule 4 - Seasonal	0.0	1.1150	1.3500	0.2350
24	Schedule 5 - General Firm	65.4	1.8959	1.7766	(0.1193)
25	Schedule 6 - NGV and VRA	0.7	1.2904	1.2828	(0.0076)
26	Total Columbia	3,205.6			0.8
27					
28	Rounding Differences	0.0			(2.5)
29	Total Cost of Gas Shifts	127,980.6			\$0.0

30

31

32 Notes: (1) Rate 5 load factor set at 50% and Rate 4 charged Rate 7 seasonal (summer) gas cost.



EX. 4A

**PROPOSAL TO REVISE INDUSTRIAL RATES AND SERVICE TARIFFS**

Commodity Sales Tariffs - Rates Schedules 7, 10

These rate schedules offer medium to large volume commercial and industrial customers interruptible gas (Schedule 10 only) and interruptible gas and delivery service (Schedule 7 only) based on published market price as determined by "Inside FERC's Gas Market Report". See pricing and methodology details in the filing with the Commission dated August 27, 1996.

The sale of interruptible gas under these rate schedules is made possible, for the most part, by way of surplus gas supplies and transportation capacity contracted for the core market, but which become excess due to fluctuating core market demand caused by changing weather conditions. The combination of baseload supplies, storage arrangements and seasonal gas supply agreements that are contracted to ensure reliable service is maintained to the core market, are also sufficient in providing highly reliable interruptible gas supply for sale under Schedule 7 and 10. Any margins earned from these sales, i.e. the difference between the variable cost of the gas sold and the market price, is credited back to the Gas Cost Reconciliation Account (GCRA) and goes toward reducing the core markets overall gas costs. These margins have contributed approximately \$25.0 million over the past four years toward reducing the core market's overall gas costs.

**A. Schedule 7 - General Interruptible Service**

On August 27, 1996, BC Gas filed with the Commission its proposed pricing for the gas commodity component of its Schedule 7 Interruptible Service. These sales are typically to smaller volume commercial and industrial customers who have installed alternative fuel backup systems in the event of

1 curtailment. The pricing options proposed in the Company's  
2 August 27, 1996 filing were as follows:

	<u>Winter</u>	<u>Summer</u>
3		
4		
5		
6	Fixed	\$1.80/GJ
7	Index*	\$1.47/GJ
8		Full Index
9		less 1.25%

10 \* Index = The Index Price for Lower Mainland and Inland  
11 service areas will be as set out in Inside F.E.R.C.'s Gas  
12 Market Report for Gas delivered to Northwest Pipeline  
13 Corp. at the Canadian border and may be subject to  
14 adjustments reflecting delivery terms consistent with  
15 prevailing market conditions. For the Columbia service  
16 area, the Index Price will be as set out in the Canadian  
17 Gas Price Reporter for Gas delivered by Nova Corporation  
18 of Alberta to Empress plus an allowance for Alberta  
19 Natural Gas Company tolls to reflect prices for delivery  
20 to Kingsgate at the Canadian border. The Index Price  
21 will be subject to \$US to Canadian dollar conversion and  
22 will be specified monthly, subject to a minimum floor  
23 price that meets or exceeds the BC Gas forecast marginal  
24 Gas cost for the Month in which Gas is to be sold.

25  
26 Details of the methodology and rationale upon which these  
27 prices and discounts are based can be derived from a review of  
28 BC Gas' August 27, 1996 filing with the Commission.

29  
30 BC Gas proposes to make no changes with respect to its  
31 application for Schedule 7 commodity pricing.

32  
33 B. Schedule 10 - Large Volume Interruptible Sales

1 Unlike Schedule 7 which provides small volume interruptible  
2 customers with gas commodity and delivery service in a bundled  
3 form at the customer's meter inlet, Schedule 10 is for the  
4 sale of gas only to large volume customers taking delivery at  
5 the interconnect of the BC Gas distribution system with that  
6 of its transporters (e.g. Westcoast, Alberta Natural Gas,  
7 etc.). Also unlike Schedule 7, and as explained in the  
8 Company's initial filing, BC Gas is no longer offering a fixed  
9 price option.

10  
11 However, upon further review, BC Gas has concluded that a 2.5%  
12 discount which equates to a "winter" discount of about  $\$1.90^1$   
13  $\times .025 \times 150 \approx \$7.13/\text{GJ}$  is insufficient to cover an estimated  
14 alternative fuel cost of about  $\$7.00 - 9.00/\text{GJ}$ . Only by  
15 increasing the discount to 3%, i.e.  $\$1.90 \times .03 \times 150 =$   
16  $\$8.55/\text{GJ}$ , does the discount achieve a level that at least  
17 reasonably covers the cost alternative fuel burned during  
18 periods of curtailment.

19  
20 BC Gas hereby proposes to amend its application increasing the  
21 discount from index for Schedule 10 sales from the Company's  
22 initial proposal of a 2.5% discount up to 3%. In fact, even  
23 at 3% the discount is barely adequate to cover a single day of  
24 curtailment. Any interruptions of 2 days or more make the gas  
25 price under Schedule 10 uncompetitive.

---

26 <sup>1</sup> Sumas winter strip as at September 26, 1996.

# TABLE OF CHARGES

Proposed rates for November 1, 1996

		<u>Lower Mainland Service Area</u>	<u>Inland Service Area</u>	<u>Columbia Service Area</u>
(a)	Sales Commodity Charge per gigajoule			
(i)	between and including April 1 and October 31	Index Price <sup>1</sup>	Index Price <sup>1</sup>	Index Price <sup>1</sup>
(ii)	between and including November 1 and March 31	Index Price <sup>1</sup> less 3.0 percent	Index Price <sup>1</sup> less 3.0 percent	Index Price <sup>1</sup> less 3.0 percent

**Franchise Fee Charge** of 3.09% of the aggregate of the above charges, is payable (in addition to the above charges) if the location of the facilities to which the Gas sold under this Rate Schedule is delivered is within the municipal boundaries of a municipality to which BC Gas pays Franchise Fees.

## Notes:

- The Index Price for Lower Mainland and Inland service areas will be as set out in Inside F.E.R.C.'s Gas Market Report for Gas delivered to Northwest Pipeline Corp. at the Canadian border and may be subject to adjustments reflecting delivery terms consistent with prevailing market conditions. For the Columbia service area, the Index Price will be as set out in the Canadian Gas Price Reporter for Gas delivered by Nova Corporation of Alberta to Empress plus an allowance for Alberta Natural Gas Company tolls to reflect prices for delivery to Kingsgate at the Canadian border. The Index Price will be subject to \$US to Canadian dollar conversion and will be specified monthly, subject to a minimum floor price that meets or exceeds the BC Gas forecast marginal Gas cost for the Month in which Gas is to be sold.

**BC Gas Utility Ltd.**

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**David M. Masuhara**  
Vice President  
Legal & Regulatory Affairs  
and Secretary



August 27, 1996

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

Attention: Mr. R.J. Pellatt, Commission Secretary

**MARKET BASED COMMODITY PRICING AND POSTING DATES FOR  
RATE SCHEDULES 7 AND 10 COMMODITY PRICES**

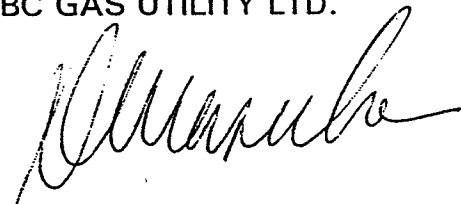
In accordance with the Commission's February 21, 1992 Decision in the matter of BC Gas' Phase A Rate Design application BC Gas hereby submits for approval its proposed commodity pricing for Rate Schedules 7 and Rate Schedule 10 interruptible sales for the gas year commencing November 1, 1996. Please note unlike the 1995/96 contract year, BC Gas has not submitted a Rate Schedule 8 pricing option as per our 1996 Rate Design Application.

		Commodity Pricing (CDN\$/GJ)	
		Nov 1 - Apr 1	Apr 1 - Nov 1
Rate Schedule 7 General Service Interruptible Sales	(Fixed Pricing)	\$1.80	\$1.47
	(Index Pricing)	Index <sup>1</sup> - 1.25%	Index <sup>1</sup>
Rate Schedule 10 Large Volume Interruptible Sales (Index Pricing)		Index <sup>1</sup> - 2.5%	Index <sup>1</sup>
Index = Is the Canadian border price for spot gas delivered to Northwest Pipeline Corp at the first of the month as published in "Inside FERC's Gas Market Report" converted to Canadian dollars per gigajoule using the noon exchange rate for the first of the month as quoted by the Bank of Canada.			

The attached report details BC Gas' reasoning and justification for the requested approval. Any questions related to this filing should be directed to Mr. Steve Yallouz, Off-System Services & Market Development at 443-6304 or Mr. Henry Dinter, Manager, Transportation & Industrial Services at 443-6491.

Yours very truly,

BC GAS UTILITY LTD.

A handwritten signature in black ink, appearing to read 'Masuhara', written over the company name.

David M. Masuhara, Vice President  
Legal and Regulatory Affairs

DMM/SY/bjt

**FILING OF MARKET BASED  
COMMODITY PRICING  
FOR RATE SCHEDULES 7 AND 10**

**ATTACHMENT TO FILING  
OF AUGUST 27, 1996**

**A. MARKET BASED COMMODITY PRICING FOR GAS YEAR 96/97**

**i. Introduction**

In accordance with the 1992 Phase A Decision regarding market based pricing for interruptible gas supply from BC Gas' core market supply portfolio, BC Gas herein will establish such pricing for the gas year 1996/97. Furthermore, BC Gas proposes to use the same methodology for establishment of the fixed price offering as was used in our filings for the 1992/93, 1993/94, 1994/95 and 1995/96 gas years. Where minor adjustments are made to the methodology they will be noted in the text below, however, a full explanation of the rationale supporting the methodology can be referenced in our filing of September 13, 1994.

**ii. Rate Schedule 7 General Interruptible Service Fixed Price Determination**

As stated above, BC Gas proposes to use the methodology used in previous years to establish fixed pricing for our interruptible gas supplies. This methodology began with the use of the NYMEX futures market to establish a value for natural gas during the gas year in question and subsequently convert that to a price reflecting the value of BC Gas' core market interruptible supplies delivered to the Sumas marketplace. The steps used are as follows:

- 1) Establishment of an appropriate one year strip (November 1996 to October 1997) price.
- 2) Conversion to a Sumas price using an appropriate basis differential.
- 3) Conversion from U.S. to Canadian dollars.
- 4) Conversion from firm to interruptible supply.
- 5) Conversion to seasonal rates.



*NYMEX One Year Strip*

BC Gas has tracked recent trading of the November 1996 - October 1997 NYMEX contract. As with last year's filing, rather than using a point specific strip associated with the last 3 days trading of the near month contract, BC Gas in this filing proposes to use a rolling average of the period August 6, 1996 to August 19, 1996. Examination of this rolling average (see Appendix) shows that financial markets have valued the one year strip at \$2.14 US/MMBtu over this period.

<p><b><i>NYMEX (November 1996 - October 1997)</i></b> <b><i>\$2.14 US/MMBtu</i></b></p>
---

*Conversion to Sumas Cash*

Again, BC Gas tracks the basis differentials offered for Sumas delivery by various financial houses active in futures trading. (See Appendix). BC Gas has chosen to average quotes provided over the 10 day period, August 6, 1996 to August 19, 1996, to mitigate any potential anomalies associated with a particular quote. This averaging produces a basis differential of \$0.84 US/MMBtu. Thus:

<p><b><i>\$ 2.14 US/MMBtu - \$ 0.84 US/MMBtu = \$ 1.30 US/MMBtu</i></b></p>
---

*Conversion from US to Canadian Dollars*

BC Gas proposes to use a currency exchange forecast of \$0.73 US/Cdn or \$1.3699 Cdn/US for use in the following calculation. The exchange forecast is consistent with the exchange rate used in BC Gas' forecast of Direct Purchase Reference prices for the 1996/97 contract year. It is also equivalent to the rate being currently used by BC Gas' Treasury Department for its forecasts.

<p><b><i>\$ 1.30 US/MMBtu x \$1.00 CDN/\$0.73 US x 0.948 MMBtu/1 GJ =</i></b> <b><i>\$ 1.69 CDN/GJ</i></b></p>
--

Conversion of Sumas Firm Delivery to BC Gas Rate Schedule 7  
Interruptible Delivery

Information from BC Gas' Gas Supply Planning department and alternate fuel suppliers suggest there are no significant changes to either the duration of forecast curtailments due to cold weather, or the cost of alternative fuel (from 1995/96 assumptions). However, due to increased liquidity at Sumas and corresponding increased in supply options, BC Gas estimates the number of curtailment days to be reduced from 8 to 5 days. Therefore;

(Firm gas + BC Gas' Weighted Average Cost of Service under Rate Schedule 27) x the number of days in the year must equate to:

P (the landed cost at the plant of an interruptible gas supply) times the number of days of gas use per year plus the cost of alternate fuel use per year.

iii. Rate Schedule 7 Fixed Price Determination

The methodology used to establish Rate Schedule 7 prices is therefor as follows:

$$(C \$1.69/GJ + \$0.98^1/GJ) \times 365 = \\ P \times (365-5) \text{ days} + \$8/GJ \times 5 \text{ days}$$

$$P = \$2.59/GJ$$

Backing out the cost of service determines the commodity price of

$$\$ 2.59 /GJ - \$ 0.98^2/GJ = \$ 1.61/GJ$$

at the Westcoast interconnect.

---

<sup>1</sup> Estimates for number of days of curtailment and cost of alternate fuel are consistent with both last year's assumptions and the latest available information. Transportation margin includes 1996 Revenue Requirement increases but does not include proposed 1997 Rate Design Application modifications. However, as discussed earlier is not significant to the determination of the interconnect price.

As in previous years, BC Gas proposes the following seasonal pricing scheme.

<i>Winter \$ 1.80/GJ</i>	<i>Summer \$ 1.47/GJ</i>
--------------------------	--------------------------

This pricing scheme was based on winter Sumas quotations from financial brokers on August 20, 1996. The Sumas price for the winter was quoted in the range of US\$1.40 - \$1.44/MMBtu or Cdn \$1.82 - \$1.87/GJ. The winter price was set at approximately \$0.05/GJ below the mid-point. Using the 1 year price \$1.61 and the **Winter** price, the **Summer** price was derived.

iv. Rate Schedule 7 and 10 Index Price Offering

BC Gas proposes to continue to offer its Rate Schedule 10 buyers an index related pricing option but no fixed price option. In addition, BC Gas proposes to continue to offer an index pricing option to its Rate Schedule 7 buyers.

For Rate Schedule 10, during the past two winters BC Gas has offered a discount of between five and ten percent to reflect the interruptibility of BC Gas' core market supply. While we still believe a discount is appropriate, it is our belief that a two and one-half (2.5) percent discount might better optimize the return to BC Gas' core market. In addition, as with Rate Schedule 7, BC Gas believes that increased liquidity at Sumas should reduce interruptibility and thus justify a lower discount.

Furthermore, BC Gas believes that a 2.5% discount is competitive in comparison with the historical daily spot market price during the winter. This is illustrated in the attached appendices. This data demonstrates that during the past two winters the average daily spot price has averaged 7.5% less the corresponding first of the month Index FERC index. Therefore, the 2.5% discount cannot be perceived as significantly under cutting comparable market opportunities.

Comparison of Inside FERC Monthly Index vs Daily Spot Price - Midpoint as reported by Gas Daily		
	<u>Inside FERC</u>	<u>Daily Spot</u>
Average for past two winters	US \$1.272/MMBtu	\$1.177
Daily Spot Price is therefore on average 7.5% less.		

For Rate Schedule 7 buyers, BC Gas proposes to offer a similar discount during the winter, however the discount shall be 1.25% in recognition of the higher level of service associated with this type of supply. BC Gas is fully cognizant that this may push the Rate Schedule 7 buyers to direct purchase alternatives, but we continue to feel the reliability and flexibility of BC Gas supply should make our supply competitive.

#### Index Related Pricing

	Commodity Pricing (CDN\$/GJ)	
	November 1 - April 1	April 1 - November 1
Rate Schedule 7 General Service Interruptible Sales (Index Pricing)	Index <sup>1</sup> - 1.25%	Index <sup>1</sup>
Rate Schedule 10 Large Volume Interruptible Sales (Index Pricing)	Index <sup>1</sup> - 2.5%	Index <sup>1</sup>
Index = Is the Canadian border price for spot gas delivered to Northwest Pipeline Corp at the first of the month as published in "Inside FERC's Gas Market Report" converted to Canadian dollars per gigajoule using the noon exchange rate for the first of the month as quoted by the Bank of Canada.		

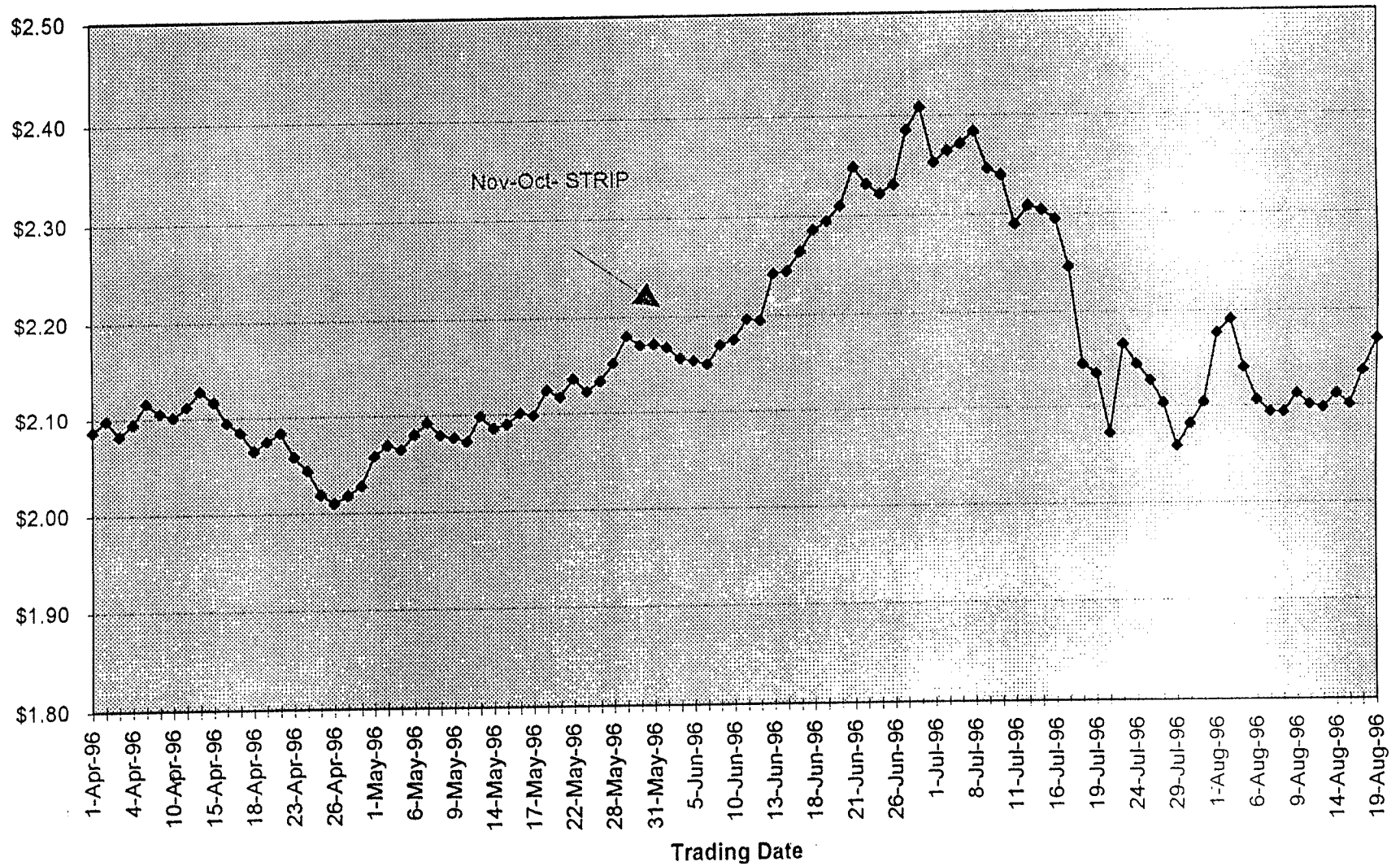
As per previous years, BC Gas qualifies its Index price offering by stating that should the Index price methodology result in a price below BC Gas' variable cost of gas, we reserve the right to adjust these sales prices to cover the variable cost.

## **APPENDICES**

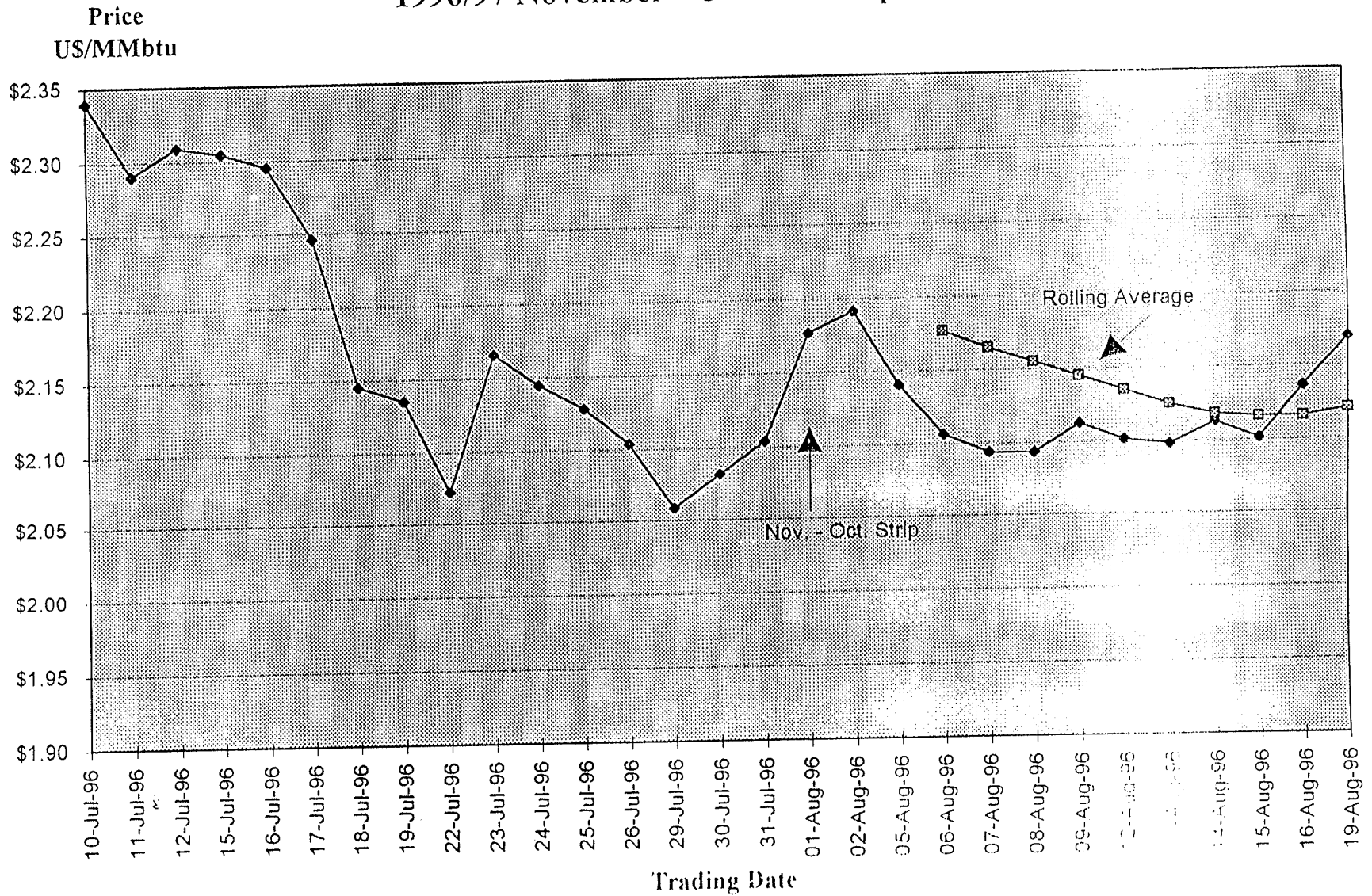
Gas Utility Ltd.		
US		
1996/97 November - October Strip		
Trading Date	Nov. - Oct. Strip	Rolling Average
	U\$/MMbtu	U\$/MMbtu
10-Jul-96	\$2.34	
11-Jul-96	\$2.29	
12-Jul-96	\$2.31	
15-Jul-96	\$2.30	
16-Jul-96	\$2.30	
17-Jul-96	\$2.25	
18-Jul-96	\$2.15	
19-Jul-96	\$2.14	
22-Jul-96	\$2.07	
23-Jul-96	\$2.17	
24-Jul-96	\$2.14	
25-Jul-96	\$2.13	
26-Jul-96	\$2.10	
29-Jul-96	\$2.06	
30-Jul-96	\$2.08	
31-Jul-96	\$2.10	
01-Aug-96	\$2.18	
02-Aug-96	\$2.19	
05-Aug-96	\$2.14	
06-Aug-96	\$2.11	\$2.18
07-Aug-96	\$2.09	\$2.17
08-Aug-96	\$2.09	\$2.16
09-Aug-96	\$2.11	\$2.15
12-Aug-96	\$2.10	\$2.14
13-Aug-96	\$2.10	\$2.13
14-Aug-96	\$2.11	\$2.12
15-Aug-96	\$2.10	\$2.12
16-Aug-96	\$2.14	\$2.12
19-Aug-96	\$2.17	\$2.12

# 1996/97 November - October Strip

Price  
US\$/MMBtu



# 1996/97 November - October Strip





Gas Utility Ltd.		
SS		
<b>Recent Average of Basis Differential Quotations</b>		
Trading Date	Basis Differential	
	US/MMbtu	
6-Aug-96	\$0.91	
7-Aug-96	\$0.87	
8-Aug-96	\$0.83	
9-Aug-96	\$0.84	
12-Aug-96	\$0.83	
13-Aug-96	\$0.84	
14-Aug-96	\$0.83	
15-Aug-96	\$0.80	
16-Aug-96	\$0.81	
19-Aug-96	\$0.83	
Average	\$0.84	

**COMPARISON OF MONTHLY INDEX PRICE VS  
CANADIAN DAILY PRICE**

	<b>U\$/MMBtu Monthly Inside FERC</b>	<b>U\$/MMBtu Average Gas Daily Sumas<sup>1</sup></b>
Nov - 94	\$1.520	\$1.505
Dec - 94	\$1.630	\$1.467
Jan - 95	\$1.400	\$1.074
Feb - 95	\$1.030	\$1.039
Mar - 95	\$1.000	\$1.009
Nov - 95	\$1.260	\$1.091
Dec - 95	\$1.290	\$1.114
Jan - 96	\$1.240	\$1.183
Feb - 96	\$1.200	\$1.302
Mar - 96	\$1.150	\$0.991
<b>Average</b>	<b>\$1.272</b>	<b>\$1.177</b>

<sup>1</sup> **Average Gas Daily Sumas price is the mid-point of the daily spot mid point price reported daily in Gas Daily.**



**PROPOSED INDUSTRIAL DELIVERY CHARGES**  
**Pro-Forma - Subject to adjustments as noted below.**

TRANSPORTATION SERVICE	PRESENT WINTER	PRESENT SUMMER	PROPOSED WINTER \$/GJ	PROPOSED SUMMER \$/GJ
<b><u>D. RATE SCHEDULE 22 - LARGE VOLUME</u></b>				
a) Basic Charge Per Month	\$ 1,643.00	\$ 1,643.00	\$2,500.00	\$2,500.00
b) Delivery Charge				
• Firm	\$ 1.65	\$ 0.85	\$ 1.05	\$ 0.52
• Interruptible	\$ 0.976	\$ 0.671	\$ 0.64* ← .67	\$ 0.36* ← .34
c) Administration Charge Per Month	\$ 608.00	\$ 608.00	\$ 100.00	\$ 100.00
<b><u>E. RATE SCHEDULE 22A (CLOSED)</u></b>				
a) Basic Charge Per Month	\$3,284.00	\$3,284.00	No change	No change
b) Delivery Charge				
• Firm Demand Charge per month	\$ 7.824	\$ 7.824	No change	No change
• Interruptible	\$ 0.630	\$ 0.630	No change	No change
c) Administration Charge Per Month	\$ 608.00	\$ 608.00	\$100.00	\$100.00
<b><u>F. RATE SCHEDULE 22B (CLOSED)</u></b>				
a) Basic Charge Per Month	Same	Same	\$3,345.00	\$3,345.00
b) Delivery Charge				
• Firm Demand Charge/Mo.	Same	Same	\$ 5.520	\$ 5.520
• Interruptible			\$ 0.793	\$ 0.550
c) Administration Charge	\$608.00	\$ 608.00	\$ 100.00	\$ 100.00
<b><u>E. RATE SCHEDULE 25 - FIRM</u></b>				
a) Basic Charge Per Month	\$ 366.00	\$ 366.00	\$ 300.00	\$ 300.00
b) Delivery Charge	\$ 1.65	\$ 0.85	\$ 1.05	\$ 0.52
c) Administration Charge Per Month	\$ 213.00	\$ 213.00	\$ 100.00	\$ 100.00
<b><u>F. RATE SCHEDULE 27 - INTERRUPTIBLE</u></b>				
a) Basic Charge	\$ 851.00	\$ 851.00	\$ 600.00	\$ 600.00* ← \$ 300.00
b) Delivery Charge	\$ 1.16	\$ 0.85	\$ 0.77	\$ 0.52
c) Administration Charge Per Month	\$ 213.00	\$ 213.00	\$ 100.00	\$ 100.00

\*NOTE: 1. Subject to 1997 Revenue Requirement increase effective January 1, 1997.  
2. Riders not incorporated.



**PROPOSED INDUSTRIAL DELIVERY CHARGES**  
**Pro-Forma - Subject to adjustments as noted below.**

TRANSPORTATION SERVICE	PRESENT WINTER	PRESENT SUMMER	PROPOSED WINTER \$/GJ	PROPOSED SUMMER \$/GJ
<b><u>D. RATE SCHEDULE 22 - LARGE VOLUME</u></b>				
a) Basic Charge Per Month	\$ 1,643.00	\$ 1,643.00	\$2,500.00	\$2,500.00
b) Delivery Charge				
• Firm	\$ 1.65	\$ 0.85	\$ 1.05	\$ 0.52
• Interruptible	\$ 0.976	\$ 0.671	\$ 0.67	\$ 0.34
c) Administration Charge Per Month	\$ 608.00	\$ 608.00	\$ 100.00	\$ 100.00
<b><u>E. RATE SCHEDULE 22A (CLOSED)</u></b>				
a) Basic Charge Per Month	\$3,284.00	\$3,284.00	No change	No change
b) Delivery Charge				
• Firm Demand Charge per month	\$ 7.824	\$ 7.824	No change	No change
• Interruptible	\$ 0.630	\$ 0.630	No change	No change
c) Administration Charge Per Month	\$ 608.00	\$ 608.00	\$100.00	\$100.00
<b><u>F. RATE SCHEDULE 22B (CLOSED)</u></b>				
a) Basic Charge Per Month	Same	Same	\$3,345.00	\$3,345.00
b) Delivery Charge				
• Firm Demand Charge/Mo.	Same	Same	\$ 5.520	\$ 5.520
• Interruptible			\$ 0.793	\$ 0.550
c) Administration Charge	\$608.00	\$ 608.00	\$ 100.00	\$ 100.00
<b><u>E. RATE SCHEDULE 25 - FIRM</u></b>				
a) Basic Charge Per Month	\$ 366.00	\$ 366.00	\$ 300.00	\$ 300.00
b) Delivery Charge	\$ 1.65	\$ 0.85	\$ 1.05	\$ 0.52
c) Administration Charge Per Month	\$ 213.00	\$ 213.00	\$ 100.00	\$ 100.00
<b><u>F. RATE SCHEDULE 27 - INTERRUPTIBLE</u></b>				
a) Basic Charge	\$ 851.00	\$ 851.00	\$ 300.00	\$ 300.00
b) Delivery Charge	\$ 1.16	\$ 0.85	\$ 0.77	\$ 0.52
c) Administration Charge Per Month	\$ 213.00	\$ 213.00	\$ 100.00	\$ 100.00

\*NOTE: 1. Subject to 1997 Revenue Requirement increase effective January 1, 1997.  
2. Riders not incorporated.



**PROPOSED INDUSTRIAL DELIVERY CHARGES**  
**Pro-Forma - Subject to adjustments as noted below.**

TRANSPORTATION SERVICE	PRESENT	PRESENT	WINTER \$/GJ	SUMMER \$/GJ
<b><u>D. RATE SCHEDULE 22 - LARGE VOLUME</u></b>				
a) Basic Charge Per Month	\$ 1,643.00	\$ 1,643.00	\$2,500.00	\$2,500.00
b) Delivery Charge				
• Firm	\$ 1.65	\$ 0.85	\$ 1.05	\$ 0.52
• Interruptible	\$ 0.976	\$ 0.671	\$ 0.67	\$ 0.34
c) Administration Charge Per Month	\$ 608.00	\$ 608.00	\$ 100.00	\$ 100.00
<b><u>E. RATE SCHEDULE 22A (CLOSED)</u></b>				
a) Basic Charge Per Month	\$3,284.00	\$3,284.00	No change	No change
b) Delivery Charge				
• Firm Demand Charge per month	\$ 7.824	\$ 7.824	No change	No change
• Interruptible	\$ 0.630	\$ 0.630	No change	No change
c) Administration Charge Per Month	\$ 100.00	\$ 100.00	No change	No change
<b><u>F. RATE SCHEDULE 22B (CLOSED)</u></b>				
a) Basic Charge Per Month	Same	Same	\$3,345.00	\$3,345.00
b) Delivery Charge				
• Firm Demand Charge/Mo.	Same	Same	\$ 5.520	\$ 5.520
• Interruptible			\$ 0.793	\$ 0.550
c) Administration Charge	\$608.00	\$ 608.00	\$ 100.00	\$ 100.00
<b><u>E. RATE SCHEDULE 25 - FIRM</u></b>				
a) Basic Charge Per Month	\$ 366.00	\$ 366.00	\$ 300.00	\$ 300.00
b) Delivery Charge	\$ 1.65	\$ 0.85	\$ 1.05	\$ 0.52
c) Administration Charge Per Month	\$ 213.00	\$ 213.00	\$ 100.00	\$ 100.00
<b><u>F. RATE SCHEDULE 27 - INTERRUPTIBLE</u></b>				
a) Basic Charge	\$ 851.00	\$ 851.00	\$ 300.00	\$ 300.00
b) Delivery Charge	\$ 1.16	\$ 0.85	\$ 0.77	\$ 0.52
c) Administration Charge Per Month	\$ 213.00	\$ 213.00	\$ 100.00	\$ 100.00

\*NOTE: 1. Subject to 1997 Revenue Requirement increase effective January 1, 1997.  
2. Riders not incorporated.



## **PROPOSED INDUSTRIAL DELIVERY CHARGES**

**Pro-Forma - Subject to adjustments as noted below.**

<b>BUNDLED SERVICE</b>	<b>PRESENT WINTER \$/GJ</b>	<b>PRESENT SUMMER \$/GJ</b>	<b>PROPOSED WINTER \$/GJ</b>	<b>PROPOSED SUMMER \$/GJ</b>
<b><u>A. RATE SCHEDULE 4 - SEASONAL</u></b>				
a) Basic Charge Per Month	\$ 366.00	\$ 366.00	n/a	\$ 300.00
b) Delivery Charge	\$ 5.07	\$ 0.73	n/a	\$ 0.52
<b><u>B. RATE SCHEDULE 5 - FIRM</u></b>				
a) Basic Charge Per Month	\$ 366.00	\$ 366.00	\$300.00	\$300.00
b) Delivery Charge	\$ 1.65	\$ 0.85	\$ 1.05	\$ 0.52
<b><u>C. RATE SCHEDULE 7 - INTERRUPTIBLE</u></b>				
a) Basic Charge Per Month	\$ 851.00	\$ 851.00	\$ 600.00	\$ 600.00
b) Delivery Charges	\$ 1.16	\$ 0.85	\$ 0.77	\$ 0.52

- \*NOTE:**
1. Subject to 1997 Revenue Requirement increase effective January 1, 1997.
  2. Riders not incorporated.
  3. Gas Costs not included.
  3. Subject to Gas Cost Adjustment effective January 1, 1997.

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 4  
SEASONAL FIRM GAS SERVICE**

**Effective November 1, 1993**



**BC Gas**

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## 1. **Applicability**

- 1.1 **Description of Applicability** - This Rate Schedule applies to the sale of Gas, no portion of which may be resold, through one meter station to one Customer who, pursuant to this Rate Schedule, consumes Gas ~~principally~~ during the Off-Peak Period, ~~except as otherwise agreed upon.~~
- 1.2 **Service Agreement** - BC Gas will only sell Gas pursuant to an executed Service Agreement.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

## 2. **Conditions of Service**

- 2.1 **Conditions** - This Rate Schedule is available to Customers in all territory served by BC Gas under the BC Gas tariff of which this Rate Schedule is a part if
- (a) adequate Gas volumes for such service are available,
  - (b) adequate capacity exists ~~in~~ the BC Gas System, and
  - (c) at all times during the Off-Peak Period, the Customer will use Gas purchased under this Rate Schedule as the only ~~fuel~~ Gas for the facilities specified in the Service Agreement, ~~and~~
  - ~~(d) BC Gas has installed at the Delivery Point the facilities and equipment referred to in section 7.1 (Facilities and Equipment).~~
- 2.2 **Security** - In order to secure the prompt and orderly payment of charges to be paid by ~~Shipper~~ the Customer to BC Gas under the Service Agreement, BC Gas may require the Customer to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the ~~estimated~~ maximum amount payable by the Customer under this Rate Schedule and the Service Agreement for a period of 90 Days. Where BC Gas requires a Customer to provide a letter of credit and the Customer is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.

## 3. **Sales**

- 3.1 **Sale of Gas** - Subject to section 13 of the General Terms and Conditions of BC Gas (Interruption of Service), BC Gas will sell to the Customer and the Customer

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will buy from BC Gas at one Delivery Point such quantity of Gas as is required by the Customer for the operation of the Customer's facilities specified in the Service Agreement, estimated to be the maximum quantity per Day set out in the Service Agreement, for the charges and on all of the terms and conditions set out in either this Rate Schedule or the Service Agreement.

~~3.2 **Curtailment** If at any time during the Peak Period BC Gas determines that it does not have sufficient capacity on the BC Gas System to accommodate the Customer's request for service under this Rate Schedule, BC Gas may for any length of time curtail the delivery of Gas to the Delivery Point or turn off the valve serving the Customer, and may request the Customer switch to an interruptible Rate Schedule.~~

~~3.2 **Notice of Curtailment** Any notice from BC Gas to the Customer with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Delivery Point will be by telephone and be confirmed by facsimile when such means of communication are available and will specify the quantity of Gas to which the Customer is curtailed and the time at which curtailment is to be made. BC Gas will endeavour to give the Customer as much notice as possible with respect to such curtailment, not to be less than 8 hours' prior notice unless prevented by Force Majeure or unless the Transporter does not provide to BC Gas at least 8 hours' prior notice of reduced availability of Gas.~~

~~3.3 **Acknowledgement** All Customers purchasing gas pursuant to this Rate Schedule acknowledge and agree that they can accommodate any total or partial interruption of gas service by BC Gas.~~

**3.2 Maximum Hourly Quantities** - BC Gas will not be obliged to deliver in any one Hour more than 5% of the maximum quantity per Day set out in the Service Agreement.

~~3.5 **Pressure at Delivery Point** All Gas delivered by BC Gas at the Delivery Point to the Customer will be at not less than the pressure specified in the Service Agreement.~~

**3.3 Extension of Off-Peak Period** - BC Gas may in its sole discretion extend the Gas service beyond the Off-Peak Period in response to a request by the Customer and the Customer will be charged the Peak Period Charges set out in the Table of Charges. If the Customer takes Gas service beyond the Off-Peak Period without the prior written consent of BC Gas, the Customer will be charged the Unauthorized Gas Charge set out in the Table of Charges.

#### **4. Table of Charges**

- 4.1 **Charges** - In respect of all quantities of Gas delivered to the Delivery Point pursuant to this Rate Schedule and the Service Agreement, the Customer will pay to BC Gas all of the charges set out in the Table of Charges.

#### **5. Term of Service Agreement**

- 5.1 **Term** - The initial term of the Service Agreement will begin on the Commencement Date and will expire at 8:00 a.m. ~~Standard~~ Local Time on the November 1st next following, provided that if the foregoing would result in the initial term being for a period of less than one year, then the initial term will instead expire at the end of one further Contract Year.
- 5.2 **Automatic Renewal** - Except as specified in the Service Agreement, the term of the Service Agreement will continue ~~on a from~~ year to year basis after the expiry of the initial term ~~until unless~~ cancelled by either BC Gas or the Customer upon not less than 2 months' notice prior to the end of the Contract Year then in effect.
- 5.3 **Early Termination** - The term of the Service Agreement is subject to early termination in accordance with section 9 (Default or Bankruptcy).
- 5.4 **Survival of Covenants** - Upon the termination of the Service Agreement, whether pursuant to section 9 (Default or Bankruptcy) or otherwise,
- (a) all claims, causes of action or other outstanding obligations remaining or being unfulfilled as at the date of termination, and,
  - (b) all of the provisions in this Rate Schedule and in the Service Agreement relating to the obligation of any of the parties to account to or indemnify the other and to pay to the other any monies owing as at the date of termination in connection with the Service Agreement,

will survive such termination.

#### **6. Statement and Payments**

- 6.1 **Statements to be Provided** - BC Gas will each month deliver to the Customer a statement for the preceding month showing the Gas quantities delivered to the Customer and the amount due. BC Gas will, on or ~~before about~~ the 45th day after the end of a Contract Year, deliver to the Customer a separate statement for the preceding Contract Year showing the amount required from the Customer

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in respect of any indemnity due under ~~this Rate Schedule~~ or a Service Agreement. Any errors in any statement will be promptly reported to the other party as provided hereunder, and statements will be final and binding unless questioned within one year after the date of the statement.

- 6.2 **Payment and ~~Late Payment Charge~~Interest** - Payment for the full amount of the statement, including federal, provincial and municipal taxes or fees applicable thereon, will be made to BC Gas at its Vancouver, British Columbia office, or such other place in Canada as it will designate, on or before the 1st business day after the 21st calendar day following the billing date. If the Customer fails or neglects to make any payment required under this Rate Schedule, or any portion thereof, to BC Gas when due, BC Gas may include in the next bill to the Customer ~~a late payment charge interest on the outstanding amount at the rate of~~ 1 1/2% per month (19.56% per annum).

- 6.3 **Examination of Records** - Each of BC Gas and the Customer will have the right to examine at reasonable times the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Rate Schedule or the Service Agreement.

## 7. **Measuring Equipment**

- 7.1 **Facilities and Equipment** - BC Gas will install, maintain and operate at the Delivery Point such metering and communications facilities and equipment as BC Gas determines are necessary or desirable for measuring the quantity of Gas delivered pursuant to this Rate Schedule to the Customer and the Customer will permit BC Gas, without cost to BC Gas, to use the Customer's communications lines and power for the purpose of installing, maintaining and operating the measuring equipment of BC Gas.
- 7.2 **Measuring Site** - If BC Gas reasonably determines that it is necessary to install the facilities and equipment referred to in section 7.1 (Facilities and Equipment) on the Customer's property, the Customer will, without charge, provide a suitable site along with utilities and enclosures for the installation of the facilities and equipment of BC Gas. BC Gas will at all times have clear access to the site and to all of its facilities and equipment. All facilities and equipment installed by BC Gas on the Customer's property will remain the property of BC Gas and may be removed by BC Gas upon termination of the Service Agreement.
- 7.3 **Calibration and Test of Measuring Equipment** - The accuracy of the measuring equipment of BC Gas will be verified by standard tests and methods at regular intervals and at other times at the initiative of BC Gas or upon the reasonable request of the Customer. Notice of the time and nature of each test conducted in

response to communications with or at the request of the Customer will be given by BC Gas to the Customer sufficiently in advance to permit a representative of the Customer to be present. If during a test the measuring equipment is found to be registering inaccurately, it will be adjusted at once to read as accurately as possible. The results of each test and adjustment, if any, made by BC Gas, whether or not the Customer is present for such test, will be accepted until the next test. All tests of such measuring equipment of BC Gas will be made at the expense of BC Gas, except that the Customer will bear the expense of tests made at its request if the measuring equipment is found to be inaccurate by an amount equal to 2% or less.

- 7.4 **Inaccuracy Exceeding 2%** - If upon any test the measuring equipment is found to be inaccurate by an amount exceeding 2%, any previous readings of such equipment will be corrected to zero error for any period during which it is definitely known or is agreed upon that the error existed. If the period is not definitely known or is not agreed upon, such correction will be for a period covering the last half of the time elapsed since the date of the last test. Provided that under no circumstances will an adjustment be made for a period of more than the preceding 12 months.
- 7.5 **Correction of Measuring Errors** - If the measuring equipment is out of service or out of repair so that the quantity of Gas delivered cannot be correctly determined by the reading thereof, the Gas delivered during the period such measuring equipment is out of service or out of repair will be estimated on the basis of the best available data, using the first of the following methods which is feasible
- (a) by correcting the error if the percentage of error is ascertained by calibration test or mathematical calculation,
  - (b) by using the registration of any check measuring equipment if installed and accurately registering, and
  - (c) by estimating the quantity of Gas delivered to the Customer during the preceding periods under similar conditions when the meter was registering accurately.
- 7.6 **Customer's Equipment** - The Customer may at its own expense install, maintain and operate its own measuring equipment for the purposes of monitoring or checking the measuring equipment of BC Gas, provided that the Customer will install such equipment so as not to interfere with the operation of the measuring equipment of BC Gas.
- 7.7 **Right to be Present** - BC Gas and the Customer will have the right to inspect all equipment installed or furnished by the other and the charts and other measurement or test data of the other at all times during business hours, and to
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be present at the time of any installing, testing, cleaning, changing, repairing, calibrating or adjusting done in connection with the measuring equipment of the other party, but all such activities will be performed by the party furnishing the measuring equipment.

- 7.8 **Preservation of Records** - Both parties will cause to be preserved each test datum, chart and other record of Gas measurement for a period of 2 years.

## 8. **Measurement**

- 8.1 **Unit of Volume** - The unit of volume of Gas for all purposes hereunder will be 1 cubic metre at a temperature of 15° Celsius and an absolute pressure of 101.325 kilopascals.
- 8.2 **Determination of Volume** - Gas delivered hereunder will be metered using metering apparatus approved by the Standards Division, ~~Department of Industry Canada, Office of Consumer & Corporate Affairs of Canada~~ and the determination of standard volumes delivered hereunder will be in accordance with terms and conditions pursuant to the *Electricity and Gas Inspection Act* of Canada.
- 8.3 **Conversion to Energy Units** - In accordance with the *Electricity and Gas Inspection Act* of Canada, volumes of Gas delivered each Day will be converted to energy units by multiplying the standard volume by the Heat Content of each unit of Gas. Volumes will be specified in 10<sup>3</sup>m<sup>3</sup> rounded to two decimal places and energy will be specified in gigajoules rounded to one decimal place.

## 9. **Default or Bankruptcy**

- 9.1 **Default** - If the Customer at any time fails or neglects
- (a) to make any payment due to BC Gas or to any other person under this Rate Schedule or the Service Agreement within 30 days after payment is due, or
  - (b) to ~~eurecorrect~~ any default of any of the other terms, covenants, agreements, conditions or obligations imposed upon it under this Rate Schedule or the Service Agreement, within 30 days after BC Gas gives to the Customer notice of such default or, in the case of a default that cannot with due diligence be ~~eured-corrected~~ within a period of 30 days, the Customer fails to proceed promptly after the giving of such notice with due diligence to ~~eure-correct~~ the same and thereafter to prosecute the ~~euring-correcting~~ of such default with all due diligence,



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then BC Gas may in addition to any other remedy that it has, ~~including the rights of BC Gas set out in section 3.2,~~ at its option and without liability therefor

- (a) suspend further service to the Customer and may refuse to deliver Gas to the Customer until the default has been fully remedied, and no such suspension or refusal will relieve the Customer from any obligation under this Rate Schedule or the Service Agreement, or
- (b) terminate the Service Agreement, and no such termination of the Service Agreement pursuant hereto will exclude the right of BC Gas to collect any amount due to it from the Customer for what would otherwise have been the remainder of the term of the Service Agreement.

9.2 **Bankruptcy or Insolvency** - If the Customer becomes bankrupt or insolvent or commits or suffers an act of bankruptcy or insolvency or a receiver is appointed pursuant to a statute or under a debt instrument or the Customer seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas will have the right, at its sole discretion, to terminate the Service Agreement by giving notice in writing to the Customer and thereupon BC Gas may cease further delivery of Gas to the Customer and the amount then outstanding for Gas provided under the Service Agreement will immediately be due and payable by the Customer.

## 10. Notice

10.1 **Notice** - Any notice, request, statement or bill that is required to be given or that may be given under this Rate Schedule or under the Service Agreement will, unless otherwise specified, be in writing and will be considered as fully delivered when mailed, personally delivered or sent by telecopier ~~fax~~ to the other in accordance with the following:

if to BC Gas

MAILING ADDRESS:

BC GAS UTILITY LTD.

1111 West Georgia Street  
Vancouver, B.C.  
V6E 4M4

BILLING AND PAYMENT:

Attention: Manager, Customer  
Administration

Telephone: (604) 443-6507/6509

Telecopier ~~Fax~~: (604) 443-6588

CUSTOMER RELATIONS

~~Interior~~

Attention: ~~Manager, Sales and  
Marketing Manager,  
Commercial Sales~~

Telephone: (604) 868-4517/293-8478

~~Lower Mainland~~

~~Telecopier Fax: (604) 868-4570/293-8742~~

Attention: ~~Manager, Coastal Sales~~

Telephone: ~~(604) 293-8606~~

~~Telecopier Fax: (604) 293-8850~~

LEGAL AND OTHER:

Attention: V.P. Legal & Regulatory  
Affairs & Secretary

Telephone: (604) 443-6607

~~Telecopier Fax: (604) 443-6789/6904~~

if to the Customer, then as set out in the Service Agreement.

- 10.2 **Specific Notices** - Notwithstanding section 10.1 (Notice), notices with respect to curtailment, interruption or restoration of deliveries of Gas pursuant to section 13 of the General Terms and Conditions of BC Gas or with respect to Force Majeure will be sufficient if given by BC Gas in writing by facsimile fax, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by the Customer as authorized to receive such notices.

## **11. Limitation on Liability and Indemnity**

- 11.1 **Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas service permitted under the General Terms and Conditions of BC Gas or this Rate Schedule.

- 11.2 **Indemnity** - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) Franchise Fees not otherwise collected by BC Gas, under the Table of Charges, and
- (b) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Customer or on the delivery of Gas to the Customer by BC Gas, or on any other service provided by BC Gas to the Customer.

## **12. Force Majeure**

**12.1 Force Majeure** - Subject to the other provisions of this section 12, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Rate Schedule under which service is rendered or in the Service Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.

**12.2 Curtailment Notice** - If BC Gas claims suspension pursuant to this section 12, BC Gas will be deemed to have issued to the Customer a notice of curtailment.

**12.3 Exceptions** - Neither party will be entitled to the benefit of the provisions of section 12 under any of the following circumstances

- (a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,
- (b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or
- (c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under the Rate Schedule or the Service Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.

**12.4 Notice to Resume** - The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.

**12.5 Settlement of Labour Disputes** - Notwithstanding any of the provisions of this section 12, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 12.1.

- 12.6 No Exemption for Payments** - Notwithstanding any of the provisions of this section 12, Force Majeure will not relieve or release either party from its obligations to make payments to the other.
- 12.7 Periodic Repair by BC Gas** - BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Customer as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.
- 12.8 Alteration of Facilities** - The Customer will pay to BC Gas all reasonable costs associated with the alteration of facilities made at the discretion of BC Gas to measure quantities reduced by reason of Force Majeure claimed by the Customer and to restore such facilities after the Force Majeure condition ends.

### **13. Arbitration**

- 13.1 Arbitration** - Any dispute between the parties arising from this Rate Schedule or the Service Agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.
- 13.2 Demand for Arbitration** - Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.
- 13.3 Arbitrator** - The parties will have 10 days from receipt of the demand referred to in section 13.2 of this Rate Schedule to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.
- 13.4 Commencement and Decision** - The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.

**13.5 Decision** - The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.

## **14. Interpretation**

**14.1 Definitions in General Terms and Conditions of BC Gas** - Except where the context requires otherwise or except as otherwise expressly provided in the Definitions which form part of this Rate Schedule, all words and phrases defined in the General Terms and Conditions of BC Gas and used in this Rate Schedule or in a Service Agreement have the meanings set out in the General Terms and Conditions of BC Gas.

**14.2 Change in Definition of "Day"** - BC Gas may, in its sole discretion, amend the definition of "Day" from time to time to suitably align its operations with those of its Transporters. If BC Gas amends the meaning definition of "Day", a pro-rata adjustment of quantities of Gas and charges to account for any Day of more or less than 24 hours will be made and the terms of the Service Agreement will be similarly adjusted.

**14.3 Further Definitions** - Additionally, except where the context requires otherwise, each of the words and phrases described in the Definitions have the meanings ascribed thereto in the Definitions.

**14.3 Interpretation** - Except where the context requires otherwise or except as otherwise expressly provided, in this Rate Schedule or in a Service Agreement

- (a) all references to a designated section are to the designated section of this Rate Schedule unless otherwise specifically stated,
- (b) the singular of any term includes the plural, and vice versa, and the use of any term is equally applicable to any gender and, where applicable, body corporate,
- (c) any reference to a corporate entity includes and is also a reference to any corporate entity that is a successor to such entity,
- (d) all words, phrases and expressions used in this Rate Schedule or in a Service Agreement that have a common usage in the gas industry and that are not defined in the General Terms and Conditions of BC Gas, the Definitions or in the Service Agreement have the meanings commonly ascribed thereto in the gas industry, and

- (e) the headings of the sections set out in this Rate Schedule or in the Service Agreement are for convenience of reference only and will not be considered in any interpretation of this Rate Schedule or the Service Agreement.

## **15. Miscellaneous**

- 15.1 Waiver** - No waiver by either BC Gas or the Customer of any default by the other in the performance of any of the provisions of this Rate Schedule or the Service Agreement will operate or be construed as a waiver of any other or future default or defaults, whether of a like or different character.
- 15.2 Enurement** - The Service Agreement will enure to the benefit of and be binding upon the parties and their respective successors and permitted assigns, including without limitation successors by merger, amalgamation or consolidation.
- 15.3 Assignment** - The Customer will not assign the Service Agreement or any of its rights or obligations thereunder without the prior written consent of BC Gas which consent will not be unreasonably withheld or delayed. No assignment will release the Customer from its obligations under this Rate Schedule or under the Service Agreement that existed prior to the date on which the assignment takes effect. This provision applies to every proposed assignment by the Customer.
- 15.4 Amendments to be in Writing** - Except as set out in this Rate Schedule, no amendment or variation of the Service Agreement will be effective or binding upon the parties unless such amendment or variation is set out in writing and duly executed by the parties.
- 15.5 Proper Law** - The Service Agreement will be construed and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein.
- 15.6 Time is of Essence** - Time is of the essence of this Rate Schedule, the Service Agreement and of the terms and conditions thereof.
- 15.7 Subject to Legislation** - Notwithstanding any other provision hereof, this Rate Schedule and the Service Agreement and the rights and obligations of BC Gas and the Customer under this Rate Schedule and the Service Agreement are subject to all present and future laws, rules, regulations and orders of any legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over BC Gas or the Customer.
- 15.8 Further Assurances** - Each of BC Gas and the Customer will, on demand by the other, execute and deliver or cause to be executed and delivered all such further

documents and instruments and do all such further acts and things as the other may reasonably require to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Rate Schedule and the Service Agreement and to assure the completion of the transactions contemplated hereby.

**15.9 Form of Payments** - All payments required to be made under statements and invoices rendered pursuant to this Rate Schedule or the Service Agreement will be made by telegraphic ~~wire~~ transfer to, or cheque or bank cashier's cheque drawn on, a Canadian chartered bank or trust company, payable in lawful money of Canada at par in immediately available funds in Vancouver, British Columbia.

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**DEFINITIONS**

- (a) **BC Gas** - means BC Gas Utility Ltd., a body corporate incorporated pursuant to the laws of the Province of British Columbia under number 368681.
- (b) **BC Gas System** - means the Gas transmission and distribution system owned and operated by BC Gas, as such system is expanded, reduced or modified from time to time.
- (c) **British Columbia Utilities Commission** - means the British Columbia Utilities Commission constituted under the *Utilities Commission Act* of British Columbia and includes and is also a reference to
  - (i) any commission that is a successor to such commission, and
  - (ii) any commission that is constituted pursuant to any statute that may be passed which supplements or supersedes the *Utilities Commission Act* of British Columbia.
- (d) **Commencement Date** - means the day specified as the Commencement Date in the Service Agreement.
- (e) **Contract Year** - means a period of 12 consecutive Months commencing at the beginning of the 1st Day of November and ending at the beginning of the next succeeding 1st Day of November.
- (f) **Customer** - means a person who enters into a Service Agreement with BC Gas.
- (g) **Day** - means, subject to section 11-214.2 (Change in Definition of "Day"), any period of twenty-four consecutive hours beginning and ending at 8:00 a.m. ~~Standard Local~~ Time.
- ~~(h) **Definitions** - means the definitions appended to this Rate Schedule.~~
- ~~(h)~~ **Delivery Point** - means the point specified in a Service Agreement where BC Gas delivers Gas to a Customer.
- ~~(i)~~ **Force Majeure** - means any acts of God, strikes, lockouts, or other industrial disturbances, civil disturbances, arrests and restraints of rulers or people, interruptions by government or court orders, present or future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, blackouts, insurrections, failure or inability to secure materials or labour by reason of priority, regulations or orders of government, serious epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, breakage or accident to machinery or lines of pipes, or freezing of wells or pipelines, or the



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failure of gas supply, temporary or otherwise, from a Supplier of gas, which act of Force Majeure was not due to negligence of the party claiming Force Majeure. Further, Force Majeure will also include a declaration of force majeure by a transporter that results in Gas being unavailable for delivery.

- (j) Franchise Fees** - means the aggregate of all monies payable by BC Gas to a municipality
- (i) for the use of the municipality's streets and other property to construct and operate the utility business of BC Gas,
  - (ii) relating to the revenues received by BC Gas for services provided and Gas consumed within the municipality, and
  - (iii) relating, if applicable, to the value of Gas transported by BC Gas through the municipality.
- (k) Gas** - means the residue remaining after raw gas has been subjected to any or all of the following permissible processes
- (i) the removal of any of its constituent parts other than methane, and the removal of methane to such extent as is necessary in removing other constituents,
  - (ii) the compression, regulation, cooling, cleaning or any other chemical or physical process other than the addition of diluents, such as air or nitrogen, to such extent as may be required in its production, gathering, transmission, transportation, storage, removal from storage and delivery, and
  - (iii) the addition of odorant by BC Gas,
- but for greater certainty Gas does not include propane.
- (l) General Terms and Conditions of BC Gas** - means the general terms and conditions of BC Gas from time to time approved by the British Columbia Utilities Commission.
- (m) Heat Content** - means the gross heating value of the Gas, determined on the basis of a temperature of 15° Celsius with the Gas free of all water vapour and at an absolute pressure of 101.325 kilopascals, with the products of combustion cooled to the initial temperature of the Gas and the water formed by the combustion condensed to the liquid state. The Heat Content will be expressed in megajoules per cubic metre of Gas (MJ/M<sup>3</sup>) rounded to two decimal places.
- (n) Hour** - means any consecutive 60 minute period.
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- (o) **Local Time** - means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area or daylight savings time as the case may be.
- (p) **Month** - means, subject to any changes from time to time required by BC Gas in the starting time of its Gas Day, the period beginning at 8:00 a.m. Standard Local Time on the first day of the calendar month and ending at 8:00 a.m. Standard Local Time on the first day of the next succeeding calendar month.
- (q) **Off-Peak Period** - means, subject to section 3.7 (Extension of Off-Peak Period), the period commencing 8:00 a.m. Standard Local Time April 1 to 8:00 a.m. Standard Local Time November 1.
- (r) **Peak Period** - means the period beginning at the expiry of one Off-Peak Period and ending at the commencement of the next following Off-Peak Period.
- (t) ~~Standard Time~~ - means ~~Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area.~~
- (s) **Rate Schedule 4 or this Rate Schedule** - means this Rate Schedule, including all rates, terms and conditions, the Definitions and the Table of Charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (i) **Service Agreement** - means an agreement between BC Gas and a Customer to provide service pursuant to this Rate Schedule.
- (u) **Supplier** - means a party who sells Gas to BC Gas.
- (v) **Table of Charges** - means the table of prices, fees and charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission, appended to this Rate Schedule.
- (w) **Transporter** - means, in the case of the Columbia service area, Alberta Natural Gas Company, a Canadian corporation, and Nova Corporation of Alberta, and in the case of the Inland and Lower Mainland service areas, Westcoast Energy Inc., a Canadian corporation, and any other gas pipeline transportation company connected to the facilities of BC Gas from which BC Gas receives Gas for the purposes of Gas service or resale.
- (x) **Unauthorized Gas** - means any Gas service taken by a Customer during the Peak Period without the prior written consent of BC Gas.
- (y) **"10<sup>3</sup>m<sup>3</sup>"** means 1,000 Cubic Metres.
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**SEASONAL  
FIRM GAS SERVICE AGREEMENT**

This Agreement is dated the \_\_\_\_ day of \_\_\_\_\_, 19\_\_, between BC Gas Utility Ltd. ("BC Gas") and \_\_\_\_\_ (the "Customer").

**WHEREAS:**

- A. BC Gas owns and operates the BC Gas System;
- B. The Customer is the owner and operator of a \_\_\_\_\_ located in or near \_\_\_\_\_ in the Province of British Columbia; and
- C. The Customer desires to purchase from BC Gas seasonal **firm Gas service** for such facilities in accordance with Rate Schedule 4 and the terms set out herein.

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the terms, conditions and limitations contained herein, the parties agree as follows:

**1. Specific Information**

Estimated Maximum \_\_\_\_\_ gigajoules per day  
~~Consumption Quantity:~~

Commencement Date: \_\_\_\_\_

Expiry Date: \_\_\_\_\_  
(only specify expiry date if term not automatically renewed as set out in section 5.2 of Rate Schedule 4)

Delivery Point: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

~~Gauge Pressure at Delivery Point:~~ \_\_\_\_\_ kilopascals

Address of Customer for receiving notices:

\_\_\_\_\_  
(name of Customer) Attention: \_\_\_\_\_

\_\_\_\_\_  
(address of Customer) Telephone: \_\_\_\_\_

Telecopier/Fax: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The information set out above is hereby approved by the parties and each reference in either this agreement or Rate Schedule 4 to any such information is to the information set out above.

## **2. Rate Schedule 4**

- 2.1 **Additional Terms** - All rates, terms and conditions set out in Rate Schedule 4 or the General Terms and Conditions of BC Gas, as either of them may be amended by BC Gas and approved from time to time by the British Columbia Utilities Commission, are in addition to the rates, terms and conditions contained in this Service Agreement and form part of this Service Agreement and bind BC Gas and the Customer as if set out herein.
- 2.2 **Payment of Amounts** - Without limiting the generality of the foregoing, the Customer will pay to BC Gas all of the amounts set out in Rate Schedule 4 for the services provided under that Rate Schedule 4 and this Service Agreement.
- 2.3 **Conflict** - Where anything in either Rate Schedule 4 or the General Terms and Conditions of BC Gas conflicts with any of the rates, terms and conditions set out in this Service Agreement, this Service Agreement governs. Where anything in Rate Schedule 4 conflicts with any of the rates, terms and conditions set out in the General Terms and Conditions of BC Gas, Rate Schedule 4 governs.
- 2.4 **Acknowledgement** - The Customer acknowledges receiving and reading a copy of Rate Schedule 4 and the General Terms and Conditions of BC Gas.

## **3. ~~Limitation on Liability and Indemnity~~**

- 3.1 ~~**Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of gas service.~~
- 3.2 ~~**Indemnity** - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgements, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following~~
- ~~(a) Franchise Fees not otherwise collected by BC Gas, under the Table of Charges, and~~
  - ~~(b) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Customer or on the delivery of Gas to the Customer by BC Gas, or on any other service provided by BC Gas to the Customer.~~

#### **4. Force Majeure**

- ~~4.1 Force Majeure Subject to the other provisions of this section 4, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Service Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.~~
- ~~4.2 Curtailment Notice If BC Gas claims suspension pursuant to this section 4, BC Gas will be deemed to have issued to the Customer a notice of curtailment.~~
- ~~4.3 Exceptions Neither party will be entitled to the benefit of the provisions of section 4.1 of this agreement under any of the following circumstances-~~
- ~~(a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,~~
  - ~~(b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or~~
  - ~~(c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under this Service Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.~~
- ~~4.4 Notice to Resume The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.~~
- ~~4.5 Settlement of Labour Disputes Notwithstanding any of the provisions of this section 4, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 4.1 of this agreement.~~
- ~~4.6 No Exemption for Payments Notwithstanding any of the provisions of this section 4, Force Majeure will not relieve or release either party from its obligations to make payments to the other.~~
-

- ~~4.7 Periodic Repair by BC Gas BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Customer as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.~~

## ~~5. Arbitration~~

- ~~5.1 Arbitration Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the Commercial Arbitration Act of British Columbia or successor legislation, save as expressly provided herein.~~
- ~~5.2 Demand for Arbitration Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.~~
- ~~5.3 Arbitrator The parties will have 10 days from receipt of the demand referred to in section 5.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.~~
- ~~5.4 Commencement and Decision The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.~~
- ~~5.5 Decision The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.~~

IN WITNESS WHEREOF the parties hereto have executed this Service Agreement.

BC GAS UTILITY LTD.

\_\_\_\_\_  
(here insert name of Customer)

BY: \_\_\_\_\_  
(Signature)

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

\_\_\_\_\_  
(Name - Please Print)

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 5  
GENERAL FIRM SERVICE**

**Effective November 1, 1993**



**BC Gas**



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**1. Applicability**

- 1.1 **Description of Applicability** - This Rate Schedule applies to the sale of firm Gas (subject to a minimum of 5,000 gigajoules per Contract Year), no portion of which may be resold, through one meter station to a Customer whose Baseload Quantity, pursuant to this Rate Schedule, ~~uses more than~~ represents at least 75% of its annual consumption of Gas for the Contract Year. ~~50% of its approved connected Gas load for applications other than space heating.~~
- 1.2 **Service Agreement** - BC Gas will only sell Gas pursuant to an executed Service Agreement.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

**2. Conditions of Service**

- 2.1 **Conditions** - This Rate Schedule is available to Customers in all territory served by BC Gas under the BC Gas tariff of which this Rate Schedule is a part if
- (a) adequate Gas volumes for such service are available,
  - (b) adequate capacity exists ~~in~~ the BC Gas System, and
  - (c) the Customer purchases under this Rate Schedule all of the fuel Gas required for its facilities specified in the Service Agreement ~~; and~~
  - ~~(d) BC Gas has installed at the Delivery Point the facilities and equipment referred to in section 7.1 (Facilities and Equipment).~~
- 2.2 **Security** - In order to secure the prompt and orderly payment of the charges to be paid by ~~Shipper the Customer~~ to BC Gas under the Service Agreement, BC Gas may require the Customer to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the ~~estimated~~ maximum amount payable by the Customer under this Rate Schedule and the Service Agreement for a period of 90 Days. Where BC Gas requires a Customer to provide a letter of credit and the Customer is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.
- 2.3 **~~Switch from~~ Warning Relating to Interruptible Transportation Service or Interruptible Sales** - ~~A consumer of Gas within the service area of BC Gas either receiving transportation service pursuant to an interruptible transportation Rate Schedule, or buying Gas pursuant to an interruptible Gas sales Rate Schedule,~~

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and ~~Customer~~ wishing to buy Gas pursuant to switch at the end of the term of an interruptible Transportation Agreement or an interruptible Gas Service Agreement to firm Gas service under this Rate Schedule must

- (a) give 13 months<sup>2</sup> prior notice to BC Gas of ~~such consumer~~ the Customer's desire to do so, and
- (b) if BC Gas is ~~subjected to incurs additional higher transportation costs to provide such service~~, reimbursing BC Gas for any such additional higher prices or costs, in addition to paying the charges set forth in the Table of Charges.

Notwithstanding section 2.3(a), BC Gas will endeavor to accommodate a ~~Customer~~ consumer on less than 13 months<sup>2</sup> prior notice if BC Gas is able, with such shorter notice, to arrange for the firm purchase and transportation of Gas for sales under this Rate Schedule.

### 3. Sales

- 3.1 **Sale of Gas** - Subject to section 13 of the General Terms and Conditions of BC Gas (Interruption of Service), BC Gas will sell to the Customer and the Customer will buy from BC Gas at one Delivery Point such quantity of Gas as is required by the Customer for the operation of the Customer's facilities specified in the Service Agreement, estimated to be the maximum quantity per Day set out in the Service Agreement, for the charges and on all of the terms and conditions set out in either this Rate Schedule or the Service Agreement.
- 3.2 **Maximum Hourly Quantities** - BC Gas will not be obliged to deliver in any one Hour more than 5% of the maximum quantity per Day set out in the Service Agreement.
- ~~3.3 **Pressure at Delivery Point** - All Gas delivered by BC Gas at the Delivery Point to the Customer will be at not less than the pressure specified in the Service Agreement.~~

### 4. Table of Charges

- 4.1 **Charges** - In respect of all quantities of Gas delivered to the Delivery Point pursuant to this Rate Schedule and the Service Agreement, the Customer will pay to BC Gas all of the charges set out in the Table of Charges.

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## 5. Term of Service Agreement

- 5.1 **Term** - The initial term of the Service Agreement will begin on the Commencement Date and will expire at 8:00 a.m. ~~Standard Local~~ Time on the November 1 next following, provided that if the foregoing would result in the initial term being for a period of less than one year, then the initial term will instead expire at the end of one further Contract Year.
- 5.2 **Automatic Renewal** - Except as specified in the Service Agreement, the term of the Service Agreement will continue from year to year after the expiry of the initial term ~~until unless~~ cancelled by either BC Gas or the Customer upon not less than 2 months' notice prior to the end of the Contract year then in effect. ~~The Customer shall reimburse BC Gas for any net incremental utility supply costs incurred by BC Gas as a result of the Customer cancelling the Service Agreement and entering into a service agreement with BC Gas other than Rate Schedule 5 prior to the end of the current Contract Year. This reimbursement will include only those costs which, upon BC Gas' demonstration to the British Columbia Utilities Commission's satisfaction, were unavoidable and could not be reduced by mitigation.~~
- 5.3 **Early Termination** - The term of the Service Agreement is subject to early termination in accordance with section 9 (Default or Bankruptcy). ~~The Customer will reimburse BC Gas for any net incremental utility Gas supply costs incurred by BC Gas as a result of the Customer cancelling the Service Agreement prior to the end of the Contract Year then in effect. This reimbursement will include only those costs which are approved by the British Columbia Utilities Commission, and were unavoidable and could not be reduced by mitigation.~~
- 5.4 **Survival of Covenants** - Upon the termination of the Service Agreement, whether pursuant to section 9 (Default or Bankruptcy) or otherwise,
- (a) all claims, causes of action or other outstanding obligations remaining or being unfulfilled as at the date of termination, and,
  - (b) all of the provisions in this Rate Schedule and in the Service Agreement relating to the obligation of any of the parties to account to or indemnify the other and to pay to the other any monies owing as at the date of termination in connection with the Service Agreement,
- will survive such termination.

## **6. Statement and Payments**

- 6.1 **Statements to be Provided** - BC Gas will each month deliver to the Customer a statement for the preceding month showing the Gas quantities delivered to the Customer and the amount due. BC Gas will, on or before about the 45th day after the end of a Contract Year, deliver to the Customer a separate statement for the preceding Contract Year showing the amount required from the Customer in respect of any indemnity due under this Rate Schedule or a Service Agreement. Any errors in any statement will be promptly reported to the other party as provided hereunder, and statements will be final and binding unless questioned within one year after the date of the statement.
- 6.2 **Payment and ~~Late Payment Charge~~Interest** - Payment for the full amount of the statement, including federal, provincial and municipal taxes or fees applicable thereon, will be made to BC Gas at its Vancouver, British Columbia office, or such other place in Canada as it will designate, on or before the 1st business day after the 21st calendar day following the billing date. If the Customer fails or neglects to make any payment required under this Rate Schedule, or any portion thereof, to BC Gas when due, BC Gas may include in the next bill to the Customer interest on the outstanding amount at the rate of a late payment charge of 1 1/2% per month (19.56% per annum).
- 6.3 **Examination of Records** - Each of BC Gas and the Customer will have the right to examine at reasonable times the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Rate Schedule or the Service Agreement.

## **7. Measuring Equipment**

- 7.1 **Facilities and Equipment** - BC Gas will install, maintain and operate at the Delivery Point such metering and communications facilities and equipment as BC Gas determines are necessary or desirable for measuring the quantity of Gas delivered pursuant to this Rate Schedule to the Customer and the Customer will permit BC Gas, without cost to BC Gas, to use the Customer's communications lines and power for the purpose of installing, maintaining and operating the measuring equipment of BC Gas.
- 7.2 **Measuring Site** - If BC Gas reasonably determines that it is necessary to install the facilities and equipment referred to in section 7.1 (Facilities and Equipment) on the Customer's property, the Customer will, without charge, provide a suitable site along with utilities and enclosures for the installation of the facilities and equipment of BC Gas. BC Gas will at all times have clear access to the site and to all of its facilities and equipment. All facilities and equipment installed by BC

Gas on the Customer's property will remain the property of BC Gas and may be removed by BC Gas upon termination of the Service Agreement.

- 7.3 Calibration and Test of Measuring Equipment** - The accuracy of the measuring equipment of BC Gas will be verified by standard tests and methods at regular intervals and at other times at the initiative of BC Gas or upon the reasonable request of the Customer. Notice of the time and nature of each test conducted in response to communications with or at the request of the Customer will be given by BC Gas to the Customer sufficiently in advance to permit a representative of the Customer to be present. If during a test the measuring equipment is found to be registering inaccurately, it will be adjusted at once to read as accurately as possible. The results of each test and adjustment, if any, made by BC Gas, whether or not the Customer is present for such test, will be accepted until the next test. All tests of such measuring equipment of BC Gas will be made at the expense of BC Gas, except that the Customer will bear the expense of tests made at its request if the measuring equipment is found to be inaccurate by an amount equal to 2% or less.
- 7.4 Inaccuracy Exceeding 2%** - If upon any test the measuring equipment is found to be inaccurate by an amount exceeding 2%, any previous readings of such equipment will be corrected to zero error for any period during which it is definitely known or is agreed upon that the error existed. If the period is not definitely known or is not agreed upon, such correction will be for a period covering the last half of the time elapsed since the date of the last test. Provided that under no circumstances will an adjustment be made for a period of more than the preceding 12 months.
- 7.5 Correction of Measuring Errors** - If the measuring equipment is out of service or out of repair so that the quantity of Gas delivered cannot be correctly determined by the reading thereof, the Gas delivered during the period such measuring equipment is out of service or out of repair will be estimated on the basis of the best available data, using the first of the following methods which is feasible
- (a) by correcting the error if the percentage of error is ascertained by calibration test or mathematical calculation,
  - (b) by using the registration of any check measuring equipment if installed and accurately registering, and
  - (c) by estimating the quantity of Gas delivered to the Customer during the preceding periods under similar conditions when the meter was registering accurately.
- 7.6 Customer's Equipment** - The Customer may at its own expense install, maintain and operate its own measuring equipment for the purposes of monitoring or
-



checking the measuring equipment of BC Gas, provided that the Customer will install such equipment so as not to interfere with the operation of the measuring equipment of BC Gas.

- 7.7 **Right to be Present** - BC Gas and the Customer will have the right to inspect all equipment installed or furnished by the other and the charts and other measurement or test data of the other at all times during business hours, and to be present at the time of any installing, testing, cleaning, changing, repairing, calibrating or adjusting done in connection with the measuring equipment of the other party, but all such activities will be performed by the party furnishing the measuring equipment.
- 7.8 **Preservation of Records** - Both parties will cause to be preserved each test datum, chart and other record of Gas measurement for a period of 2 years.

## 8. **Measurement**

- 8.1 **Unit of Volume** - The unit of volume of Gas for all purposes hereunder will be 1 cubic metre at a temperature of 15° Celsius and an absolute pressure of 101.325 kilopascals.
- 8.2 **Determination of Volume** - Gas delivered hereunder will be metered using metering apparatus approved by the Standards Division, ~~Department of Consumer & Corporate Affairs of Canada~~ Industry Canada, Office of Consumer Affairs and the determination of standard volumes delivered hereunder will be in accordance with terms and conditions pursuant to the *Electricity and Gas Inspection Act* of Canada.
- 8.3 **Conversion to Energy Units** - In accordance with the *Electricity and Gas Inspection Act* of Canada, volumes of Gas delivered each Day will be converted to energy units by multiplying the standard volume by the Heat Content of each unit of Gas. Volumes will be specified in  $10^3\text{m}^3$  rounded to two decimal places and energy will be specified in gigajoules rounded to one decimal place.

## 9. **Default or Bankruptcy**

- 9.1 **Default** - If the Customer at any time fails or neglects
- (a) to make any payment due to BC Gas or to any other person under this Rate Schedule or the Service Agreement within 30 days after payment is due, or

- (b) to ~~cure~~~~correct~~ any default of any of the other terms, covenants, agreements, conditions or obligations imposed upon it under this Rate Schedule or the Service Agreement, within 30 days after BC Gas gives to the Customer notice of such default or, in the case of a default that cannot with due diligence be ~~cured~~~~corrected~~ within a period of 30 days, the Customer fails to proceed promptly after the giving of such notice with due diligence to ~~cure~~~~correct~~ the same and thereafter to prosecute the ~~curing~~~~correcting~~ of such default with all due diligence,

then BC Gas may in addition to any other remedy that it has, at its option and without liability therefor

- (a) suspend further service to the Customer and may refuse to deliver Gas to the Customer until the default has been fully remedied, and no such suspension or refusal will relieve the Customer from any obligation under this Rate Schedule or the Service Agreement, or
- (b) terminate the Service Agreement, and no such termination of the Service Agreement pursuant hereto will exclude the right of BC Gas to collect any amount due to it from the Customer for what would otherwise have been the remainder of the term of the Service Agreement.

9.2 **Bankruptcy or Insolvency** - If the Customer becomes bankrupt or insolvent or commits or suffers an act of bankruptcy or insolvency or a receiver is appointed pursuant to a statute or under a debt instrument or the Customer seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas will have the right, at its sole discretion, to terminate the Service Agreement by giving notice in writing to the Customer and thereupon BC Gas may cease further delivery of Gas to the Customer and the amount then outstanding for Gas provided under the Service Agreement will immediately be due and payable by the Customer.

## 10. **Notice**

10.1 **Notice** - Any notice, request, statement or bill that is required to be given or that may be given under this Rate Schedule or under the Service Agreement will, unless otherwise specified, be in writing and will be considered as fully delivered when mailed, personally delivered or sent by ~~telecopier~~~~fax~~ to the other in accordance with the following:

if to BC Gas

BC GAS UTILITY LTD.

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MAILING ADDRESS: 1111 West Georgia Street  
Vancouver, B.C.  
V6E 4M4

BILLING AND PAYMENT: Attention: Manager, Customer  
Administration  
Telephone: (604) 443-6507/6509  
Telecopier-Fax: (604) 443-6588

CUSTOMER RELATIONS ~~Interior locations:~~ Attention: ~~Manager, Commercial~~  
~~Lower Mainland locations:~~ Sales Manager, Energy  
Solutions  
Telephone: (604) 868-4517/293-8532  
Telecopier-Fax: (604) 868-4570/293-8749

Attention: ~~Manager, Coastal Sales~~  
Telephone: ~~(604) 293-8606~~  
Telecopier: ~~(604) 293-8850~~

LEGAL AND OTHER: Attention: V.P. Legal & Regulatory  
Affairs & Secretary  
Telephone: (604) 443-6607  
Telecopier-Fax: (604) 443-6789/6904

if to the Customer, then as set out in the Service Agreement.

- 10.2 **Specific Notices** - Notwithstanding section 10.1 (Notice), notices with respect to curtailment, interruption or restoration of deliveries of Gas pursuant to section 13 of the General Terms and Conditions of BC Gas or with respect to Force Majeure will be sufficient if given by BC Gas in writing by facsimile fax, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by the Customer as authorized to receive such notices.

## **11. Limitation on Liability and Indemnity**

- 11.1 **Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas Service permitted under the General Terms and Conditions of BC Gas, or this Rate Schedule.
- 11.2 **Indemnity** - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims,

losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) Franchise Fees not otherwise collected by BC Gas under the Table of Charges, and
- (b) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Customer or on the delivery of Gas to the Customer by BC Gas, or on any other service provided by BC Gas to the Customer.

## **12. Force Majeure**

**12.1 Force Majeure** - Subject to the other provisions of this section 12, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Rate Schedule under which service is rendered or in the Service Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.

**12.2 Curtailment Notice** - If BC Gas claims suspension pursuant to this section 12, BC Gas will be deemed to have issued to the Customer a notice of curtailment.

**12.3 Exceptions** - Neither party will be entitled to the benefit of the provisions of section 12 under any of the following circumstances

- (a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,
- (b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or
- (c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under the Rate Schedule or the Service Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.

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- 12.4 Notice to Resume** - The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.
- 12.5 Settlement of Labour Disputes** - Notwithstanding any of the provisions of this section 12, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 12.1.
- 12.6 No Exemption for Payments** - Notwithstanding any of the provisions of this section 12, Force Majeure will not relieve or release either party from its obligations to make payments to the other.
- 12.7 Periodic Repair by BC Gas** - BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Customer as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.
- 12.8 Alteration of Facilities** - The Customer will pay to BC Gas all reasonable costs associated with the alteration of facilities made at the discretion of BC Gas to measure quantities reduced by reason of Force Majeure claimed by the Customer and to restore such facilities after the Force Majeure condition ends.

### **13. Arbitration**

- 13.1 Arbitration** - Any dispute between the parties arising from this Rate Schedule or the Service Agreement will be resolved by a single arbitrator pursuant to the Commercial Arbitration Act of British Columbia or successor legislation, save as expressly provided herein.
- 13.2 Demand for Arbitration** - Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting forth the nature of the dispute.
- 13.3 Arbitrator** - The parties will have 10 days from receipt of the demand referred to in section 13.2 of this Rate Schedule to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the
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arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.

**13.4 Commencement and Decision** - The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.

**13.5 Decision** - The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.

## **14. Interpretation**

**14.1 Definitions in General Terms and Conditions of BC Gas** - Except where the context requires otherwise or except as otherwise expressly provided in the Definitions which form part of this Rate Schedule, all words and phrases defined in the General Terms and Conditions of BC Gas and used in this Rate Schedule or in a Service Agreement have the meanings set out in the General Terms and Conditions of BC Gas.

**14.2 Change in Definition of "Day"** - BC Gas may amend the definition of "Day" from time to time to suitably align its operations with those of its Transporters. If BC Gas amends the meaning definition of "Day", a pro-rata adjustment of quantities of Gas and charges to account for any Day of more or less than 24 hours will be made and the term of the Service Agreement will be similarly adjusted.

**14.3 Further Definitions** - Additionally, except where the context requires otherwise, each of the words and phrases described in the Definitions have the meanings ascribed thereto in the Definitions.

**14.3 Interpretation** - Except where the context requires otherwise or except as otherwise expressly provided, in this Rate Schedule or in a Service Agreement

- (a) all references to a designated section are to the designated section of this Rate Schedule unless otherwise specifically stated,
- (b) the singular of any term includes the plural, and vice versa, and the use of any term is equally applicable to any gender and, where applicable, body corporate,

- (c) any reference to a corporate entity includes and is also a reference to any corporate entity that is a successor to such entity,
- (d) all words, phrases and expressions used in this Rate Schedule or in a Service Agreement that have a common usage in the gas industry and that are not defined in the General Terms and Conditions of BC Gas, the definitions or in the Service Agreement have the meanings commonly ascribed thereto in the gas industry, and
- (e) the headings of the sections set forth in this Rate Schedule or in the Service Agreement are for convenience of reference only and will not be considered in any interpretation of this Rate Schedule or the Service Agreement.

## **15. Miscellaneous**

**15.1 Waiver** - No waiver by either BC Gas or the Customer of any default by the other in the performance of any of the provisions of this Rate Schedule or the Service Agreement will operate or be construed as a waiver of any other or future default or defaults, whether of a like or different character.

**15.2 Enurement** - The Service Agreement will enure to the benefit of and be binding upon the parties and their respective successors and permitted assigns, including without limitation successors by merger, amalgamation or consolidation.

**15.3 Assignment** - The Customer will not assign the Service Agreement or any of its rights or obligations thereunder without the prior written consent of BC Gas which consent will not be unreasonably withheld or delayed. No assignment will release the Customer from its obligations under this Rate Schedule or under the Service Agreement that existed prior to the date on which the assignment takes effect. This provision applies to every proposed assignment by the Customer.

**15.4 Amendments to be in Writing** - Except as set out in this Rate Schedule, no amendment or variation of the Service Agreement will be effective or binding upon the parties unless such amendment or variation is set out in writing and duly executed by the parties.

**15.5 Proper Law** - The Service Agreement will be construed and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein.

**15.6 Time is of Essence** - Time is of the essence of this Rate Schedule, the Service Agreement and of the terms and conditions thereof.

- 15.7 Subject to Legislation** - Notwithstanding any other provision hereof, this Rate Schedule and the Service Agreement and the rights and obligations of BC Gas and the Customer under this Rate Schedule and the Service Agreement are subject to all present and future laws, rules, regulations and orders of any legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over BC Gas or the Customer.
- 15.8 Further Assurances** - Each of BC Gas and the Customer will, on demand by the other, execute and deliver or cause to be executed and delivered all such further documents and instruments and do all such further acts and things as the other may reasonably require to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Rate Schedule and the Service Agreement and to assure the completion of the transactions contemplated hereby.
- 15.9 Form of Payments** - All payments required to be made under statements and invoices rendered pursuant to this Rate Schedule or the Service Agreement will be made by ~~telegraphic wire~~ transfer to, or cheque or bank cashier's cheque drawn on, a Canadian chartered bank or trust company, payable in lawful money of Canada at par in immediately available funds in Vancouver, British Columbia.



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**DEFINITIONS**

- (a) **Baseload Quantity** - means the Customer's consumption in either the Month of July or August, whichever is lower, multiplied by 12 Months.
- (b) **BC Gas** - means BC Gas Utility Ltd., a body corporate incorporated pursuant to the laws of the Province of British Columbia under number 368681.
- (c) **BC Gas System** - means the Gas transmission and distribution system owned and operated by BC Gas, as such system is expanded, reduced or modified from time to time.
- (d) **British Columbia Utilities Commission** - means the British Columbia Utilities Commission constituted under the *Utilities Commission Act* of British Columbia and includes and is also a reference to
- (i) any commission that is a successor to such commission, and
  - (ii) any commission that is constituted pursuant to any statute that may be passed which supplements or supersedes the *Utilities Commission Act* of British Columbia.
- (e) **Commencement Date** - means the day specified as the Commencement Date in the Service Agreement.
- (f) **Contract Year** - means a period of 12 consecutive Months commencing at the beginning of the 1st Day of November and ending at the beginning of the next succeeding 1st Day of November.
- (g) **Customer** - means a person who enters into a Service Agreement with BC Gas.
- (h) **Day** - means, subject to section 11.214.2 (Change in Definition of "Day"), any period of twenty-four consecutive hours beginning and ending at 8:00 a.m. Standard Local Time.
- ~~(i) **Definitions** - means the definitions appended to this Rate Schedule.~~
- (j) **Delivery Point** - means the point specified in a Service Agreement where BC Gas delivers Gas to a Customer.
- (k) **Force Majeure** - means any acts of God, strikes, lockouts, or other industrial disturbances, civil disturbances, arrests and restraints of rulers or people, interruptions by government or court orders, present or future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots,

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blackouts, insurrections, failure or inability to secure materials or labour by reason of priority, regulations or orders of government, serious epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, breakage or accident to machinery or lines of pipes, or freezing of wells or pipelines, or the failure of gas supply, temporary or otherwise, from a Supplier of gas, which act of Force Majeure was not due to negligence of the party claiming Force Majeure. Further, Force Majeure will also include a declaration of force majeure by a Transporter that results in Gas being unavailable for delivery.

**(l) Franchise Fees** - means the aggregate of all monies payable by BC Gas to a municipality

- (i) for the use of the municipality's streets and other property to construct and operate the utility business of BC Gas,
- (ii) relating to the revenues received by BC Gas for services provided and Gas consumed within the municipality, and
- (iii) relating, if applicable, to the value of Gas transported by BC Gas through the municipality.

**(m) Gas** - means the residue remaining after raw gas has been subjected to any or all of the following permissible processes

- (i) the removal of any of its constituent parts other than methane, and the removal of methane to such extent as is necessary in removing other constituents,
- (ii) the compression, regulation, cooling, cleaning or any other chemical or physical process other than the addition of diluents, such as air or nitrogen, to such extent as may be required in its production, gathering, transmission, transportation, storage, removal from storage and delivery, and
- (iii) the addition of odorant by BC Gas,

but for greater certainty Gas does not include propane.

**(n) General Terms and Conditions of BC Gas** - means the general terms and conditions of BC Gas from time to time approved by the British Columbia Utilities Commission.

**(o) Heat Content** - means the gross heating value of the Gas, determined on the basis of a temperature of 15° Celsius with the Gas free of all water vapour and at an absolute pressure of 101.325 kilopascals, with the products of combustion cooled to the initial temperature of the Gas and the water formed by the combustion

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condensed to the liquid state. The Heat Content will be expressed in megajoules per cubic metre of Gas (MJ/M<sup>3</sup>) rounded to two decimal places.

- (p) **Hour** - means any consecutive 60 minute period.
- (q) **Local Time** - means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area or daylight savings time as the case may be.
- (r) **Month** - means, subject to any changes from time to time required by BC Gas, in the starting time of its Gas Day, the period beginning at 8:00 a.m. Standard Local Time on the first day of the calendar month and ending at 8:00 a.m. Standard Local Time on the first day of the next succeeding calendar month.
- (s) **Rate Schedule 5 or this Rate Schedule** - means this Rate Schedule, including all rates, terms and conditions, the Definitions and the Table of Charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (t) **Service Agreement** - means an agreement between BC Gas and a Customer to provide service pursuant to this Rate Schedule.
- (u) **Supplier** - means a party who sells Gas to BC Gas.
- (v) **Table of Charges** - means the table of prices, fees and charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission, appended to this Rate Schedule.
- (w) **Transporter** - means, in the case of the Columbia service area, Alberta Natural Gas Company, a Canadian corporation, and Nova Corporation of Alberta, and in the case of the Inland and Lower Mainland service areas, Westcoast Energy Inc., a Canadian corporation, and any other gas pipeline transportation company connected to the facilities of BC Gas from which BC Gas receives Gas for the purposes of Gas service or resale.
- (x) **"10<sup>3</sup>m<sup>3</sup>"** means 1,000 Cubic Metres.

**GENERAL FIRM  
SERVICE AGREEMENT**

This Agreement is dated the \_\_\_\_ day of \_\_\_\_\_, 19\_\_, between BC Gas Utility Ltd. ("BC Gas") and \_\_\_\_\_ (the "Customer").

**WHEREAS:**

- A. BC Gas owns and operates the BC Gas System;
- B. The Customer is the owner and operator of a \_\_\_\_\_ located in or near \_\_\_\_\_, in the Province of British Columbia; and
- C. The Customer desires to purchase from BC Gas firm Gas for such facilities in accordance with Rate Schedule 5 and the terms set out herein.

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the terms, conditions and limitations contained herein, the parties agree as follows:

**1. Specific Information**

Estimated Maximum consumption Quantity: \_\_\_\_\_ gigajoules per day

Commencement Date: \_\_\_\_\_

Expiry Date: \_\_\_\_\_

(only specify an expiry date if term of Service Agreement is not to automatically continue from year to year as set out in section 5.2 of Rate Schedule 5)

Delivery Point: \_\_\_\_\_

Gauge pressure at Delivery Point: \_\_\_\_\_ kilopascals

Address of Customer for receiving notices:

\_\_\_\_\_  
(name of Customer)

Attention: \_\_\_\_\_

\_\_\_\_\_  
(address of Customer)

Telephone: \_\_\_\_\_

Telecopier Fax: \_\_\_\_\_

The information set out above is hereby approved by the parties and each reference in either this agreement or Rate Schedule 5 to any such information is to the information set out above.

## **2. Rate Schedule 5**

- 2.1 **Additional Terms** - All rates, terms and conditions set out in Rate Schedule 5 or the General Terms and Conditions of BC Gas, as either of them may be amended by BC Gas and approved from time to time by the British Columbia Utilities Commission, are in addition to the rates, terms and conditions contained in this Service Agreement and form part of this Service Agreement and bind BC Gas and the Customer as if set out herein.
- 2.2 **Payment of Amounts** - Without limiting the generality of the foregoing, the Customer will pay to BC Gas all of the amounts set out in Rate Schedule 5 for the services provided under ~~that~~ Rate Schedule 5 and this Service Agreement.
- 2.3 **Conflict** - Where anything in either Rate Schedule 5 or the General Terms and Conditions of BC Gas conflicts with any of the rates, terms and conditions set out in this Service Agreement, this Service Agreement governs. Where anything in Rate Schedule 5 conflicts with any of the rates, terms and conditions set out in the General Terms and Conditions of BC Gas, Rate Schedule 5 governs.
- 2.4 **Acknowledgement** - The Customer acknowledges receiving and reading a copy of Rate Schedule 5 and the General Terms and Conditions of BC Gas.

## **3. ~~Limitation on Liability and Indemnity~~**

- 3.1 ~~Limitation on Liability~~ Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment permitted under the General Terms and Conditions of BC Gas, this Service Agreement or Rate Schedule 5.
- 3.2 ~~Indemnity~~ The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgements, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following
- (a) ~~Franchise Fees not otherwise collected by BC Gas under the Table of Charges, and~~
  - (b) ~~all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the~~

~~Customer or on the delivery of Gas to the Customer by BC Gas, or on any other service provided by BC Gas to the Customer.~~

#### **4. Force Majeure**

- ~~4.1 Force Majeure Subject to the other provisions of this section 4, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Service Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.~~
- ~~4.2 Curtailment Notice If BC Gas claims suspension pursuant to this section 4, BC Gas will be deemed to have issued to the Customer a notice of curtailment.~~
- ~~4.3 Exceptions Neither party will be entitled to the benefit of the provisions of section 4.1 of this agreement under any of the following circumstances-~~
- ~~(a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,~~
  - ~~(b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or~~
  - ~~(c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under this Service Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.~~
- ~~4.4 Notice to Resume The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.~~
- ~~4.5 Settlement of Labour Disputes Notwithstanding any of the provisions of this section 4, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 4.1 of this agreement.~~

- ~~4.6 No Exemption for Payments Notwithstanding any of the provisions of this section 4, Force Majeure will not relieve or release either party from its obligations to make payments to the other.~~
- ~~4.7 Periodic Repair by BC Gas BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Customer as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.~~

## **~~5. Arbitration~~**

- ~~5.1 Arbitration Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the Commercial Arbitration Act of British Columbia or successor legislation, save as expressly provided herein.~~
- ~~5.2 Demand for Arbitration Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting forth the nature of the dispute.~~
- ~~5.3 Arbitrator The parties will have 10 days from receipt of the demand referred to in section 5.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.~~
- ~~5.4 Commencement and Decision The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.~~
- ~~5.5 Decision The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.~~

IN WITNESS WHEREOF the parties hereto have executed this Service Agreement.

BC GAS UTILITY LTD.

\_\_\_\_\_  
(here insert name of Customer)

BY: \_\_\_\_\_  
(Signature)

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

\_\_\_\_\_  
(Name - Please Print)

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_



**BC GAS UTILITY LTD.**

**RATE SCHEDULE 7**  
**GENERAL INTERRUPTIBLE SERVICE**

**Effective November 1, 1993**



**BC Gas**

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**1. Applicability**

- 1.1 **Description of Applicability** - This Rate Schedule applies to the sale of interruptible Gas, no portion of which may be resold, through one meter station to one Customer.
- 1.2 **Service Agreement** - BC Gas will only sell Gas pursuant to an executed Service Agreement.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

**2. Conditions of Service**

- 2.1 **Conditions** - This Rate Schedule is available to Customers in all territory served by BC Gas under the BC Gas tariff of which this Rate Schedule is a part if
- (a) adequate Gas volumes for such service are available,
  - (b) adequate capacity exists in the BC Gas System,
  - (c) at all times when adequate quantities of Gas are available for sale by BC Gas to the Customer at the facilities specified in the Service Agreement, the Customer will use such Gas as the only fuel Gas for such facilities, and
  - ~~(d) BC Gas has installed at the Delivery Point the facilities and equipment referred to in section 8.1 (Facilities and Equipment), and~~
  - ~~(e) the Customer has and continues to have, to the satisfaction of BC Gas, an alternative fuel burning installation in good operating order with an adequate supply of fuel in order that the Customer can continue its operations on occasions when Gas service is discontinued, interrupted or curtailed and the Customer acknowledges its ability to accommodate such interruption or curtailment. BC Gas will waive this requirement provided that the Customer agrees and acknowledges that any interruption of its operations due to Gas discontinuance, interruption or curtailment results solely from the Customer's election not to install and maintain standby facilities.~~
  - (d) the Customer acknowledges that it is able to accommodate interruption or curtailment of Gas service and releases BC Gas of any liability for the Customer's inability to accommodate an interruption or curtailment of Gas Service.
-

2.2 **Security** - In order to secure the prompt and orderly payment of the charges to be paid by the Customer to BC Gas under the Service Agreement, BC Gas may require the Customer to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the ~~estimated~~ maximum amount payable by the Customer under this Rate Schedule and the Service Agreement for a period of 90 days. Where BC Gas requires a Customer to provide a letter of credit and the Customer is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.

2.3 **Warning Relating to Firm Sales or Firm Transportation Rate Schedule** - A Customer wishing to switch at the end of the term of an ~~interruptible~~ Service Agreement to a firm Gas sales or firm transportation Rate Schedule must comply with the requirements set out in the applicable Rate Schedule, including the following

- (a) ~~giving~~ 13 months' prior notice to BC Gas of the Customer's desire to do so, and
- (b) if BC Gas is ~~subjected to~~ incurs additional costs to provide such service, ~~higher Gas prices or other transportation costs, or both,~~ reimburses BC Gas for any such ~~higher prices or~~ additional costs.

Notwithstanding section 2.3(a), BC Gas will endeavour to accommodate a Customer on less than 13 months' prior notice if BC Gas is able, with such shorter notice, to arrange for the firm purchase and transportation of Gas under a Firm Sales Rate Schedule, or transportation of Gas under a Firm Transportation Rate Schedule.

### 3. **Sales**

3.1 **Sale of Gas** - Subject to section 13 of the General Terms and Conditions of BC Gas (Interruption of Service), BC Gas will sell to the Customer and the Customer will buy from BC Gas at one Delivery Point such quantity of Gas as is required by the Customer for the operation of the Customer's facilities specified in the Service Agreement, estimated to be the maximum quantity per Day set out in the Service Agreement, for the charges and on all of the terms and conditions set out in either this Rate Schedule or the Service Agreement.

3.2 **Curtailment** - If BC Gas at any time and for any reason determines either that it does not have sufficient capacity on the BC Gas System, or that adequate volumes of Gas ~~volumes~~ are not available, ~~to accommodate the Customer's request for~~

~~service under this Rate Schedule, BC Gas may for any length of time interrupt or curtail the delivery of Gas to the Customer at the Delivery Point.~~

- 3.3 **Notice of Curtailment** - Each notice from BC Gas to the Customer with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Delivery Point will be by telephone ~~and be confirmed by facsimile and/or fax when such means of communication are available~~ and will specify the quantity of Gas to which the Customer is curtailed and the time at which such curtailment is to be made. BC Gas will endeavour to give the Customer as much notice as possible with respect to such curtailment, not to be less than 8 hours' prior notice unless prevented by Force Majeure ~~or unless the Transporter does not provide to BC Gas at least 8 hours' prior notice of reduced availability of Gas.~~

- 3.4 **Default Regarding Curtailment** - ~~The Customer will comply with each notice from BC Gas to interrupt or curtail the Customer's take.~~ If the Customer at any time fails or neglects to comply with a notice from BC Gas to interrupt or curtail the Customer's take, BC Gas may, in addition to any other remedy that it may then or thereafter have, at its option, without liability therefor and without any prior notice to the Customer

- (a) turn off the valve at the Delivery Point,
- (b) deliver such Gas and charge the Customer for such Gas consumed on that Day the charge for Unauthorized Overrun Gas set out in the Table of Charges, ~~or~~

3.5 **Failure to Comply**

If during any one Contract Year the Customer fails or neglects to comply with three notices from BC Gas to interrupt or curtail the Customer's take, unless the Customer provides to BC Gas assurances, to the ~~complete~~ satisfaction of BC Gas, that the Customer will comply with all further interruption or curtailment notices, BC Gas may, in addition to any other remedy ~~which that~~ it may then or thereafter have, at its option and without liability therefor, switch the Customer to a firm Gas sales Rate Schedule, beginning ~~on~~ at the commencement of the next following ~~Contract Year Month~~. If the Customer and BC Gas do not execute a new Service Agreement pursuant to the firm Gas sales Rate Schedule, from the date of such switch the Service Agreement will be deemed to be a Service Agreement pursuant to the firm Gas sales Rate Schedule, with all necessary changes.

- 3.6 **Maximum Hourly Quantities** - BC Gas will not be obliged to deliver in any one Hour more than 5% of the maximum quantity per Day set out in the Service Agreement.

~~3.7 **Pressure at Delivery Point** - All Gas delivered by BC Gas at the Delivery Point to the Customer will be at not less than the pressure specified in the Service Agreement.~~

#### **4. Table of Charges**

4.1 **Charges** - In respect of all quantities of Gas delivered to the Delivery Point pursuant to this Rate Schedule and the Service Agreement, the Customer will pay to BC Gas all of the charges set out in the Table of Charges.

~~4.2 **Alternative Fuels** - BC Gas may, in its sole discretion, reduce the charges set out in the Table of Charges to any Customer to compete with the price of alternative fuels.~~

#### **5. Unauthorized Gas Use**

5.1 **Charges for Unauthorized Service** - On any Day the Customer takes Unauthorized Overrun Gas, the Customer will pay to BC Gas the charges for Unauthorized Overrun Gas set out in the Table of Charges.

5.2 **Payments Not License** - Payments made by the Customer to BC Gas for Unauthorized Overrun Gas neither give the Customer the right to take Unauthorized Overrun Gas, nor exclude or limit any other remedies available to BC Gas for the Customer's taking of Unauthorized Overrun Gas.

#### **6. Term of Service Agreement**

6.1 **Term** - The initial term of the Service Agreement will begin on the Commencement Date and will expire at 8:00 a.m. ~~Standard~~ Local Time on the November 1 next following, provided that if the foregoing would result in the initial term being for a period of less than one year, then the initial term will instead expire at the end of one further Contract Year.

6.2 **Automatic Renewal** - Except as specified in the Service Agreement, the term of the Service Agreement will continue ~~on a~~ from year to year basis after the expiry of the initial term ~~until unless~~ cancelled by either BC Gas or the Customer, and subject to Section 2.3, upon not less than 10 days' notice prior to the end of the Contract Year then in effect.

6.3 **Early Termination** - The term of the Service Agreement is subject to early termination in accordance with section 10 (Default or Bankruptcy).



**6.4 Survival of Covenants** - Upon the termination of the Service Agreement, whether pursuant to section 10 (Default or Bankruptcy) or otherwise,

- (a) all claims, causes of action or other outstanding obligations remaining or being unfulfilled as at the date of termination, and,
- (b) all of the provisions in this Rate Schedule and in the Service Agreement relating to the obligation of any of the parties to account to or indemnify the other and to pay to the other any monies owing as at the date of termination in connection with the Service Agreement,

will survive such termination.

**7. Statement and Payments**

**7.1 Statements to be Provided** - BC Gas will, on or ~~before about~~ the 15th day of each month, deliver to the Customer a statement for the preceding month showing the Gas quantities delivered to the Customer and the amount due. BC Gas will, on or ~~before about~~ the 45th day after the end of a Contract Year, deliver to the Customer a separate statement for the preceding Contract Year showing the amount required from the Customer in respect of any indemnity due under ~~this Rate Schedule or a Service Agreement~~. Any errors in any statement will be promptly reported to the other party as provided hereunder, and statements will be final and binding unless questioned within one year after the date of the statement.

**7.2 Payment and ~~Interest~~ Late Payment Charge** - Payment for the full amount of the statement, including federal, provincial and municipal taxes or fees applicable thereon, will be made to BC Gas at its Vancouver, British Columbia office, or such other place in Canada as it will designate, on or before the 1st business day after the 21st calendar day following the billing date. If the Customer fails or neglects to make any payment required under this Rate Schedule, or any portion thereof, to BC Gas when due, BC Gas may include in the next bill to the Customer ~~interest on the outstanding amount at the rate of a late payment charge of 1 1/2% per month (19.56% per annum)~~.

**7.3 Examination of Records** - Each of BC Gas and the Customer will have the right to examine at reasonable times the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Rate Schedule or the Service Agreement.

## **8. Measuring Equipment**

- 8.1 Facilities and Equipment** - BC Gas will install, maintain and operate at the Delivery Point such metering and communications facilities and equipment as BC Gas determines are necessary or desirable for measuring the quantity of Gas delivered pursuant to this Rate Schedule to the Customer and the Customer will permit BC Gas, without cost to BC Gas, to use the Customer's communications lines and power for the purpose of installing, maintaining and operating the measuring equipment of BC Gas.
- 8.2 Measuring Site** - If BC Gas reasonably determines that it is necessary to install the facilities and equipment referred to in section 8.1 (Facilities and Equipment) on the Customer's property, the Customer will, without charge, provide a suitable site along with utilities and enclosures for the installation of the facilities and equipment of BC Gas. BC Gas will at all times have clear access to the site and to all of its facilities and equipment. All facilities and equipment installed by BC Gas on the Customer's property will remain the property of BC Gas and may be removed by BC Gas upon termination of the Service Agreement.
- 8.3 Calibration and Test of Measuring Equipment** - The accuracy of the measuring equipment of BC Gas will be verified by standard tests and methods at regular intervals and at other times at the initiative of BC Gas or upon the reasonable request of the Customer. Notice of the time and nature of each test conducted in response to communications with or at the request of the Customer will be given by BC Gas to the Customer sufficiently in advance to permit a representative of the Customer to be present. If during a test the measuring equipment is found to be registering inaccurately, it will be adjusted at once to read as accurately as possible. The results of each test and adjustment, if any, made by BC Gas, whether or not the Customer is present for such test, will be accepted until the next test. All tests of such measuring equipment of BC Gas will be made at the expense of BC Gas, except that the Customer will bear the expense of tests made at its request if the measuring equipment is found to be inaccurate by an amount equal to 2% or less.
- 8.4 Inaccuracy Exceeding 2%** - If upon any test the measuring equipment is found to be inaccurate by an amount exceeding 2%, any previous readings of such equipment will be corrected to zero error for any period during which it is definitely known or is agreed upon that the error existed. If the period is not definitely known or is not agreed upon, such correction will be for a period covering the last half of the time elapsed since the date of the last test. Provided that under no circumstances will an adjustment be made for a period of more than the preceding 12 months.

**8.5 Correction of Measuring Errors** - If the measuring equipment is out of service or out of repair so that the quantity of Gas delivered cannot be correctly determined by the reading thereof, the Gas delivered during the period such measuring equipment is out of service or out of repair will be estimated on the basis of the best available data, using the first of the following methods which is feasible

- (a) by correcting the error if the percentage of error is ascertained by calibration test or mathematical calculation,
- (b) by using the registration of any check measuring equipment if installed and accurately registering, and
- (c) by estimating the quantity of Gas delivered to the Customer during the preceding periods under similar conditions when the meter was registering accurately.

**8.6 Customer's Equipment** - The Customer may at its own expense install, maintain and operate its own measuring equipment for the purposes of monitoring or checking the measuring equipment of BC Gas, provided that the Customer will install such equipment so as not to interfere with the operation of the measuring equipment of BC Gas.

**8.7 Right to be Present** - BC Gas and the Customer will have the right to inspect all equipment installed or furnished by the other and the charts and other measurement or test data of the other at all times during business hours, and to be present at the time of any installing, testing, cleaning, changing, repairing, calibrating or adjusting done in connection with the measuring equipment of the other party, but all such activities will be performed by the party furnishing the measuring equipment.

**8.8 Preservation of Records** - Both parties will cause to be preserved each test datum, chart and other record of Gas measurement for a period of 2 years.

## **9. Measurement**

**9.1 Unit of Volume** - The unit of volume of Gas for all purposes hereunder will be 1 cubic metre at a temperature of 15° Celsius and an absolute pressure of 101.325 kilopascals.

**9.2 Determination of Volume** - Gas delivered hereunder will be metered using metering apparatus approved by the Standards Division, ~~Department Industry~~ Canada, Office of Consumer & Corporate Affairs of Canada and the

determination of standard volumes delivered hereunder will be in accordance with terms and conditions pursuant to the *Electricity and Gas Inspection Act* of Canada.

- 9.3 **Conversion to Energy Units** - In accordance with the *Electricity and Gas Inspection Act* of Canada, volumes of Gas delivered each day will be converted to energy units by multiplying the standard volume by the Heat Content of each unit of Gas. Volumes will be specified in  $10^3\text{m}^3$  rounded to two decimal places and energy will be specified in gigajoules rounded to one decimal place.

## 10. **Default or Bankruptcy**

### 10.1 **Default** - If the Customer at any time fails or neglects

- (a) to make any payment due to BC Gas or to any other person under this Rate Schedule or the Service Agreement within 30 days after payment is due, or
- (b) to ~~eurecorrect~~ any default of any of the other terms, covenants, agreements, conditions or obligations imposed upon it under this Rate Schedule or the Service Agreement, within 30 days after BC Gas gives to the Customer notice of such default or, in the case of a default that cannot with due diligence be ~~eured-corrected~~ within a period of 30 days, the Customer fails to proceed promptly after the giving of such notice with due diligence to ~~eurecorrect~~ the same and thereafter to prosecute the ~~euringcorrecting~~ of such default with all due diligence,

then BC Gas may in addition to any other remedy that it has, including the rights of BC Gas set out in section 3.4 (Default Regarding Curtailment), ~~3.5 (Failure to Comply)~~ and ~~5 (Unauthorized Gas Use)~~, at its option and without liability therefor

- (a) suspend further service to the Customer and may refuse to deliver Gas to the Customer until the default has been fully remedied, and no such suspension or refusal will relieve the Customer from any obligation under this Rate Schedule or the Service Agreement, or
- (b) terminate the Service Agreement, and no such termination of the Service Agreement pursuant hereto will exclude the right of BC Gas to collect any amount due to it from the Customer for what would otherwise have been the remainder of the term of the Service Agreement.

### 10.2 **Bankruptcy or Insolvency** - If the Customer becomes bankrupt or insolvent or commits or suffers an act of bankruptcy or insolvency or a receiver is appointed

pursuant to a statute or under a debt instrument or the Customer seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas will have the right, at its sole discretion, to terminate the Service Agreement by giving notice in writing to the Customer and thereupon BC Gas may cease further delivery of Gas to the Customer and the amount then outstanding for Gas provided under the Service Agreement will immediately be due and payable by the Customer.

## 11. Notice

- 11.1 Notice - Any notice, request, statement or bill that is required to be given or that may be given under this Rate Schedule or under the Service Agreement will, unless otherwise specified, be in writing and will be considered as fully delivered when mailed, personally delivered or sent by ~~telecopier~~ ~~fax~~ to the other in accordance with the following:

if to BC Gas

BC GAS UTILITY LTD.

MAILING ADDRESS:

1111 West Georgia Street  
Vancouver, B.C.  
V6E 4M4

BILLING AND PAYMENT:

Attention: Manager, Customer  
Administration  
Telephone: (604) 443-6507  
~~Telecopier~~ ~~Fax~~: (604) 443-6588

CURTAILMENT AND FORCE  
MAJEURE:

Attention: Transportation Coordinators  
Telephone: (604) 443-6950  
~~Telecopier~~ ~~Fax~~: (604) 443-6952

CUSTOMER RELATIONS

Attention: Manager, ~~Transportation~~  
~~and Industrial Services~~  
Telephone: (604) 443-6491  
~~Telecopier~~ ~~Fax~~: (604) 443-6770

LEGAL AND OTHER:

Attention: V.P. Legal & Regulatory  
Affairs & ~~Secretary~~  
Telephone: (604) 443-6607  
~~Telecopier~~ ~~Fax~~: (604) 443-6789

if to the Customer, then as set out in the Service Agreement.

- 11.2 **Specific Notices** - Notwithstanding section 11.1 (Notice), notices with respect to Force Majeure will be sufficient if given by BC Gas in writing by facsimile-fax, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by the Customer as authorized to receive such notices.

## **12. Limitation on Liability and Indemnity**

- 12.1 **Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas service permitted under the General Terms and Conditions of BC Gas or this Rate Schedule.
- 12.2 **Indemnity** - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following
- (a) Franchise Fees not otherwise collected by BC Gas under the Table of Charges, and
  - (b) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Customer or on the delivery of Gas to the Customer by BC Gas, or on any other service provided by BC Gas to the Customer.

## **13. Force Majeure**

- 13.1 **Force Majeure** - Subject to the other provisions of this section 13, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Rate Schedule under which service is rendered or in the Service Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.
- 13.2 **Curtailment Notice** - If BC Gas claims suspension pursuant to this section 13, BC Gas will be deemed to have issued to the Customer a notice of curtailment.
- 13.3 **Exceptions** - Neither party will be entitled to the benefit of the provisions of section 13 under any of the following circumstances

- (a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,
- (b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or
- (c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under the Rate Schedule or the Service Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.

**13.4 Notice to Resume** - The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.

**13.5 Settlement of Labour Disputes** - Notwithstanding any of the provisions of this section 13, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 13.1.

**13.6 No Exemption for Payments** - Notwithstanding any of the provisions of this section 13, Force Majeure will not relieve or release either party from its obligations to make payments to the other.

**13.7 Periodic Repair by BC Gas** - BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Customer as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.

**13.8 Alteration of Facilities** - The Customer will pay to BC Gas all reasonable costs associated with the alteration of facilities made at the discretion of BC Gas to measure quantities reduced by reason of Force Majeure claimed by the Customer and to restore such facilities after the Force Majeure ends.

## **14. Arbitration**

- 14.1 Arbitration** - Any dispute between the parties arising from this Rate Schedule or the Service Agreement will be resolved by a single arbitrator pursuant to the Commercial Arbitration Act of British Columbia or successor legislation, save as expressly provided herein.
- 14.2 Demand for Arbitration** - Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.
- 14.3 Arbitrator** - The parties will have 10 days from receipt of the demand referred to in section 14.2 of this Rate Schedule to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.
- 14.4 Commencement and Decision** - The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.
- 14.5 Decision** - The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.

## **15. Interpretation**

- 15.1 Definitions in General Terms and Conditions of BC Gas** - Except where the context requires otherwise or except as otherwise expressly provided in the Definitions which form part of this Rate Schedule, all words and phrases defined in the General Terms and Conditions of BC Gas and used in this Rate Schedule or in a Service Agreement have the meanings set out in the General Terms and Conditions of BC Gas.
- 15.2 Change in Definition of "Day"** - BC Gas may amend the definition of "Day" from time to time to suitably align its operations with those of its Transporters. If BC



Gas amends the meaning definition of "Day", a pro-rata adjustment of quantities of Gas and charges to account for any Day of more or less than 24 hours will be made and the term of the Service Agreement will be similarly adjusted.

~~15.2 Further Definitions~~ Additionally, except where the context requires otherwise, each of the words and phrases described in the Definitions have the meanings ascribed thereto in the Definitions.

**15.3 Interpretation** - Except where the context requires otherwise or except as otherwise expressly provided, in this Rate Schedule or in a Service Agreement

- (a) all references to a designated section are to the designated section of this Rate Schedule unless otherwise specifically stated,
- (b) the singular of any term includes the plural, and vice versa, and the use of any term is equally applicable to any gender and, where applicable, body corporate,
- (c) any reference to a corporate entity includes and is also a reference to any corporate entity that is a successor to such entity,
- (d) all words, phrases and expressions used in this Rate Schedule or in a Service Agreement that have a common usage in the gas industry and that are not defined in the General Terms and Conditions of BC Gas, the Definitions or in the Service Agreement have the meanings commonly ascribed thereto in the gas industry, and
- (e) the headings of the sections set out in this Rate Schedule or in the Service Agreement are for convenience of reference only and will not be considered in any interpretation of this Rate Schedule or the Service Agreement.

## **16 Miscellaneous**

**16.1 Waiver** - No waiver by either BC Gas or the Customer of any default by the other in the performance of any of the provisions of this Rate Schedule or the Service Agreement will operate or be construed as a waiver of any other or future default or defaults, whether of a like or different character.

**16.2 Enurement** - The Service Agreement will enure to the benefit of and be binding upon the parties and their respective successors and permitted assigns, including without limitation successors by merger, amalgamation or consolidation.

- 16.3 Assignment** - The Customer will not assign the Service Agreement or any of its rights or obligations thereunder without the prior written consent of BC Gas which consent will not be unreasonably withheld or delayed. No assignment will release the Customer from its obligations under this Rate Schedule or under the Service Agreement that existed prior to the date on which the assignment takes effect. This provision applies to every proposed assignment by the Customer.
- 16.4 Amendments to be in Writing** - Except as set out in this Rate Schedule, no amendment or variation of the Service Agreement will be effective or binding upon the parties unless such amendment or variation is set out in writing and duly executed by the parties.
- 16.5 Proper Law** - The Service Agreement will be construed and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein.
- 16.6 Time is of Essence** - Time is of the essence of this Rate Schedule, the Service Agreement and of the terms and conditions thereof.
- 16.7 Subject to Legislation** - Notwithstanding any other provision hereof, this Rate Schedule and the Service Agreement and the rights and obligations of BC Gas and the Customer under this Rate Schedule and the Service Agreement are subject to all present and future laws, rules, regulations and orders of any legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over BC Gas or the Customer.
- 16.8 Further Assurances** - Each of BC Gas and the Customer will, on demand by the other, execute and deliver or cause to be executed and delivered all such further documents and instruments and do all such further acts and things as the other may reasonably require to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Rate Schedule and the Service Agreement and to assure the completion of the transactions contemplated hereby.
- 16.9 Form of Payments** - All payments required to be made under statements and invoices rendered pursuant to this Rate Schedule or the Service Agreement will be made by ~~telegraphic wire~~ transfer to, or cheque or bank cashier's cheque drawn on, a Canadian chartered bank or trust company, payable in lawful money of Canada at par in immediately available funds in Vancouver, British Columbia.

## DEFINITIONS

- (a) **BC Gas** - means BC Gas Utility Ltd., a body corporate incorporated pursuant to the laws of the Province of British Columbia under number 368681.
- (b) **BC Gas System** - means the Gas transmission and distribution system owned and operated by BC Gas, as such system is expanded, reduced or modified from time to time.
- (c) **British Columbia Utilities Commission** - means the British Columbia Utilities Commission constituted under the *Utilities Commission Act* of British Columbia and includes and is also a reference to
  - (i) any commission that is a successor to such commission, and
  - (ii) any commission that is constituted pursuant to any statute that may be passed which supplements or supersedes the *Utilities Commission Act* of British Columbia.
- (d) **Commencement Date** - means the day specified as the Commencement Date in the Service Agreement.
- (e) **Contract Year** - means a period of 12 consecutive Months commencing at the beginning of the 1st Day of November and ending at the beginning of the next succeeding 1st Day of November.
- (f) **Customer** - means a person who enters into a Service Agreement with BC Gas.
- (g) **Day** - means, subject to section 12-215.2 (Change in Definition of "Day"), any period of twenty-four consecutive hours beginning and ending at 8:00 a.m. Standard Local Time.
- ~~(h) **Definitions** - means the definitions appended to this Rate Schedule.~~
- (i) **Delivery Point** - means the point specified in a Service Agreement where BC Gas delivers Gas to a Customer.
- (j) **Force Majeure** - means any acts of God, strikes, lockouts, or other industrial disturbances, civil disturbances, arrests and restraints of rulers or people, interruptions by government or court orders, present or future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, blackouts, insurrections, failure or inability to secure materials or labour by reason of priority, regulations or orders of government, serious epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, breakage or accident to machinery or lines of pipes, or freezing of wells or pipelines, or the

failure of gas supply, temporary or otherwise, from a Supplier of gas, which act of Force Majeure was not due to negligence of the party claiming Force Majeure. Further, Force Majeure will also include a declaration of force majeure by a Transporter that results in Gas being unavailable for delivery.

**(k) Franchise Fees** - means the aggregate of all monies payable by BC Gas to a municipality

- (i) for the use of the municipality's streets and other property to construct and operate the utility business of BC Gas,
- (ii) relating to the revenues received by BC Gas for services provided and Gas consumed within the municipality, and
- (iii) relating, if applicable, to the value of Gas transported by BC Gas through the municipality.

**(l) Gas** - means the residue remaining after raw gas has been subjected to any or all of the following permissible processes

- (i) the removal of any of its constituent parts other than methane, and the removal of methane to such extent as is necessary in removing other constituents,
- (ii) the compression, regulation, cooling, cleaning or any other chemical or physical process other than the addition of diluents, such as air or nitrogen, to such extent as may be required in its production, gathering, transmission, transportation, storage, removal from storage and delivery, and
- (iii) the addition of odorant by BC Gas,

but for greater certainty Gas does not include propane.

**(m) General Terms and Conditions of BC Gas** - means the general terms and conditions of BC Gas from time to time approved by the British Columbia Utilities Commission.

**(n) Heat Content** - means the gross heating value of the Gas, determined on the basis of a temperature of 15° Celsius with the Gas free of all water vapour and at an absolute pressure of 101.325 kilopascals, with the products of combustion cooled to the initial temperature of the Gas and the water formed by the combustion condensed to the liquid state. The Heat Content will be expressed in megajoules per cubic metre of Gas (MJ/M<sup>3</sup>) rounded to two decimal places.

**(o) Hour** - means any consecutive 60 minute period.

- (p) **Interruption Period** - means the period or periods during which the Customer is required pursuant to section 4 of the ~~Service Agreement~~ or sections 3.2 (Curtailed) or 3.3 (Notice of Curtailed) or section 13 (Force Majeure) to interrupt or curtail the receipt of Gas.
- (q) **Local Time** - means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area or daylight savings time as the case may be.
- (r) **Month** - means, subject to any changes from time to time required by BC Gas in the starting time of its Gas Day, the period beginning at 8:00 a.m. Standard Local Time on the first day of the calendar month and ending at 8:00 a.m. Standard Local Time on the first day of the next succeeding calendar month.
- (s) **Rate Schedule 7 or this Rate Schedule** - means this Rate Schedule, including all rates, terms and conditions, the Definitions and the Table of Charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (t) **Service Agreement** - means an agreement between BC Gas and a Customer to provide service pursuant to this Rate Schedule.
- (u) **Supplier** - means a party who sells Gas to BC Gas or has access to its own supplies of Gas.
- (v) **Table of Charges** - means the table of prices, fees and charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission, appended to this Rate Schedule.
- (w) **Transporter** - means, in the case of the Columbia service area, Alberta Natural Gas Company, a Canadian corporation, and Nova Corporation of Alberta, and in the case of the Inland and Lower Mainland service areas, Westcoast Energy Inc., a Canadian corporation, and any other gas pipeline transportation company connected to the facilities of BC Gas from which BC Gas receives Gas for the purposes of Gas service or resale.
- (x) **Unauthorized Overrun Gas** - means any Gas taken on any Day by a Customer in excess of the curtailed quantity specified in any notice from BC Gas to interrupt or curtail the Customer's take, and for greater certainty, Unauthorized Overrun Gas includes all Gas taken by a Customer to the extent that the obligation of BC Gas to deliver such Gas is suspended by reason of Force Majeure.
- (y) **"10<sup>3</sup>m<sup>3</sup>"** means 1,000 Cubic Metres.
-

**GENERAL INTERRUPTIBLE  
SERVICE AGREEMENT**

This Agreement is dated the \_\_\_\_ day of \_\_\_\_\_, 19\_\_, between BC Gas Utility Ltd. ("BC Gas") and \_\_\_\_\_ (the "Customer").

**WHEREAS:**

- A. BC Gas owns and operates the BC Gas System;
- B. The Customer is the owner and operator of a \_\_\_\_\_ located in or near \_\_\_\_\_ ~~in the Province of British Columbia;~~ and
- C. The Customer desires to purchase from BC Gas interruptible Gas for such facilities in accordance with Rate Schedule 7 and the terms set out herein.

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the terms, conditions and limitations contained herein, the parties agree as follows:

**1. Specific Information**

Estimated Maximum consumption: \_\_\_\_\_ gigajoules per day

Pricing:

\_\_\_\_\_  
(Indicate "Fixed" or "Index" as per Rate Schedule 7 Table of Charges)

Commencement Date:

\_\_\_\_\_

Expiry Date:

\_\_\_\_\_  
(only specify an expiry date if term of Service Agreement is not to automatically continue from year to year as set out in section 6.2 of Rate Schedule 7)

Delivery Point:

\_\_\_\_\_

~~Gauge pressure at Delivery Point:~~

\_\_\_\_\_  
\_\_\_\_\_ kilopascals

Address of Customer for receiving notices:

\_\_\_\_\_  
(name of Customer)

Attention: \_\_\_\_\_

\_\_\_\_\_  
(address of Customer)

Telephone: \_\_\_\_\_

Telecopier ~~Fax~~: \_\_\_\_\_

The information set out above is hereby approved by the parties and each reference in either this agreement or Rate Schedule 7 to any such information is to the information set out above.

## **2. Rate Schedule 7**

- 2.1 **Additional Terms** - All rates, terms and conditions set out in Rate Schedule 7 ~~and~~ the General Terms and Conditions of BC Gas, as either of them may be amended by BC Gas and approved from time to time by the British Columbia Utilities Commission, are in addition to the rates, terms and conditions contained in this Service Agreement and form part of this Service Agreement and bind BC Gas and the Customer as if set out herein.
- 2.2 **Payment of Amounts** - Without limiting the generality of the foregoing, the Customer will pay to BC Gas all of the amounts set out in Rate Schedule 7 for the services provided under ~~that~~ Rate Schedule 7 and this Service Agreement.
- 2.3 **Conflict** - Where anything in either Rate Schedule 7 or the General Terms and Conditions of BC Gas conflicts with any of the rates, terms and conditions set out in this Service Agreement, this Service Agreement governs. Where anything in Rate Schedule 7 conflicts with any of the rates, terms and conditions set out in the General Terms and Conditions of BC Gas, Rate Schedule 7 governs.
- 2.4 **Acknowledgment** - The Customer acknowledges receiving and reading a copy of Rate Schedule 7 and the General Terms and Conditions of BC Gas and, without limiting the generality of the foregoing, the Customer is able to accommodate interruption or curtailment of Gas service and releases BC Gas of any liability for the Customer's inability to accommodate an interruption or curtailment of Gas service.

## **3. ~~Limitation on Liability and Indemnity~~**

- 3.1 ~~**Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas service.~~
- 3.2 ~~**Indemnity** - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgements, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following~~
- (a) ~~Franchise Fees not otherwise collected by BC Gas under the Table of Charges, and~~

- (b) ~~all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Customer or on the delivery of Gas to the Customer by BC Gas, or on any other service provided by BC Gas to the Customer.~~

#### **4. ~~Force Majeure~~**

- 4.1 ~~Force Majeure~~ Subject to the other provisions of this section 4, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Service Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.
- 4.2 ~~Curtailment Notice~~ If BC Gas claims suspension pursuant to this section 4, BC Gas will be deemed to have issued to the Customer a notice of curtailment.
- 4.3 ~~Exceptions~~ Neither party will be entitled to the benefit of the provisions of section 4.1 of this agreement under any of the following circumstances-
- (a) ~~to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,~~
  - (b) ~~to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or~~
  - (c) ~~unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under this Service Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.~~
- 4.4 ~~Notice to Resume~~ The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.
- 4.5 ~~Settlement of Labour Disputes~~ Notwithstanding any of the provisions of this section 4, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to



~~be advisable and no delay in making settlement will deprive the party of the benefit of section 4.1 of this agreement.~~

- ~~4.6 — **No Exemption for Payments** Notwithstanding any of the provisions of this section 4, Force Majeure will not relieve or release either party from its obligations to make payments to the other.~~
- ~~4.7 — **Periodic Repair by BC Gas** BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas system or its equipment and BC Gas will endeavour to give the Customer as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.~~

## **5. — Arbitration**

- ~~5.1 — **Arbitration** Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.~~
- ~~5.2 — **Demand for Arbitration** Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.~~
- ~~5.3 — **Arbitrator** The parties will have 10 days from receipt of the demand referred to in section 5.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.~~
- ~~5.4 — **Commencement and Decision** The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.~~
- ~~5.5 — **Decision** The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.~~

IN WITNESS WHEREOF the parties hereto have executed this Service Agreement.

BC GAS UTILITY LTD.

\_\_\_\_\_  
(here insert name of Customer)

BY: \_\_\_\_\_  
(Signature)

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

\_\_\_\_\_  
(Name - Please Print)

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

**WAIVER**

To: ~~BC Gas Utility Ltd.~~  
~~1111 West Georgia Street~~  
~~Vancouver, B.C.~~  
~~V6E 4M4~~

~~("BC Gas")~~

From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

~~(the "Customer")~~

~~In consideration of BC Gas waiving the requirement that the Customer have an alternative fuel burning installation in order to obtain Gas service under Rate Schedule 7, the Customer agrees and acknowledges that any interruption of its operations due to Gas discontinuance, interruption or curtailment results solely from the Customer's election not to install and maintain standby facilities.~~

~~Concurrently with the signing of this waiver, the Customer further acknowledges receiving and reading a copy of Rate Schedule 7.~~

\_\_\_\_\_  
~~(here insert name of Customer)~~

BY: \_\_\_\_\_  
\_\_\_\_\_  
~~(Signature)~~

\_\_\_\_\_  
\_\_\_\_\_  
~~(Title)~~

\_\_\_\_\_  
\_\_\_\_\_  
~~(Name Please Print)~~

DATE: \_\_\_\_\_  
\_\_\_\_\_

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 10  
LARGE VOLUME INTERRUPTIBLE SALES**

**Effective November 1, 1993**



**BC Gas**

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## 1. **Applicability**

- 1.1 **Description of Applicability** - ~~This~~ Rate Schedule 10 applies to the sale of ~~interruptible Gas~~, at the Interconnection Point, ~~of interruptible Gas at two levels of priority, no portion of which may be resold, for transportation through the BC Gas System to one Customer, except as otherwise agreed upon.~~
- 1.2 **Sales Agreement** - BC Gas will only sell Gas pursuant to an executed Sales Agreement.
- 1.3 **British Columbia Utilities Commission** - ~~This~~ Rate Schedule 10 may be amended from time to time with the consent of the British Columbia Utilities Commission.
- ~~1.4 **Peaking and Backstopping** - Peaking Gas and Backstopping Gas are supplied under Rate Schedule 13 and 14 respectively, and are not available under this Rate Schedule 10.~~

## 2. **Conditions of Sales**

- 2.1 **Conditions** - ~~This~~ Rate Schedule 10 is available to Customers in all territory served by BC Gas under the ~~BC Gas~~ tariff of which Rate Schedule 10 is a part if
- ~~(a) — adequate Gas volumes for such sales are available, and~~
  - ~~(b) — at all times when adequate quantities of Gas are available for sale by from BC Gas to the Customer at the facilities specified in the Sales Agreement and subject to section 3.5 (Exception to Exclusivity), the Customer will only use Gas delivered under this Rate Schedule as fuel for such facilities, and~~
  - (a) the Customer has entered into a Transportation Agreement pursuant to Rate Schedule 22 and such agreement continues to be in effect;
  - (b) Gas volumes are available for sale by BC Gas to the Customer for the facilities specified in the Sales Agreement, except to the extent that the Customer has purchased a daily Gas volume equal to the Customer's Firm DTQ under Rate Schedule 22 directly from other Suppliers, the Customer will use the Gas delivered under this Rate Schedule as its sole source of interruptible Gas for its facilities, and
  - (c) the Customer acknowledges that it is able to accommodate interruption or curtailment of Gas sales and releases BC Gas of any liability for the Customer's inability to accommodate such interruption or curtailment.

*Green  
Review*

- 2.2 **Security** - In order to secure the prompt and orderly payment of the charges to be paid by the Customer to BC Gas under the Sales Agreement, BC Gas may require the Customer to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the ~~estimated~~ maximum amount payable by the Customer under ~~this~~ Rate Schedule 10 and the Sales Agreement for a period of 90 Days. Where BC Gas requires a Customer to provide a letter of credit and the Customer is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.

### 3. **Terms of Sales**

- 3.1 **Sale of Gas** - Subject to all of the terms and conditions set out in this Rate Schedule, ~~and to section 3.5 (Exception to Exclusivity)~~, BC Gas will sell to the Customer and the Customer will buy from BC Gas on each Day the quantity of Gas required by the Customer for the operation of the Customer's facilities specified in the Sales Agreement.
- ~~3.2 **Priority 1 Curtailment** - The circumstances and duration of curtailment under priority 1 sales will be set out in the Sales Agreement.~~
- ~~3.2~~ **Priority 2 Curtailment** - BC Gas may at any time, for any reason and for any length of time, interrupt or curtail ~~priority 2 Gas~~ sales under ~~this~~ Rate Schedule 10.
- ~~3.3~~ **Notice of Curtailment** - Each notice from BC Gas to the Customer with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Interconnection Point will be by telephone ~~and be confirmed by facsimile and/or fax~~ and will specify the quantity of Gas to which the Customer is curtailed and the time at which such curtailment is to be made, ~~and~~ BC Gas will endeavour to give to the Customer as much notice as possible with respect to such curtailment, not to be less than 2 hours' prior notice unless prevented by Force Majeure ~~or unless the Transporter does not provide to BC Gas at least 24 hours' prior notice of reduced Gas supply availability.~~
- ~~3.4 **Exception to Exclusivity** - The Customer may purchase a daily quantity of Gas equal to the Customer's Firm DTQ under Rate Schedule 22 directly from other Suppliers a daily quantity of Gas equal to the Customer's Firm DTQ under Rate Schedule 22. BC Gas and the Customer may agree on an alternative daily quantity to be contracted from other Suppliers (which may include interruptible Gas), subject to the following:~~
- ~~(a) to the extent BC Gas is unable to supply Gas hereunder on any Day, or~~



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~~(b) such agreement provides a greater net contribution to BC Gas with respect to recovery of the Gas supply costs or other costs of service of BC Gas in respect of firm Gas customers, or~~

~~(c) such agreement provides incremental peak shaving to BC Gas.~~

#### 4. **Table of Charges**

- 4.1 **Charges** - In respect of all Authorized Quantities of Gas sales to the Customer, as described in section 5.2 (Authorized Quantity), the Customer will pay to BC Gas all of the charges set out in the Table of Charges.

#### 5. **Nomination**

- 5.1 **Requested Quantity** - The Customer or Shipper Agent will provide to BC Gas by facsimile fax or other method approved by BC Gas, prior to 7:30 a.m. Pacific Local Time on each Day (or such other time as may be specified from time to time by BC Gas) the Customer's Requested Quantity for the Day commencing in approximately 24 hours. If the Customer or Shipper Agent does not notify BC Gas in accordance with the foregoing, then the Customer's Requested Quantity for the Day commencing in approximately 24 hours will be deemed to be the Customer's quantity pursuant to Section 5.2 (Authorized Quantity) for the Day just commencing.
- 5.2 **Authorized Quantity** - BC Gas will each Day, giving consideration to the Customer's request pursuant to section 5.1 (Requested Quantity), determine the Authorized Quantity to be made available to the Customer under this Rate Schedule 10 and will advise the Customer if such Authorized Quantity is less than the Customer's request.

#### 6. **Term of Sales Agreement**

- 6.1 **Term** - The initial term of the Sales Agreement will begin on the Commencement Date and, ~~except if otherwise specified in the Sales Agreement,~~ will expire at 8:00 a.m. Standard Local Time on the November 1st next following, provided that if the foregoing would result in the initial term being for a period of less than one year, then the initial term will instead expire at the end of one further Contract Year.
- 6.2 **Automatic Renewal** - Except as specified in the Sales Agreement, the term of the Sales Agreement will continue on a year to year basis after the expiry of the initial term until cancelled by either BC Gas or the Customer upon not less than 10 days notice prior to the end of the Contract Year then in effect.

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## 7. **Limitation on Liability and Indemnity**

- 7.1 **Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas sales permitted under this Rate Schedule service.
- 7.2 **Indemnity** - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgements, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following
- (a) Franchise Fees not otherwise collected by BC Gas, under the Table of Charges, and
  - (b) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to the Customer by BC Gas or on the delivery of Gas to BC Gas by the Customer, or on any other service provided by BC Gas to the Customer.

## 8. ~~Force Majeure~~

- 8.1 ~~Force Majeure~~ Subject to the other provisions of this section 5, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Sales Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.
- 8.2 ~~Curtailment Notice~~ If BC Gas claims suspension pursuant to this section 5, BC Gas will be deemed to have issued to the Customer a notice of curtailment.
- 8.3 ~~Exceptions~~ Neither party will be entitled to the benefit of the provisions of section 5.1 of this agreement under any of the following circumstances
- (c) ~~to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,~~
  - (d) ~~to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or~~
  - (e) ~~unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the~~

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~~nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under this Sales Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.~~

~~8.4 — **Notice to Resume** The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.~~

~~8.5 — **Settlement of Labour Disputes** Notwithstanding any of the provisions of this section 5, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 5.1 of this agreement.~~

~~8.6 — **No Exemption for Payments** Notwithstanding any of the provisions of this section 5, Force Majeure will not relieve or release either party from its obligations to make payments to the other.~~

## **9. — Arbitration**

~~9.1 — **Arbitration** Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.~~

~~9.2 — **Demand for Arbitration** Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.~~

~~9.3 — **Arbitrator** The parties will have 10 days from receipt of the demand referred to in section 6.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.~~

~~9.4 — **Commencement and Decision** The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by~~

~~and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.~~

~~9.5 Decision The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.~~

## **8. Transportation Rate Schedule**

**8.1 Definitions in Rate Schedule** - Except where the context requires otherwise or except as otherwise expressly provided in the Rate Schedule 22 under which the Customer receives transportation service, all words and phrases defined in the transportation Rate Schedule 22 and used in this Rate Schedule 10 or in a Sales Agreement have the meanings set out in the transportation Rate Schedule 22, with necessary changes.

**8.2 Applicable Provisions of Transportation Rate Schedule** - The terms and conditions set out in the following sections of Rate Schedule 22 apply to and form part of this Rate Schedule 10, with necessary changes, and bind BC Gas and the Customer, as if set out in this Rate Schedule 10

- section 910.3 (Early Termination)
- section 910.4 (Survival of Covenants)
- section 1011 (Statements and Payments)
- section 1314 (Measurement)
- section 1516 (Default or Bankruptcy)
- section 1617 (Notice)
- section 20 (Arbitration)
- section 1721 (Interpretation) and
- section 1822 (Miscellaneous).

## **9. Title to Gas**

**9.1 Representation and Warranty** - BC Gas represents and warrants generally the title to all Gas delivered to the Customer at the Interconnection Point under this Rate Schedule 10 and the right of BC Gas to sell such Gas, and represents and warrants that such Gas will be free and clear of all liens, encumbrances and adverse claims.

**9.2 Transfer of Title** - Title to Gas delivered under this Rate Schedule 10 will pass to

**LARGE VOLUME INTERRUPTIBLE AND PEAKING SALES AGREEMENT**

This Agreement is dated the \_\_\_\_ day of \_\_\_\_\_, 19\_\_, between BC Gas Utility Ltd. ("BC Gas") and \_\_\_\_\_ (the "Customer").

**WHEREAS:**

- A. BC Gas owns and operates the BC Gas System;
- B. The Customer is the owner and operator of a \_\_\_\_\_ located in or near \_\_\_\_\_ in the Province of British Columbia; and
- C. The Customer desires to purchase from BC Gas interruptible Gas for such facilities in accordance with the Rate Schedule 10 and the terms set out herein.

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the terms, conditions and limitations contained herein, the parties agree as follows:

**1. Specific Information**

~~Applicable Rate Schedule(s)~~ \_\_\_\_\_

~~Commencement Date:~~ \_\_\_\_\_

~~Expiry Date:~~ \_\_\_\_\_

(only specify expiry date if term not automatically renewed as set out in section 6.2 of Rate Schedule 10)

~~Delivery Point of Customer's Transportation Agreement:~~ \_\_\_\_\_

~~Interconnection Point:~~

the point at ( \_\_ km-post \_\_ ) where the Transporter's pipeline system in British Columbia interconnects with the BC Gas System

**2. Specific Information Related to Rate Schedule 10 Sales**

~~Maximum Firm Transportation Quantity (DTQ) quantity from Suppliers other than BC Gas:~~

\_\_\_\_\_ gigajoules per day  
(pursuant to section 2.1(b) of Rate Schedule 10)

~~Maximum quantity of priority 1 Gas:~~

\_\_\_\_\_ gigajoules per day

~~Maximum quantity of priority 2 Gas:~~

\_\_\_\_\_ gigajoules per day

~~Pricing:~~ \_\_\_\_\_

~~Other Conditions:~~ \_\_\_\_\_

Refer to Rate Schedule 22  
Transportation Agreement for  
Address of Customer for receiving  
notices :-

\_\_\_\_\_  
(name of Customer)      Attention: \_\_\_\_\_  
\_\_\_\_\_  
(address of Customer)      Telephone: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_      Telecopier/Fax: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

The information set out above is hereby approved by the parties and each reference in either this agreement or the Rate Schedule 10 to any such information is to the information set out above.

### 3. **Rate Schedule s 10 and 13**

- 3.1 **Additional Terms** - All rates, terms and conditions set out in the applicable Rate Schedule (10 and/or 13) and the General Terms and Conditions of BC Gas, as they either of them may be amended by BC Gas and approved to from time to time by the British Columbia Utilities Commission, are in addition to the rates, terms and conditions contained in this Sales Agreement and form part of this Sales Agreement and bind BC Gas and the Customer as if set out herein.
- 3.2 **Payment of Amounts** - Without limiting the generality of the foregoing, the Customer will pay to BC Gas all of the amounts set out in the applicable Rate Schedule 10 for the services provided under such that Rate Schedule and this Sales Agreement.
- 3.3 **Conflict** - Where anything in either the Rate Schedule 10, or the General Terms and Conditions of BC Gas, conflicts with any of the rates, terms and conditions set out in this Sales Agreement, this Sales Agreement governs. Where anything in the Rate Schedule 10 conflicts with any of the rates, terms and conditions set out in the General Terms and Conditions of BC Gas, the Rate Schedule 10 governs.
- 3.4 **Acknowledgment** - The Customer acknowledges receiving and reading a copy of Rates Schedules 10 and 22 and the General Terms and Conditions of BC Gas and, without limiting the generality of the foregoing, the Customer is able to accommodate interruption or curtailment of Gas service and releases BC Gas of any liability for the Customer's inability to accommodate an interruption or curtailment of Gas Service.

**4. ~~Limitation on Liability and Indemnity~~**

- ~~4.1 **Limitation on Liability** Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas service.~~
- ~~4.2 **Indemnity** The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgements, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following~~
- ~~(a) Franchise Fees not otherwise collected by BC Gas, under the Table of Charges, and~~
  - ~~(b) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to the Customer by BC Gas or on the delivery of Gas to BC Gas by the Customer, or on any other service provided by BC Gas to the Customer.~~

**5. ~~Force Majeure~~**

- ~~5.1 **Force Majeure** Subject to the other provisions of this section 5, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Sales Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.~~
- ~~5.2 **Curtailment Notice** If BC Gas claims suspension pursuant to this section 5, BC Gas will be deemed to have issued to the Customer a notice of curtailment.~~
- ~~5.3 **Exceptions** Neither party will be entitled to the benefit of the provisions of section 5.1 of this agreement under any of the following circumstances~~
- ~~(a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,~~
  - ~~(b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or~~
  - ~~(c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to~~

~~observe or perform any of its covenants or obligations under this Sales Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.~~

~~5.4 — Notice to Resume — The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.~~

~~5.5 — Settlement of Labour Disputes — Notwithstanding any of the provisions of this section 5, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 5.1 of this agreement.~~

~~5.6 — No Exemption for Payments — Notwithstanding any of the provisions of this section 5, Force Majeure will not relieve or release either party from its obligations to make payments to the other.~~

## **6. — Arbitration**

~~6.1 — Arbitration — Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.~~

~~6.2 — Demand for Arbitration — Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.~~

~~6.3 — Arbitrator — The parties will have 10 days from receipt of the demand referred to in section 6.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.~~

~~6.4 — Commencement and Decision — The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the~~



~~arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.~~

~~6.5 Decision The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.~~

IN WITNESS WHEREOF the parties hereto have executed this Sales Agreement.

BC GAS UTILITY LTD.

\_\_\_\_\_  
(here insert name of Customer)

BY: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

BY: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

\_\_\_\_\_  
(Name - Please Print)

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 14**  
**~~INTERRUPTIBLE BACKSTOPPING INDUSTRIAL GAS SALES~~**  
**~~INDEX PRICING~~**

**Effective November 1, 1993~~6~~**



**BC Gas**

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## 1. **Applicability**

- 1.1 **Description of Applicability** - ~~This Rate Schedule 14 applies to the sale of Gas at the Interconnection Point of interruptible Backstopping Gas, no portion of which may be resold for transportation through the BC Gas system to one Customer, except as otherwise agreed upon. Gas under Rate Schedule 14 is sold interruptibly on a first come, first served basis to provide a supply of Gas to a Customer when the Customer's usual supply of Gas is not available.~~

*more specific*

- 1.2 **Sales Agreement** - BC Gas will only sell Gas pursuant to an executed Sales Agreement.
- 1.3 **British Columbia Utilities Commission** - ~~This Rate Schedule 14 may be amended from time to time with the consent of the British Columbia Utilities Commission.~~

## 2. **Conditions of Sales**

- 2.1 **Conditions** - ~~This Rate Schedule 14 is available to Customers in all territory served by BC Gas under the BC Gas tariff of which Rate Schedule 14 is a part if~~

- ~~(a) adequate Gas volumes for such sales are available, and~~
- (a) the Customer has entered into a Transportation Agreement pursuant to a Rate Schedule that provides interruptible service and such agreement continues to be in effect, and
- (b) the Customer acknowledges that where the Gas service under this Rate Schedule is interruptible, the Customer is able to accommodate such interruption or curtailment and releases BC Gas of any liability for the Customer's inability to accommodate such interruption or curtailment.

- 2.2 **Security** - In order to secure the prompt and orderly payment of the charges to be paid by the Customer to BC Gas under the Sales Agreement, BC Gas may require the Customer to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the estimated maximum amount payable by the Customer under this Rate Schedule 14 and the Sales Agreement for a period of 90 Days. Where BC Gas requires a Customer to provide a letter of credit and the Customer is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.

### 3. Terms of Sale

- 3.1 **Sale of Gas** - Subject to all of the terms and conditions set out in this Rate Schedule, and the Sales Agreement, BC Gas will sell to the Customer and the Customer will buy from BC Gas on each Day the quantity of Gas authorized by BC Gas in accordance with section 5 (Nomination).
- 3.2 **Minimum Quantity** - A minimum sales quantity may be specified in the Sales Agreement consistent with prevailing spot market availability of supply and pricing conditions.
- 3.3 **Curtailment** - BC Gas may at any time, for any reason and for any length of time, interrupt or curtail Gas sales under this Rate Schedule 14, except as otherwise set out in the Sales Agreement.
- 3.4 **Notice of Curtailment** - Each notice from BC Gas to the Customer with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Interconnection Point will be by telephone and/or fax be confirmed by facsimile and will specify the quantity of Gas to which the Customer is curtailed and the time at which such curtailment is to be made, and BC Gas will endeavour to give to the Customer as much notice as possible with respect to such curtailment, not to be less than 2 hours' prior notice unless prevented by Force Majeure or unless the Transporter does not provide to BC Gas at least 2 hours' prior notice of reduced Gas supply availability.

### 4. Table of Charges

- 4.1 **Charges** - In respect of all Authorized Quantities of Gas sales to the Customer as described in section 5.2 (Authorized Quantity) and subject to the minimum quantity, if applicable, specified in the Sales Agreement, and to section 4.2 (Increased Charges), the Customer will pay to BC Gas the charges set out in the Sales Agreement as determined by the Table of Charges.
- 4.2 ~~Increased Charges~~ - On days when the cost of Gas for sales hereunder exceed the charges set out in the Sales Agreement the charges applying to the Authorized Quantities will be adjusted to equal such costs.

### 5. Nomination

- 5.1 **Requested Quantity** - The Customer or Shipper Agent will provide to BC Gas by facsimile fax or other method approved by BC Gas, prior to 7:30 a.m. Pacific Local

Time on each Day (or such other time as may be specified from time to time by BC Gas) the Customer's Requested Quantity for the Day commencing in approximately 24 hours. If the Customer or Shipper Agent does not notify BC Gas in accordance with the foregoing, then the Customer's Requested Quantity for the Day commencing in approximately 24 hours will be deemed to be the Customer's quantity pursuant to Section 5.2 (Authorized Quantity) for the Day just commencing.

5.2 **Authorized Quantity** - BC Gas will each Day, giving consideration to the Customer's request pursuant to section 5.1 (Requested Quantity), determine the ~~advise the Customer of the price and the~~ Authorized Quantity to be made available to the Customer under this Rate Schedule 14 and will advise the Customer if such Authorized Quantity is less than the Customer's request.

~~5.3 **Adjusted Quantity** - BC Gas may agree to increase or decrease the quantity described in section 5.2 (Authorized Quantity) when BC Gas, after advising the Customer of the Authorized Quantity, considers it has additional supply available to it or requires additional supply for its other Customers.~~

## 6. **Term of Sales Agreement**

6.1 **Term** - The initial term of the Sales Agreement will begin on the Commencement Date and will expire at 8:00 a.m. Standard Local Time on the Expiry Date specified in the Sales Agreement. ~~The initial term may be extended only by amendment of the Sales Agreement.~~

## 7. **Limitation on Liability and Indemnity**

7.1 **Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas service permitted under this Rate Schedule.

7.2 **Indemnity** - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) Franchise Fees not otherwise collected by BC Gas, under the Table of Charges, and

- (b) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to the Customer by BC Gas or on the delivery of Gas to BC Gas by the Customer, or on any other service provided by BC Gas to the Customer.

## **8. Force Majeure**

- 8.1 **Force Majeure** - Subject to the other provisions of this section 8, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Sales Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.
- 8.2 **Curtailment Notice** - If BC Gas claims suspension pursuant to this section 8, BC Gas will be deemed to have issued to the Customer a notice of curtailment.
- 8.3 **Exceptions** - Neither party will be entitled to the benefit of the provisions of section 8.1 of this agreement under any of the following circumstances
  - (a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,
  - (b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or
  - (c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under this Sales Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.
- 8.4 **Notice to Resume** - The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.
- 8.5 **Settlement of Labour Disputes** - Notwithstanding any of the provisions of this



section 8, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 8.1 of this agreement.

**8.6 No Exemption for Payments** - Notwithstanding any of the provisions of this section 8, Force Majeure will not relieve or release either party from its obligations to make payments to the other.

## **9 Transportation Rate Schedule**

**9.1 Definitions in Rate Schedule** - Except where the context requires otherwise or except as otherwise expressly provided in the Rate Schedule under which the Customer receives transportation service, all words and phrases defined in the transportation Rate Schedule and used in this Rate Schedule 14 or in a Sales Agreement have the meanings set out in the transportation Rate Schedule, with necessary changes.

**9.2 Applicable Provisions of Transportation Rate Schedule** - The terms and conditions set out in the following sections of Rate Schedule 22 apply to and form part of this Rate Schedule 14, with necessary changes, and bind BC Gas and the Customer as if set out in this Rate Schedule 14

- section 9.310.3 (Early Termination)
- section 9.410.4 (Survival of Covenants)
- section 1011 (Statements and Payments)
- section 1314 (Measurement)
- section 1516 (Default or Bankruptcy)
- section 1617 (Notice)
- section 20 (Arbitration)
- section 1721 (Interpretation) and
- section 1822 (Miscellaneous).

## **10 Title to Gas**

**10.1 Warranty** - BC Gas represents and warrants generally the title to all Gas delivered to the Customer at the Interconnection Point under the Rate Schedule 14 and the right of BC Gas to sell such Gas, and represents and warrants that such Gas will be free and clear of all liens, encumbrances and adverse claims.

**10.2 Transfer of Title** - Title to Gas delivered under this Rate Schedule 14 will pass to

**LARGE VOLUME INTERRUPTIBLE AND PEAKING INDUSTRIAL GAS SALES AGREEMENT**

This Agreement is dated the \_\_\_\_ day of \_\_\_\_\_, 19\_\_, between BC Gas Utility Ltd. ("BC Gas") and \_\_\_\_\_ (the "Customer").

**WHEREAS:**

- A. BC Gas owns and operates the BC Gas System;
- B. The Customer is the owner and operator of a \_\_\_\_\_ located in or near \_\_\_\_\_ in the Province of British Columbia; and
- C. The Customer desires to purchase from BC Gas interruptible Gas for such facilities in accordance with the Rate Schedule 14 and the terms set out herein.

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the terms, conditions and limitations contained herein, the parties agree as follows:

**1. Specific Information**

Applicable ~~Transportation~~ Rate  
Schedule(s) \_\_\_\_\_

Commencement Date: \_\_\_\_\_

Expiry Date: \_\_\_\_\_

(only specify expiry date if term not automatically renewed as set out in section 6.2 of Rate Schedule 10).

~~Delivery Point of Customer's  
Transportation Agreement:~~ \_\_\_\_\_

Address of Customer for receiving  
notices: \_\_\_\_\_

Attention: \_\_\_\_\_

\_\_\_\_\_  
(name of Customer)

Telephone: \_\_\_\_\_

\_\_\_\_\_  
(address of Customer)

Telecopier Fax: \_\_\_\_\_

The information set out above is hereby approved by the parties and each reference in either this agreement or Rate Schedule 14 to any such information is to the information set above.

**2. Specific Information Related to  
Rate Schedule 1014 Sales**

~~Maximum quantity from Suppliers  
other than BC Gas:~~ \_\_\_\_\_ gigajoules per day

~~Maximum quantity of priority 1 Gas:~~ \_\_\_\_\_ gigajoules per day

~~Maximum quantity of priority 2 Gas:~~ \_\_\_\_\_ gigajoules per day

~~Pricing:~~ \_\_\_\_\_

~~Other Conditions:~~ \_\_\_\_\_

~~Address of Customer for receiving  
notices:~~

\_\_\_\_\_  
~~(name of Customer)~~ Attention: \_\_\_\_\_

\_\_\_\_\_  
~~(address of Customer)~~ Telephone: \_\_\_\_\_

\_\_\_\_\_  
Telecopier Fax: \_\_\_\_\_

The information set out above is hereby approved by the parties and each reference in either this agreement or the Rate Schedule to any such information is to the information set out above.

**2. Other Terms and Conditions**

- 2.1 Specified Terms - Any other terms and conditions applicable to the services provided under Rate Schedule 14 and this Sales Agreement are set out in the applicable Appendix "A" attached to this Sales Agreement.

**3. Rate Schedules 1014 and 13**

- 3.1 Additional Terms - All rates, terms and conditions set out in the applicable Rate Schedule 14 (10 and/or 13) and the General Terms and Conditions of BC Gas, as they either of them may be amended by BC Gas and approved to from time to time by the British Columbia Utilities Commission, are in addition to the rates, terms and conditions contained in this Sales Agreement and form part of this Sales Agreement and bind BC Gas and the Customer as if set out herein.

- 3.2 Payment of Amounts - Without limiting the generality of the foregoing, the Customer will pay to BC Gas all of the amounts set out in the applicable

~~Appendix "A" attached to this Sales Agreement Rate Schedule for the services provided under such Rate Schedule 14 and this Sales Agreement.~~

3.3 ~~Conflict~~ - Where anything in either the Rate Schedule 14, or the General Terms and Conditions of BC Gas, conflicts with any of the rates, terms and conditions set out in this Sales Agreement, this Sales Agreement governs. Where anything in the Rate Schedule 14 conflicts with any of the rates, terms and conditions set out in the General Terms and Conditions of BC Gas, the Rate Schedule 14 governs.

3.4 ~~Appendices Incorporated in Sales Agreement~~ - Any and all Appendices attached to this Sales Agreement from time to time and referred to herein, are hereby incorporated into and made a part of this Agreement and are of contractual effect. Each Appendix will be for the period of time stated therein, and the termination of any Appendix will not result in the termination of this Sales Agreement.

3.5 ~~Acknowledgment~~ - The Customer acknowledges receiving and reading a copy of Rates Schedule 14 and the applicable transportation Rate Schedule and the General Terms and Conditions of BC Gas and, without limited the generality of the foregoing where the Gas Service under this Rate Schedule is interruptible, the Customer is able to accommodate such interruption or curtailment of Gas Service and releases BC Gas of any liability for the Customer's inability to accommodate an interruption or curtailment of Gas Service.

#### ~~4. Limitation on Liability and Indemnity~~

4.1 ~~Limitation on Liability~~ - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of Gas service.

4.2 ~~Indemnity~~ - The Customer will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgements, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) ~~Franchise Fees not otherwise collected by BC Gas, under the Table of Charges, and~~
- (b) ~~all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to the Customer by BC Gas or on the delivery of Gas to BC Gas by the Customer, or on any other service provided by BC Gas to the Customer.~~

**5. Force Majeure**

- ~~5.1 Force Majeure Subject to the other provisions of this section 5, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Sales Agreement, the obligations of both BC Gas and the Customer will be suspended to the extent necessary for the period of the Force Majeure condition.~~
- ~~5.2 Curtailment Notice If BC Gas claims suspension pursuant to this section 5, BC Gas will be deemed to have issued to the Customer a notice of curtailment.~~
- ~~5.3 Exceptions Neither party will be entitled to the benefit of the provisions of section 5.1 of this agreement under any of the following circumstances-~~
- ~~(a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,~~
  - ~~(b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or~~
  - ~~(c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under this Sales Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.~~
- ~~5.4 Notice to Resume The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.~~
- ~~5.5 Settlement of Labour Disputes Notwithstanding any of the provisions of this section 5, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 5.1 of this agreement.~~

~~5.6 — No Exemption for Payments — Notwithstanding any of the provisions of this section 5, Force Majeure will not relieve or release either party from its obligations to make payments to the other.~~

## ~~6. — Arbitration~~

~~6.1 — Arbitration — Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.~~

~~6.2 — Demand for Arbitration — Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.~~

~~6.3 — Arbitrator — The parties will have 10 days from receipt of the demand referred to in section 6.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Customer or BC Gas.~~

~~6.4 — Commencement and Decision — The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.~~

~~6.5 — Decision — The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.~~

IN WITNESS WHEREOF the parties hereto have executed this Sales Agreement.

BC GAS UTILITY LTD.

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

DATE: \_\_\_\_\_

\_\_\_\_\_  
(here insert name of Customer)

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

DATE: \_\_\_\_\_

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 22  
LARGE VOLUME TRANSPORTATION SERVICE**

**Effective November 1, 1993**



**BC Gas**



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## 1. Applicability

- 1.1 **Description of Applicability** - This Rate Schedule applies to the provision of firm and/or interruptible transportation service ~~(subject to a minimum of 12,000 gigajoules per Month)~~ through the BC Gas System ~~(subject to a minimum of 12,000 gigajoules per Month)~~, and through one meter station to one Shipper ~~except as otherwise agreed upon.~~ <sup>previously</sup> 8
- 1.2 **Transportation Agreement** - BC Gas will only transport Gas pursuant to an executed Transportation Agreement. BC Gas is not offering to provide service as a common carrier.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

## 2. Conditions of Service

- 2.1 **Conditions** - This Rate Schedule is available to Shippers in all territory served by BC Gas under the BC Gas tariff of which this Rate Schedule is a part if

- (a) adequate capacity exists on the BC Gas System, and
- ~~(b) the Shipper has contracted for a supply of Gas, which has been approved by the British Columbia Utilities Commission and any other authorities having jurisdiction,~~
- ~~(c) the Shipper has contracted with the Transporter, or has caused to be contracted with the Transporter, firm delivery to the Interconnection Point each Day over the term of the Transportation Agreement of a quantity of Gas equal to the Firm DTQ,~~
- (b) the End User has and continues to have, to the satisfaction of BC Gas, an alternative fuel burning installation in good operating order with an adequate supply of fuel in order that the End User can continue its operations on occasions when the transportation of Gas is interrupted or curtailed and the the Shipper End User acknowledges that the transportation service under this Rate Schedule is interruptible. its <sup>and</sup> the Shipper is abilityable to accommodate such interruption or curtailment and releases BC Gas of any liability for the Shipper's inability to accomodate such interruption or curtailment. BC Gas will waive this requirement provided that the End User agrees and acknowledges that any interruption of its operations due to Gas interruption or curtailment results solely from the End User's election not to install and maintain standby facilities,

- ~~(d) where the Shipper is not an End User of the Gas to be transported pursuant to the Transportation Agreement~~ ✓
- ~~(i) the End User is specified in the Transportation Agreement,~~
  - ~~(ii) the Shipper does not deliver Gas to a party other than the End User specified in the Transportation Agreement,~~
  - ~~(iii) the term of the Transportation Agreement is identical to the term of the gas supply contract between the Shipper and the End User, which will be for a period of not less than one Contract Year, and~~
  - ~~(iv) the Shipper has provided to BC Gas prior to the commencement of service under this Rate Schedule in a form acceptable to BC Gas the following~~
    - ~~(A) an irrevocable authorization from the End User permitting BC Gas access to the End User's property, appropriate easements and right of ways on the End User's property to lay, construct and operate the pipeline and facilities and equipment deemed necessary by BC Gas to provide Gas service under this Rate Schedule, and~~
    - ~~(B) a declaration from the End User agreeing to comply with all instructions, orders, directions and requests by BC Gas that would be applicable to the End User if the End User were a Shipper under a Transportation Agreement, and~~
- ~~(e) BC Gas has installed at the Delivery Point the facilities and equipment referred to in section 12.1 (Facilities and Equipment).~~ <sup>stet</sup>

2.2 Security - In order to secure the prompt and orderly payment of the charges to be paid by the Shipper to BC Gas under the Transportation Agreement, BC Gas may require the Shipper to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the estimated maximum amount payable by the Shipper under this Rate Schedule and the Transportation Agreement for a period of 90 Days. Where BC Gas requires a Shipper to provide a letter of credit and the Shipper is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.

2.3 Warning Relating to Firm Sales or Firm Transportation Rate Schedules - A Shipper wishing to switch from interruptible transportation or interruptible sales to a firm sales Rate Schedule, or to firm transportation under this Rate Schedule, or to increase their Firm DTQ under this Rate Schedule must comply with the

*on year's*

requirements for Firm service set out in the applicable Rate Schedule, including the following:

- (a) give 13 months prior notice to BC Gas of the Shipper's desire to do so, and
- (b) if BC Gas incurs additional costs to provide such service, reimburse BC Gas for any such additional costs.

Notwithstanding Section 2.3(a), BC Gas will endeavour to accommodate a Shipper on less than 13 months' prior notice if BC Gas is able, with such shorter notice, to arrange for the firm purchase and firm transportation of Gas under a firm sales Rate Schedule, or transportation under a firm transportation Rate Schedule.

### 3. Transportation

- 3.1 **Transportation of Gas** - Subject to section 13 of the General Terms and Conditions of BC Gas (Interruption of Service) and all of the terms and conditions of this Rate Schedule, BC Gas will on each Day transport for and deliver to the Shipper at one Delivery Point (~~except as otherwise specified in the Transportation Agreement~~) the Authorized Quantity, received at the Interconnection Point from the Shipper, up to the aggregate of the Firm DTQ and the Interruptible DTQ, where adequate capacity exists on the BC Gas System. ~~received at the Interconnection Point from the Shipper. On each Day, if the Shipper's Gas received at the Interconnection Point is not consumed by the Shipper or is not authorized for delivery to the Shipper, BC Gas will have the right to access such Gas subject to all the terms of this Rate Schedule and the Transportation Agreement.~~
- ILW/DG to 228  
work  
firm conditions.*

- 3.2 **Interruptible Curtailment** - If at any time and for any reason BC Gas determines that ~~it does not have sufficient capacity on the BC Gas System to accommodate the Shipper's request for interruptible transportation under this Rate Schedule, BC Gas may for any length of time interrupt or curtail interruptible transportation service under this Rate Schedule. The criterion for capacity curtailment will be as established from time to time by BC Gas' systems planning department. Additional capacity curtailments may occur on the basis of day to day operating conditions experienced on the BC Gas System.~~
- Assumably*
- review  
to address  
capacity*

- 3.3 **Notice of Curtailment** - Each notice from BC Gas to the Shipper with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Delivery Point will be by telephone and/or ~~be confirmed by facsimile fax when such means of communication are available~~ and will specify the quantity of Gas to which the Shipper is curtailed and the time at which such curtailment is to be made. BC Gas will endeavour to give to the Shipper as much notice as possible with respect
- Assumably*

to such curtailment, not to be less than 2 hours' prior notice unless prevented by Force Majeure.

- 3.4 **Default Regarding Curtailment** - The Shipper will comply with each notice from BC Gas to interrupt or curtail the Shipper's take. If the Shipper at any time fails or neglects to comply with a notice or order from BC Gas to interrupt or curtail the Shipper's take, BC Gas may, in addition to any other remedy which it may then or thereafter have, at its option, without liability therefor and without any prior notice to the Shipper ✓

- (a) turn off the valve at the Delivery Point, or
- (b) deliver such Gas and charge the Shipper for such Gas consumed on that Day the charges for Unauthorized Overrun Gas set out in the Table of Charges.

- 3.5 **Maximum Hourly Quantities** - BC Gas will not be obliged to receive or deliver in one Hour more than 5% of the quantity of Gas that the Shipper is entitled authorized to receive on any Day.

- ~~3.6 **Pressure at Interconnection Point** - All Gas delivered to BC Gas at the Interconnection Point by or on behalf of the Shipper will not be at less than the pressure specified in the Transporter's Service Terms.~~

- ~~3.7 **Pressure at Delivery Point** - All Gas delivered by BC Gas at the Delivery Point to or on behalf of the Shipper will not be at less than the pressure specified in the Transportation Agreement.~~

#### 4. **Table of Charges**

- 4.1 **Charges** - In respect of all quantities of Gas delivered to the Delivery Point pursuant to this Rate Schedule and the Transportation Agreement, the Shipper will pay to BC Gas all of the charges set out in the Table of Charges.

#### 5. **Minimum Charge**

- 5.1 **Minimum Charge** - The minimum charge for any Month will be based upon a Minimum Quantity of 12,000 gigajoules for that Month. The minimum charge will be calculated as the sum of the following:

- (a) the Basic Charge and Administration Charge,



- (b) the Delivery Charge per Month per gigajoule of Firm DTQ times the Firm DTQ, (if applicable),
- (c) the Delivery Charge per gigajoule of Firm MTQ times (the Firm MTQ or the Minimum Quantity, whichever is less), (if applicable),
- (d) the Delivery Charge per gigajoule of Interruptible MTQ times (the Minimum Quantity less the Firm MTQ, if a positive amount), plus
- (e) the Franchise Fee Charge, (if applicable).

5.2 **Minimum Charge Credits** - If on any Day either BC Gas fails to deliver to the Shipper the quantity of Gas that the Shipper has requested and delivered to the Interconnection Point on that Day, or the Shipper is entitled to relief by reason of Force Majeure, then a prorata credit will apply to the applicable delivery charges for firm service and an adjustment will apply to the Minimum Quantity set out in section 5.1 (Minimum Charge). The Minimum Quantity will be reduced by the quantity that would have been delivered in the absence of the curtailment. Provided, however, in the case of Force Majeure arising out of strike or lockout, the credit provisions will apply for no more than 90 Days in any Contract Year with the Minimum Quantity for each Month prorated by the number of Days of Force Majeure in that Month.

5.3 **Reduced MTQ** - The Firm MTQ will be reduced by the firm quantities on which credits have been calculated under section 5.2 (Minimum Charge Credits).

5.4 **Delivery Rate during Force Majeure** - In respect of all Gas received by the Shipper while the Shipper is entitled to relief by reason of Force Majeure, the Shipper will pay a delivery charge equivalent to three times the applicable delivery charge set out in the Table of Charges (calculated on a per unit basis at 100 percent load factor).

5.5 **Limitation on Minimum Charge Credits** - Notwithstanding section 5.2 (Minimum Charge Credits), no credit will apply in respect of an event of Force Majeure that has occurred upstream of the Transporter, or for Gas sold, delivered or transported on an interruptible basis to the Interconnection Point.

## 6. **Unauthorized Gas Use**

6.1 **Charges for <sup>ad/</sup>Unauthorized Service** - On any Day the Shipper takes Unauthorized Overrun Gas or Unauthorized Transportation Service, the Shipper will pay to BC Gas the charges for Unauthorized Overrun Gas or Unauthorized Transportation Service set out in the Table of Charges.

**6.2** **Payments Not License** - Payments made by the Shipper to BC Gas for Unauthorized Overrun Gas or Unauthorized Transportation Service neither give the Shipper the right to take Unauthorized Overrun Gas or Unauthorized Transportation Service, nor exclude or limit any other remedies available to BC Gas for the Shipper's taking of Unauthorized Overrun Gas or Unauthorized Transportation Service.

**6.3** **Demand Surcharge** - If on three or more Days during a Contract Year the Shipper takes Gas in excess of the greater of

- (a) 110% of a curtailed quantity specified by BC Gas in accordance with section 3.3 (Notice of Curtailment), or
- (b) a curtailed quantity specified by BC Gas in accordance with section 3.3 (Notice of Curtailment) plus 100 gigajoules,

the demand surcharge set out in the Table of Charges will apply. The demand surcharge will be calculated and become payable at the end of a month of the third or more occurrence, on the average of the two largest quantities of Unauthorized Overrun Gas or Unauthorized Transportation Service taken (the "Demand Surcharge Quantity") as follows:

Demand Surcharge equals the product of:

the Demand Surcharge per gigajoule specified in the Table of Charges

times 12

times the Demand Surcharge Quantity.

**6.4** **Recalculation of Demand Surcharge** - The demand surcharge will be recalculated if the Shipper again uses Unauthorized Overrun Gas or Unauthorized Transportation Service which causes the Demand Surcharge Quantity to increase. Any additional demand surcharge will become payable at the end of the Month in which a new Demand Surcharge Quantity is established.

## **7. Nomination**

**7.1** **Capacity on Transporter's Pipeline** - The Shipper will on or before the Commencement Date notify BC Gas of the identity of the party holding capacity for the Shipper on the Transporter's pipeline, and from time to time when such party changes.

7.2 **Requested Quantity** - The Shipper will provide to BC Gas by ~~facsimile fax~~ or other method approved by BC Gas, prior to 7:30 a.m. ~~Pacific Local Time~~ on each Day (or such other time as may be specified from time to time by BC Gas) such information as may be requested by BC Gas, ~~which will include, but is not limited to,~~ the Shipper's Requested Quantity for the Day commencing in approximately 24 hours ~~and~~

(a) ~~the estimated quantity of Gas that will be consumed by the Shipper on the Day commencing in approximately 24 hours,~~

(b) ~~the Shipper's Requested Quantity for the Day commencing in approximately 24 hours, and~~

(c) ~~the best estimate of Gas consumption by the Shipper for the Day just ending, and the Day just commencing.~~

It is intended that the Shipper's Requested Quantity for each Day will ~~approximately equal~~ the quantity of Gas the Shipper will actually consume on such Day. If the Shipper does not notify BC Gas in accordance with the foregoing, then the Shipper's Requested Quantity for the Day commencing in approximately 24 hours will be deemed to be the Shipper's Requested Quantity, adjusted as set out in section 7.3 (Adjustment of Requested Quantity), for the Day just commencing. } rev2

7.3 **Adjustment of Requested Quantity** - BC Gas may adjust, ~~in cooperation with the Shipper,~~ the Shipper's Requested Quantity, described in section 7.2 (Requested Quantity), when in the reasonable opinion of BC Gas such modification is required ~~in cooperation with the Shipper,~~ to limit the build up of inventory account quantities; ~~or during any period of interruption or curtailment ; or,~~ subject to the terms of the Shipper's Transportation Agreement, ~~on any Day when BC Gas wishes to increase the Requested Quantity to the level available to the Shipper on the Transporter's pipeline.~~ } rev2

7.4 **Request to Transporter** - BC Gas will provide to the Transporter the Shipper's Requested Quantity, adjusted as set out in section 7.3 (Adjustment of Requested Quantity).

7.5 **Delivery to Interconnection Point** - The Shipper will cause to be delivered to the Interconnection Point on each Day a quantity of Gas at least equal to the Shipper's Requested Quantity, adjusted as set out in section 7.3 (Adjustment of Requested Quantity). ~~On any Day BC Gas will be entitled to utilize the Shipper's overdeliveries at the Interconnection Point.~~ } rev2

7.6 **Failure to Deliver to Interconnection Point** - If on any Day the Authorized Quantity from the Transporter is less than the quantity provided pursuant to section 7.4 (Request to Transporter), then, in addition to curtailments permitted under section 3 (Transportation), BC Gas may, in its discretion, interrupt or curtail service hereunder to such Authorized Quantity within each service level by the amount that the Authorized Quantity from the Transporter is less than the amount requested. Alternatively, BC Gas may sell an equivalent amount of deliver additional Gas to the Shipper at the Interconnection Point and charge the Shipper the charge for Backstopping Gas as set out in the Table of Charges, Rate Schedule 13. If BC Gas is unable to ascertain which Shipper's supply has caused a deficiency, BC Gas may, in its discretion, interrupt or curtail service to the Shippers on a basis deemed equitable by BC Gas. BC Gas will reallocate the deficiency if it obtains information that allows it to determine responsibility. *ASAC*

~~7.7 **Authorized Quantity** - BC Gas will each Day advise the Shipper if the Authorized Quantity is less than the Shipper's request. Unless so advised, the Authorized Quantity will be equal to the Requested Quantity subject to the other provisions of section 7 (Nomination) and any notice of curtailment pursuant to section 3.3 (Notice of Curtailment).~~

*to be renewed*

## 8. Gas Balancing

8.1 **Gas Balancing** - Gas balancing hereunder is intended for matching day to day imbalances that cannot be reasonably forecast by the Shipper. Subject to all the terms of this Rate Schedule, BC Gas will on each Day balance for the Shipper at the Interconnection Point the difference between the Shipper's Authorized Quantity under the Transportation Agreement and its actual consumption of Gas.

8.2 **Provision of Gas Balancing** - When on any Day the Shipper requires Gas for balancing, BC Gas will

- (a) return Gas to the Shipper up to the amount available in the Shipper's inventory account pursuant to section 8.4 (Adjustments to Inventory). Quantities of Gas above the amount available in the Shipper's inventory will be sold to the Shipper at the commodity charge Shipper's elected Rate Schedule 10 price option or, if the Shipper does not hold a Rate Schedule 10 agreement with BC Gas, at the Index Price Option set out in the Rate Schedule 10 Table of Charges; and
- (b) for quantities of Gas for balancing that needed to balance actual consumption that exceeds the greater of 100 gigajoules or 20 percent of the Shipper's Authorized Quantity, charge the Shipper at the Gas Balancing Gas charge at the rate set out in the Table of Charges.

8.3 **Curtailment of Gas Balancing** - BC Gas may for any reason and for any length of time interrupt or curtail Gas balancing under this Rate Schedule.

8.4 **Adjustments to Inventory** - When on any Day the Shipper delivers more Gas to the Interconnection Point than its actual consumption, except for Gas purchased by BC Gas under ~~Section 19.8 the Transportation Agreement~~, BC Gas will maintain an inventory account for the Shipper and will increase the balance in the account by the excess amount received. BC Gas reserves the right to limit Gas quantities maintained in the Shipper's inventory account and ~~may from time to time~~ <sup>will</sup> in cooperation with the Shipper return excess inventory at no charge to the Shipper; this will not relieve the Shipper or the Shipper Agent, where applicable, from its obligation to provide ~~The return by BC Gas of any excess inventory is not intended in any way to frustrate the receipt of accurate nominations pursuant to section 7.2 (Requested Quantity) or to result in avoidance of either the charge for balancing as set out in the Table of Charges or the commodity charge under Rate Schedules 10, 13 or 14.~~

~~8.5 **Security of Supply** - It is the responsibility of the Shipper to arrange for a supply of Gas with adequate security to meet the needs of the Shipper. This may include a Rate Schedule 13 Sales Agreement with BC Gas for Peaking Gas and/or a Rate Schedule 14 Sales Agreement for Backstopping Gas, to be used when the Shipper's other gas supplies may be insufficient or unavailable.~~

8.5 **Imbalance Following Termination** - If BC Gas has received a quantity of Gas in excess of the quantity delivered to the Shipper during the term of a Transportation Agreement, then the Shipper may request the excess quantity be returned within 90 Days following termination of the Transportation Agreement.

## 9. **Group Nominations and Balancing**

9.1 **Group Nomination and Balancing** - If a Shipper appoints a Shipper Agent and becomes a member of the Shipper Agent's Group and if a Shipper Agent has executed a Shipper Agent Agreement, and if the members of the Shipper Agent's Group are in the same service area of BC Gas and receive service under a transportation Rate Schedule, the Shipper Agent will nominate and balance on behalf of all members of the Group on an aggregate basis pursuant to sections 7 (Nomination) and 8 (Gas Balancing), as modified by this section, and the Shipper Agent will be the agent for each of the members of a Group for the purposes of any and all matters set out in sections 7 (Nomination) and 8 (Gas Balancing).

9.2 **Requested Quantity from Shipper Agent** - The Shipper Agent will notify BC Gas of the Shipper's Requested Quantity described in section 7.2 (Requested Quantity) on behalf of all members of a Group on an aggregate basis.

9.3 **Charges to be Paid by Shipper Agent** - The charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas, set out in the Table of Charges, will be determined based on the quantities transported on behalf of all members of the Group on an aggregate basis and will be paid to BC Gas by the Shipper Agent as specified in the Shipper Agent Agreement. Notwithstanding the foregoing, each Shipper is jointly and severally liable as principal obligant with the Shipper Agent for all charges for Backstopping Gas, Balancing Gas, and Unauthorized Overrun Gas, set out in the Table of Charges.

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9.4 **Security** - BC Gas may require the Shipper Agent to provide security, as set out in section 2.2 (Security), with necessary changes, for the performance of the Shipper Agent's obligations under the Shipper Agent Agreement.

9.5 **Determination of DTQ** - If a Shipper appoints a Shipper Agent to act on its behalf, the Shipper authorizes the Shipper Agent to determine the Firm DTQ and Interruptible DTQ set out in the Transportation Agreement, for each Contract Year. This authorization will remain in effect for the term of the Transportation Agreement or so long as the Shipper Agent acts as agent for the Shipper, whichever period is shorter.

## 10. **Term of Transportation Agreement**

10.1 **Term** - The initial term of the Transportation Agreement will begin on the Commencement Date and if the Shipper is the End User, will expire at 8:00 a.m. Standard Local Time on the November 1st next following, provided that if the foregoing would result in the an initial term being for a period of less than one year, then the initial term will instead expire at the end of one further Contract Year, and

(b) ~~if the Shipper is not the End User, the term of the Transportation Agreement will be as described in section 2.1(cc)(iii).~~

10.2 **Automatic Renewal Where the Shipper is End User** - If the Shipper is the End User, and Except as specified in the Transportation Agreement, the term of the Transportation Agreement will continue on a from year to year basis after the expiry of the initial term until unless cancelled by either BC Gas or the Shipper, subject to section 2.3 upon not less than 6 months' notice prior to the end of the Contract Year then in effect. If the Shipper fails to request an amended DTQ within 6 months prior to the end of the Contract Year then in effect, the previous DTQ will remain in effect.

10.3 **Early Termination** - The term of the Transportation Agreement is subject to early termination in accordance with section 1516 (Default or Bankruptcy).

**10.4 Survival of Covenants** - Upon the termination of the Transportation Agreement, whether pursuant to section 1516 (Default or Bankruptcy) or otherwise,

- (a) all claims, causes of action or other outstanding obligations remaining or being unfulfilled as at the date of termination, and,
- (b) all of the provisions in this Rate Schedule and in the Transportation Agreement relating to the obligation of any of the parties to account to or indemnify the other and to pay to the other any monies owing as at the date of termination in connection with the Transportation Agreement,

will survive such termination.

## **11. Statements and Payments**

*and the Shipper Agent*  
**11.1 Statements to be Provided** - BC Gas will, on or before ~~about~~ the 15th day of each month, deliver to the Shipper a statement for the preceding month showing the Gas quantities delivered to the Shipper and the amount due. BC Gas will, on or before ~~about~~ the 45th day after the end of a Contract Year, deliver to the Shipper a separate statement for the preceding Contract Year showing the amount required from the Shipper in respect of any indemnity due under a ~~Transportation Agreement this Rate Schedule or a Transportation Agreement~~. Any errors in any statement will be promptly reported to the other party as provided hereunder, and statements will be final and binding unless questioned within one year after the date of the statement.

**11.2 Payment and Interest** - Payment for the full amount of the statement, including federal, provincial and municipal taxes or fees applicable thereon, will be made to BC Gas at its Vancouver, British Columbia office, or such other place in Canada as it will designate, on or before the 1st business day after the 10th calendar day following the billing date. If the Shipper fails or neglects to make any payment required under this Rate Schedule, or any portion thereof, to BC Gas when due, interest on the outstanding amount will accrue from ~~and including~~ the date when such payment is due to and including the date the same is paid, at the rate of interest declared by the chartered bank in Canada principally used by BC Gas, for loans in Canadian dollars to its most creditworthy commercial borrowers payable on demand and commonly referred to as its "prime rate", plus 5%.

**11.3 Examination of Records** - Each of BC Gas and the Shipper will have the right to examine at reasonable times the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Rate Schedule or the Transportation Agreement.

**12. Quality**

- 12.1 Minimum Standards** - All Gas delivered to the Interconnection Point by or on behalf of the Shipper and all Gas delivered to the Delivery Point will conform to the quality specifications set out in the Transporter's Service Terms.

**13. Measuring Equipment**

- 13.1 Facilities and Equipment** - BC Gas will install, maintain and operate at the Delivery Point such metering and communications facilities and equipment as BC Gas determines are necessary or desirable for measuring the quantity of Gas delivered pursuant to this Rate Schedule to the Shipper and the Shipper will permit BC Gas, without cost to BC Gas, to use the Shipper's communications lines and power for the purpose of installing, maintaining and operating the measuring equipment of BC Gas.
- 13.2 Measuring Site** - If BC Gas reasonably determines that it is necessary to install the facilities and equipment referred to in section 12.1 (Facilities and Equipment) on the Shipper's property, the Shipper will, without charge, provide a suitable site along with utilities and enclosures for the installation of the facilities and equipment of BC Gas. BC Gas will at all times have clear access to the site and to all of its facilities and equipment. All facilities and equipment installed by BC Gas on the Shipper's property will remain the property of BC Gas and may be removed by BC Gas upon termination of the Transportation Agreement.
- 13.3 Calibration and Test of Measuring Equipment** - The accuracy of the measuring equipment of BC Gas will be verified by standard tests and methods at regular intervals and at other times at the initiative of BC Gas or upon the reasonable request of the Shipper. Notice of the time and nature of each test conducted in response to communications with or at the request of the Shipper will be given by BC Gas to the Shipper sufficiently in advance to permit a representative of the Shipper to be present. If during a test the measuring equipment is found to be registering inaccurately, it will be adjusted at once to read as accurately as possible. The results of each test and adjustment, if any, made by BC Gas, whether or not the Shipper is present for such test, will be accepted until the next test. All tests of such measuring equipment of BC Gas will be made at the expense of BC Gas, except that the Shipper will bear the expense of tests made at its request if the measuring equipment is found to be inaccurate by an amount equal to 2% or less.
- 13.4 Inaccuracy Exceeding 2%** - If upon any test the measuring equipment is found to be inaccurate by an amount exceeding 2%, any previous readings of such equipment will be corrected to zero error for any period during which it is definitely known or is agreed upon that the error existed. If the period is not



definitely known or is not agreed upon, such correction will be for a period covering the last half of the time elapsed since the date of the last test. Provided that under no circumstances will an adjustment be made for a period of more than the preceding 12 months.

**13.5 Correction of Measuring Errors** - If the measuring equipment is out of service or out of repair so that the quantity of Gas delivered cannot be correctly determined by the reading thereof, the Gas delivered during the period such measuring equipment is out of service or out of repair will be estimated on the basis of the best available data, using the first of the following methods which is feasible

- (a) by correcting the error if the percentage of error is ascertained by calibration test or mathematical calculation,
- (b) by using the registration of any check measuring equipment if installed and accurately registering, and
- (c) by estimating the quantity of Gas delivered to the Shipper during the preceding periods under similar conditions when the meter was registering accurately.

**13.6 Shipper's Equipment** - The Shipper may at its own expense install, maintain and operate its own measuring equipment for the purposes of monitoring or checking the measuring equipment of BC Gas, provided that the Shipper will install such equipment so as not to interfere with the operation of the measuring equipment of BC Gas.

**13.7 Right to be Present** - BC Gas and the Shipper will have the right to inspect all equipment installed or furnished by the other and the charts and other measurement or test data of the other at all times during business hours, and to be present at the time of any installing, testing, cleaning, changing, repairing, calibrating or adjusting done in connection with the measuring equipment of the other party, but all such activities will be performed by the party furnishing the measuring equipment.

**13.8 Preservation of Records** - Both parties will cause to be preserved each test datum, chart and other record of Gas measurement for a period of 2 years.

## **14. Measurement**

**14.1 Unit of Volume** - The unit of volume of Gas for all purposes hereunder will be 1 cubic metre at a temperature of 15° Celsius and an absolute pressure of 101.325 kilopascals.

**14.2 Determination of Volume** - Gas delivered hereunder will be metered using metering apparatus approved by the Standards Division, ~~Department of Industry Canada, Office of Consumer & Corporate Affairs of Canada~~ and the determination of standard volumes delivered hereunder will be in accordance with terms and conditions pursuant to the *Electricity and Gas Inspection Act* of Canada.

**14.3 Conversion to Energy Units** - In accordance with the *Electricity and Gas Inspection Act* of Canada, volumes of Gas delivered each Day will be converted to energy units by multiplying the standard volume by the Heat Content of each unit of Gas. Volumes will be specified in  $10^3\text{m}^3$  rounded to one decimal place and energy will be specified in gigajoules rounded to the nearest gigajoule.

## **15. Representations, Warranties and Covenants**

**15.1 Title** - The Shipper ~~covenants with~~ ~~represents and warrants to~~ BC Gas that the Shipper will have good title to all Gas to be delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, free and clear of all liens, encumbrances and claims.

**15.2 Title Not That of BC Gas** - BC Gas agrees that title to all Gas transported pursuant to the Transportation Agreement remains with the Shipper.

**15.3 Acknowledgement** - The Shipper acknowledges that the Gas transported under the Transportation Agreement will be odorized and commingled with gas within the Transporter's pipeline system and the BC Gas System and the Shipper agrees to accept a proportionate share of any Gas lost by pipeline failure, fire or other similar cause that may affect the Shipper's Gas. } revise

**15.4 Shipper's Gas** ~~The Shipper acknowledges that part of the Gas to be transported under this Rate Schedule forms an important and integral part of the gas supply of BC Gas used to meet its commitments to serve its customers. The Shipper acknowledges that it is reasonably foreseeable that BC Gas may be unable to meet all its Gas delivery commitments to its firm customers if the Shipper fails to meet its commitment hereunder or under the Transportation Agreement to deliver Gas during periods in which BC Gas is entitled to interrupt or curtail and in which the Shipper is to make its supply of Gas available to BC Gas. The Shipper acknowledges that as a consequence of BC Gas being unable to meet all its Gas delivery commitments to its firm customers BC Gas may suffer damages in that~~ } input NA

(a) ~~the customers of BC Gas or other persons might have claims against BC Gas resulting from such failure to deliver, or arising from the efforts of BC Gas made to minimize such failure, and~~

- ~~(b) BC Gas may incur expenses to acquire an alternate gas supply or other expenses to minimize such failure, and losses arising from its inability to deliver Gas.~~

## **16. Default or Bankruptcy**

### **16.1 Default - If the Shipper at any time fails or neglects**

- (a) to make any payment due to BC Gas or to any other person under this Rate Schedule or the Transportation Agreement within 30 days after payment is due, or
- (b) to ~~cure correct~~ any default of any of the other terms, covenants, agreements, conditions or obligations imposed upon it under this Rate Schedule or the Transportation Agreement, within 30 days after BC Gas gives to the Shipper notice of such default or, in the case of a default that cannot with due diligence be ~~cured corrected~~ within a period of 30 days, the Shipper fails to proceed promptly after the giving of such notice with due diligence to ~~cure correct~~ the same and thereafter to prosecute the ~~curing correcting~~ of such default with all due diligence,

then BC Gas may in addition to any other remedy that it has, including the rights of BC Gas set out in sections 3.4 (Default Regarding Curtailment) and 6 (Unauthorized Gas Use), at its option and without liability therefor

- (a) suspend further transportation service to the Shipper and may refuse to deliver Gas to the Shipper until the default has been fully remedied, and no such suspension or refusal will relieve the Shipper from any obligation under this Rate Schedule or the Transportation Agreement, or
- (b) terminate the Transportation Agreement, and no such termination of the Transportation Agreement pursuant hereto will exclude the right of BC Gas to collect any amount due to it from the Shipper for what would otherwise have been the remainder of the term of the Transportation Agreement.

### **16.2 Bankruptcy or Insolvency - If the Shipper becomes bankrupt or insolvent or commits or suffers an act of bankruptcy or insolvency or a receiver is appointed pursuant to a statute or under a debt instrument or the Shipper seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas will have the right, at its sole discretion, to terminate the Transportation Agreement by giving notice in writing to the Shipper and thereupon BC Gas may cease further delivery of Gas to the Shipper and the**

amount then outstanding for Gas provided under the Transportation Agreement will immediately be due and payable by the Shipper.

**17. Notice**

**17.1** Notice - Any notice, request, statement or bill that is required to be given or that may be given under this Rate Schedule or under the Transportation Agreement will, unless otherwise specified, be in writing and will be considered as fully delivered when mailed, personally delivered or sent by ~~telecopier-fax~~ to the other in accordance with the following:

if to BC Gas

BC GAS UTILITY LTD.

MAILING ADDRESS:

1111 West Georgia Street  
Vancouver, B.C.  
V6E 4M4

NOMINATIONS AND FORCE  
MAJEURE:

Attention: Transportation Coordinators  
Telephone: (604) 443-6950  
~~Telecopier-Fax:~~ (604) 443-6952

BILLING AND PAYMENT:

Attention: Manager, Customer  
Administration  
Telephone: (604) 443-6992-6509  
~~Telecopier-Fax:~~ (604) 443-6588

CUSTOMER RELATIONS

Attention: Manager, ~~Transportation~~  
and Industrial Services  
Telephone: (604) 443-6491  
~~Telecopier-Fax:~~ (604) 443-6770

LEGAL AND OTHER:

Attention: V.P. Legal & Regulatory  
Affairs & Secretary  
Telephone: (604) 443-6607  
~~Telecopier:~~ (604) 443-6789-6904

if to the Shipper, then as set out in the Transportation Agreement.

**17.2** Specific Notices - Notwithstanding section 1617.1 (Notice), notices with respect to Force Majeure will be sufficient if

- (a) given by BC Gas in writing by ~~faesimile-fax~~, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by the Shipper as authorized to receive such notices, or

- (b) given by the Shipper by telephone (to be confirmed by ~~facsimile-fax~~) in the following manner

To claim Force Majeure... "Please be advised that (name of company and location of plant) has (reason for claiming Force Majeure as provided in the ~~Transportation Agreement section 19~~) and hereby claims suspension by reason of Force Majeure in accordance with the terms of the ~~Transportation Agreement Rate Schedule 22~~ effective 8 a.m. ~~Standard Local Time~~ (date Force Majeure suspension to become effective, but not to be retroactive)."

To terminate Force Majeure... "Please be advised that (name of company and location of plant) requests a return to normal natural gas service in accordance with the ~~Transportation Agreement Rate Schedule 22~~ and the ~~Transportation Agreement~~ effective 8 a.m. ~~Standard Time Local Time~~ (date Force Majeure suspension to end, but not to be retroactive) whereby the suspension by reason of Force Majeure currently in force will be terminated."

## **18. Limitation on Liability and Indemnity**

**18.1 Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of transportation service permitted under the General Terms and Conditions of BC Gas or this Rate Schedule.

**18.2 Indemnity** - The Shipper will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) any defect in title to any Gas delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, or arising from any charges that are applicable to the Gas delivered to BC Gas,
- (b) Franchise Fees not otherwise collected by BC Gas under the Table of Charges,
- (c) nominations made in accordance with section 7 or 9 of this Rate Schedule by BC Gas to the Transporter with respect to the Shipper's transportation volumes whether or not the Shipper is a member of a Group,

- (d) Gas delivered by the Shipper to BC Gas failing to meet the quality specifications set out in section 12.1 of this Rate Schedule,
- (e) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Shipper or on the delivery of Gas to the Shipper by BC Gas, or on any other service provided by BC Gas to the Shipper, and
- (f) all charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas, set out in the Table of Charges, whether or not the Shipper is a member of a Group.

**18.3 Principal Obligant** - If the Shipper is a member of a Group, the Shipper's obligations to pay the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges, are that of principal obligant and not of surety and are independent of the obligations of the Shipper Agent pursuant to the Shipper Agent Agreement and a separate action or actions may be brought against the Shipper, whether or not an action is brought against the Shipper Agent and whether or not the Shipper Agent can be or is joined in any such action or actions.

**18.4 Waiver of Defences** - For greater certainty, if the Shipper is a member of a Group, BC Gas will not be bound to exhaust its recourse against the Shipper Agent before being entitled to payment from the Shipper for the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges; the Shipper waives all diligence, demands, notices, protests, of the Shipper's obligations for the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges, and any and all claims or defences relating to lack of diligence or delays in collection or enforcement of any and all other securities taken by BC Gas and consents to any and all renewals and extensions of the time for payment; and this waiver will not be affected by the dissolution, arrangement, reorganization, assignment for the benefit of creditors, proposal or notice of intention to make a proposal to creditors or bankruptcy of the Shipper Agent (whether voluntary or compulsory), or by any amalgamation of the Shipper Agent.

## **19. Force Majeure**

**19.1 Force Majeure** - Subject to the other provisions of this section 19, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Rate Schedule under which service is rendered or in the Transportation Agreement, the obligations of both BC Gas and

the Shipper will be suspended to the extent necessary for the period of the Force Majeure condition.

**19.2 Curtailment Notice** - If BC Gas claims suspension pursuant to this section 19, BC Gas will be deemed to have issued to the Shipper a notice of curtailment.

**19.3 Exceptions** - Neither party will be entitled to the benefit of the provisions of section 19.1 under any of the following circumstances

- (a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,
- (b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or
- (c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under the Rate Schedule or the Transportation Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.

**19.4 Notice to Resume** - The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.

*mut s. 6. x 19.1 s. 2*  
**19.5 Settlement of Labour Disputes** - Notwithstanding any of the provisions of this section 19, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 19.1.

**19.6 No Exemption for Payments** - Notwithstanding any of the provisions of this section 19, Force Majeure will not relieve or release either party from its obligations to make payments to the other.

**19.7 Periodic Repair by BC Gas** - BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Shipper as much notice as

*make reasonable efforts*

*now to  
1 sec. 3*



possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.

19.8 **Shipper's Gas** - If BC Gas curtails or interrupts transportation of Gas by reason of Force Majeure the Shipper will make its supply of Gas available to BC Gas, to the extent required by BC Gas, to maintain service priority to those customers or classes of customers which BC Gas determines should be served.

19.9 **Alteration of Facilities** - The Shipper will pay to BC Gas all reasonable costs associated with the alteration of facilities made at the discretion of BC Gas to measure quantities reduced by reason of Force Majeure claimed by the Shipper and to restore such facilities after the Force Majeure condition ends.

## 20. **Arbitration**

20.1 **Arbitration** - Any dispute between the parties arising from this Rate Schedule or the Transportation Agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.

20.2 **Demand for Arbitration** - Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.

20.3 **Arbitrator** - The parties will have 10 days from receipt of the demand referred to in section 20.2 of this Rate Schedule to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Shipper or BC Gas.

20.4 **Commencement and Decision** - The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.

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**20.5 Decision** - The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof

## **21. Interpretation**

**21.1 Definitions in General Terms and Conditions of BC Gas** - Except where the context requires otherwise or except as otherwise expressly provided in the Definitions which form part of this Rate Schedule, all words and phrases defined in the General Terms and Conditions of BC Gas and used in this Rate Schedule or in a Transportation Agreement have the meanings set out in the General Terms and Conditions of BC Gas.

**21.2 Change in Definition of "Day"** - BC Gas may amend the definition of "Day" from time to time to suitably align its operations with those of its Transporters. If BC Gas amends the meaning definition of "Day", a pro-rata adjustment of quantities of Gas and charges to account for any Day of more or less than 24 hours will be made and the term of the Transportation Agreement will be similarly adjusted.

**21.3 Further Definitions** - ~~Additionally, except where the context requires otherwise, each of the words and phrases described in the Definitions have the meanings ascribed thereto in the Definitions.~~

**21.3 Interpretation** - Except where the context requires otherwise or except as otherwise expressly provided, in this Rate Schedule or in a Transportation Agreement

- (a) all references to a designated section are to the designated section of this Rate Schedule unless otherwise specifically stated,
- (b) the singular of any term includes the plural, and vice versa, and the use of any term is equally applicable to any gender and, where applicable, body corporate,
- (c) any reference to a corporate entity includes and is also a reference to any corporate entity that is a successor to such entity,
- (d) all words, phrases and expressions used in this Rate Schedule or in a Transportation Agreement that have a common usage in the gas industry and that are not defined in the General Terms and Conditions of BC Gas, the Definitions or in the Transportation Agreement have the meanings commonly ascribed thereto in the gas industry, and

- (e) the headings of the sections set out in this Rate Schedule or in the Transportation Agreement are for convenience of reference only and will not be considered in any interpretation of this Rate Schedule or the Transportation Agreement.

## **22. Miscellaneous**

- 22.1 Waiver** - No waiver by either BC Gas or the Shipper of any default by the other in the performance of any of the provisions of this Rate Schedule or the Transportation Agreement will operate or be construed as a waiver of any other or future default or defaults, whether of a like or different character.
- 22.2 Enurement** - The Transportation Agreement will enure to the benefit of and be binding upon the parties and their respective successors and permitted assigns, including without limitation successors by merger, amalgamation or consolidation.
- 22.3 Assignment** - The Shipper will not assign the Transportation Agreement or any of its rights or obligations thereunder without the prior written consent of BC Gas which consent will not be unreasonably withheld or delayed. No assignment will release the Shipper from its obligations under this Rate Schedule or under the Transportation Agreement that existed prior to the date on which the assignment takes effect. This provision applies to every proposed assignment by the Shipper.
- 22.4 Amendments to be in Writing** - Except as set out in this Rate Schedule, no amendment or variation of the Transportation Agreement will be effective or binding upon the parties unless such amendment or variation is set out in writing and duly executed by the parties.
- 22.5 Proper Law** - The Transportation Agreement will be construed and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein.
- 22.6 Time is of Essence** - Time is of the essence of this Rate Schedule, the Transportation Agreement and of the terms and conditions thereof.
- 22.7 Subject to Legislation** - Notwithstanding any other provision hereof, this Rate Schedule and the Transportation Agreement and the rights and obligations of BC Gas and the Shipper under this Rate Schedule and the Transportation Agreement are subject to all present and future laws, rules, regulations and orders of any legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over BC Gas or the Shipper.
- 22.8 Further Assurances** - Each of BC Gas and the Shipper will, on demand by the other, execute and deliver or cause to be executed and delivered all such further

documents and instruments and do all such further acts and things as the other may reasonably require to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Rate Schedule and the Transportation Agreement and to assure the completion of the transactions contemplated hereby.

**22.9 Form of Payments** - All payments required to be made under statements and invoices rendered pursuant to this Rate Schedule or the Transportation Agreement will be made by telegraphic-wire transfer to, or cheque or bank cashier's cheque drawn on, a Canadian chartered bank or trust company, payable in lawful money of Canada at par in immediately available funds in Vancouver, British Columbia.

## DEFINITIONS

- ~~(a) **A.N.G.** means Alberta Natural Gas Company, a Canadian corporation.~~
- (a) **Authorized Quantity** - means, subject to interruptions or curtailments as provided in section 3 (Transportation) or due to provisions of the Transportation Agreement, the quantity of energy (in gigajoules) for each Day approved by the Transporter for transportation service on the Transporter's pipeline system, based on the quantity requested by the Shipper, adjusted as set out in section 7.3 (Adjustment to Requested Quantity) or the quantity of energy approved for sale by BC Gas under Rate Schedules 10, 13 and 14, or any component or aggregate of these quantities, as the context requires.
- (b) **Backstopping Gas** - means Gas sold by BC Gas to the Shipper under Rate Schedule 14 as an interruptible backup supply if on any Day the Authorized Quantity from the Transporter is less than the Shipper's Requested Quantity, to gas obtained by the Shipper from other Suppliers.
- (c) **Balancing Gas** - means any Gas taken by the Shipper during a Day which is in excess of the Authorized Quantity, subject to section 8.2 (Provision of Gas Balancing).
- (d) **BC Gas** - means BC Gas Utility Ltd., a body corporate incorporated pursuant to the laws of the Province of British Columbia under number 368681.
- (e) **BC Gas System** - means the Gas transmission and distribution system owned and operated by BC Gas, as such system is expanded, reduced or modified from time to time.
- (f) **British Columbia Utilities Commission** - means the British Columbia Utilities Commission constituted under the *Utilities Commission Act* of British Columbia and includes and is also a reference to
- (i) any commission that is a successor to such commission, and
  - (ii) any commission that is constituted pursuant to any statute that may be passed which supplements or supersedes the *Utilities Commission Act* of British Columbia.
- (g) **Commencement Date** - means the day specified as the Commencement Date in the Transportation Agreement or a Sales Agreement, as the context requires.

- (h) **Contract Year** - means a period of 12 consecutive Months commencing at the beginning of the 1st Day of November and ending at the beginning of the next succeeding 1st Day of November.
- (i) **Customer** - means an ~~End User Shipper~~ who enters into a Sales Agreement with BC Gas under either Rate Schedule 10, ~~13~~ or 14, as the context requires.
- (j) **Day** - means, subject to section 17.221.2 (Change in Definition of "Day"), any period of twenty-four consecutive hours beginning and ending at 8:00 a.m. ~~Standard Local Time~~.
- (k) ~~**Definitions** means the definitions appended to this Rate Schedule.~~
- (k) **Delivery Point** - means the point specified in a Sales or Transportation Agreement where BC Gas delivers Gas to a Customer or the ~~a~~ Shipper.
- (l) **Demand Surcharge Quantity** - has the meaning ascribed thereto in section 6.3 (Demand Surcharge).
- (m) **DTQ or Daily Transportation Quantity** - means the Firm DTQ or the Interruptible DTQ or both, as the context requires.
- (p) ~~**End User** means a person specified in a Sales or Transportation Agreement who is a consumer of Gas within the service area of BC Gas.~~
- (n) **Firm DTQ** - means the maximum quantity of Gas that BC Gas is obligated to transport for and deliver on a firm basis to a Shipper at the Delivery Point on any particular Day, which reasonably reflects the Shipper's requirements and is specified in a Transportation Agreement.
- (o) **Firm MTQ** - means the firm transportation quantity delivered during a Month under this Rate Schedule, more specifically described as the lesser of the following quantities of Gas
- (i) the quantity of Gas BC Gas has sold to or received from a Shipper during a Month plus any imbalance carried forward from the previous Month, and
  - (ii) the quantity of Gas obtained by multiplying the Firm DTQ by the number of Days in the Month, adjusted to reflect any quantity of Gas the Shipper fails to deliver to the Interconnection Point when provided by BC Gas to the Transporter and any adjustment pursuant to section 5.3 (Reduced MTQ), such adjustments, if overlapping, to only count once.

**(p) Force Majeure** - means any acts of God, strikes, lockouts, or other industrial disturbances, civil disturbances, arrests and restraints of rulers or people, interruptions by government or court orders, present or future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, blackouts, insurrections, failure or inability to secure materials or labour by reason of priority, regulations or orders of government, serious epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, breakage or accident to machinery or lines of pipes, or freezing of wells or pipelines, or the failure of gas supply, temporary or otherwise, from a Supplier of gas, which act of Force Majeure was not due to negligence of the party claiming Force Majeure. Further, Force Majeure will also include a declaration of force majeure by a Transporter that results in Gas being unavailable for delivery at the Interconnection Point.

**(q) Franchise Fees** - means the aggregate of all monies payable by BC Gas to a municipality

- (i) for the use of the municipality's streets and other property to construct and operate the utility business of BC Gas,
- (ii) relating to the revenues received by BC Gas for services provided and Gas consumed within the municipality, and
- (iii) relating, if applicable, to the value of Gas transported by BC Gas through the municipality.

**(r) Gas** - means the residue remaining after raw gas has been subjected to any or all of the following permissible processes

- (i) the removal of any of its constituent parts other than methane, and the removal of methane to such extent as is necessary in removing other constituents,
- (ii) the compression, regulation, cooling, cleaning or any other chemical or physical process other than the addition of diluents, such as air or nitrogen, to such extent as may be required in its production, gathering, transmission, transportation, storage, removal from storage and delivery, and
- (iii) the addition of odorant by BC Gas,

but for greater certainty Gas does not include propane.

- (s) **General Terms and Conditions of BC Gas** - means the general terms and conditions of BC Gas from time to time approved by the British Columbia Utilities Commission.
- (t) **Group** - means a group of Shippers who each transport Gas under this Rate Schedule, using common nomination and balancing procedures with BC Gas and who have each entered into a Transportation Agreement.
- (u) **Heat Content** - means the gross heating value of the Gas, determined on the basis of a temperature of 15° Celsius with the Gas free of all water vapour and at an absolute pressure of 101.325 kilopascals, with the products of combustion cooled to the initial temperature of the Gas and the water formed by the combustion condensed to the liquid state. The Heat Content will be expressed in megajoules per cubic metre of Gas (MJ/m<sup>3</sup>) rounded to two decimal places.
- (v) **Hour** - means any consecutive 60 minute period.
- (w) **Interconnection Point** - means a point (specified as the "Delivery Point" in the Transportation Agreement relied upon by a Shipper for the movement of gas through the Transporter's pipeline system) where the BC Gas System interconnects with the facilities of one of the Transporters of BC Gas, as specified in a Transportation Agreement.
- (x) **Interruptible DTQ** - means the maximum quantity of Gas that BC Gas is obligated to transport for and deliver on an interruptible basis to a Shipper at the Delivery Point on any particular Day, which reasonably reflects the Shipper's requirements and is specified in a Transportation Agreement.
- (y) **Interruptible MTQ** - means the interruptible transportation quantity delivered during a Month under this Rate Schedule, more specifically described as the quantity of Gas delivered to a Shipper at the Delivery Point during a Month; less the Firm MTQ and any Unauthorized Overrun Gas taken during that Month.
- (z) **Local Time** - means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area or daylight savings time as the case may be.
- (aa) **Minimum Quantity** - means 12,000 gigajoules per Month modified by any adjustments for curtailment or Force Majeure as set out in section 5.2 (Minimum Charge Credits).
- (ab) **Month** - means, subject to any changes from time to time required by BC Gas, ~~in the starting time of its Gas Day,~~ the period beginning at 8:00 a.m. ~~Standard Local~~

Time on the first day of the calendar month and ending at 8:00 a.m.  
~~Standard-Local~~ Time on the first day of the next succeeding calendar month.

- (ac) **MTQ or Monthly Transportation Quantity** - means the firm Monthly Transportation Quantity or the interruptible Monthly Transportation Quantity, or both, as the context requires.
- ~~(ae) **Peaking Gas** means Gas sold by BC Gas under Rate Schedule 13 as an interruptible peaking supply in the event a Shipper requires Gas in addition to other interruptible Gas available from BC Gas or in addition to quantities normally available to the Shipper from Suppliers other than BC Gas.~~
- (ad) **Rate Schedule 10** - means Rate Schedule 10, including all rates, terms and conditions, and the Table of Charges appended thereto, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- ~~(af) **Rate Schedule 13** means Rate Schedule 13, including all rates, terms and conditions, and the Table of Charges appended thereto, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.~~
- (ae) **Rate Schedule 14** - means Rate Schedule 14, including all rates, terms and conditions, and the Table of Charges appended thereto, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (af) **Rate Schedule 22 or this Rate Schedule** - means this Rate Schedule, including all rates, terms and conditions, the Definitions and the Table of Charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (ag) **Rate Schedule 22A** - means Rate Schedule 22A, including all rates, terms and conditions, and the Table of Charges appended thereto, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (ah) **Rate Schedule 22B** - means Rate Schedule 22B, including all rates, terms and conditions, and the Table of Charges appended thereto, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (ai) **Requested Quantity** - means the quantity of energy for each Day requested by the Shipper or Shipper Agent for firm and interruptible transportation under Rate Schedule 22, or for sales under Rate Schedules 10, ~~13~~ or 14, or any component or aggregate of these quantities, as the context requires.
- (aj) **Sales Agreement** - means an agreement between BC Gas and the Shipper for the sale of Gas pursuant to either Rate Schedule 10, ~~13~~ or 14, as the context requires.



- (ak) **Shipper** - means a person who enters into a Transportation Agreement with BC Gas who is also the consumer of the Gas transported. ~~If the Shipper is not an End User, then the word "Shipper" in the context of each Delivery Point, property, deliveries of Gas, using of Gas, consuming of Gas, taking of Gas, curtailing of Gas, interrupting of Gas, limiting the taking of Gas, receiving of Gas, purchasing of Gas, accepting of Gas, supplying of Gas and daily nomination for Gas, will also mean "End User".~~
- (al) **Shipper Agent** - means a person who enters into a Shipper Agent Agreement with BC Gas.
- (am) **Shipper Agent Agreement** - means an agreement between BC Gas and a Shipper Agent pursuant to which the Shipper Agent agrees to pay to BC Gas the charges for Balancing Gas, Backstopping Gas and Unauthorized Overrun Gas set out in the Table of Charges, applicable to the Group.
- (an) ~~**Standard Time** - means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area.~~
- (ao) **Supplier** - means a party who sells Gas to a Shipper or BC Gas or has access to its own supplies of Gas.
- (ap) **Table of Charges** - means the table of prices, fees and charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission, appended to this Rate Schedule, or in the specific context of Rate Schedules 10, 13, 14, 22A, and 22B, the Table of Charges appended to such respective Rate Schedule.
- (aq) **Transportation Agreement** - means an agreement between BC Gas and a Shipper to provide service pursuant to this Rate Schedule.
- (ar) **Transporter** - means, in the case of the Columbia service area, ~~A.N.G. Alberta~~ Natural Gas Company, and Nova Corporation of Alberta, and in the case of the Inland and Lower Mainland service areas, Westcoast Energy Inc., and any other gas pipeline transportation company connected to the facilities of BC Gas from which BC Gas receives Gas for the purposes of Gas transportation or resale.
- (as) **Transporter's Service Terms** - means the general terms and conditions of the applicable Transporter, as filed with and approved from time to time by the National Energy Board or other applicable governmental authority.
- (at) **Unauthorized Transportation Service** - means any transportation service utilized by a Shipper in excess of the curtailed quantity specified in any notice from BC Gas, to interrupt or curtail the Shipper's transportation service.

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 22A  
LARGE VOLUME TRANSPORTATION SERVICE (CLOSED)  
INLAND SERVICE AREA**

**Effective November 1, 1993**



**BC Gas**

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**1. Applicability**

- 1.1 Description of Applicability** - This Rate Schedule applies to the provision of firm and interruptible transportation service through one meter station (except as otherwise specified in the Transportation Agreement) to the following existing large industrial Shippers.

<u>NAME OF CUSTOMER-SHIPPER</u>	<u>LOCATION OF CUSTOMER-SHIPPER</u>
Celgar Pulp Company	Castlegar
Cominco Ltd.	Trail
Pope & Talbot Ltd.	Castlegar
Weyerhaeuser Canada Ltd.	Kamloops
Consumers Packaging Inc.	Lavington
Federated Co-operatives Limited	Canoe
FMC of Canada Limited	Prince George
Highland Valley Copper	Logan Lake
Moly-Cop Canada	Kamloops
Northwood Pulp & Timber Ltd.	Prince George
Tolko Industries Ltd.	Kamloops
Cariboo Pulp & Paper Company	Quesnel
Finlay Forest Industries Ltd.	Mackenzie
Fletcher Challenge Canada Limited	Mackenzie
Husky Oil Operations Ltd. Prince George Refinery	Prince George
Louisiana-Pacific Canada Ltd.	Chetwynd
Canadian Forest Products Ltd. (Canfor) Prince George Pulp	Prince George
Northwood Pulp and Timber Limited	Prince George
Quesnel River Pulp Company	Quesnel

- 1.2 **Transportation Agreement** - BC Gas will only transport Gas under this Rate Schedule pursuant to an executed Transportation Agreement under Rate Schedule 22.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

## **2. Table of Charges**

- 2.1 **Charges** - In respect of transportation ~~service~~ pursuant to Rate Schedule 22A and the Transportation Agreement, the Shipper will pay to BC Gas all of the charges set out in the Table of Charges attached hereto ~~and~~ For greater certainty it is expressly confirmed that the Table of Charges attached to Rate Schedule 22 does not apply to this Rate Schedule 22A.

## **3. Terms and Conditions**

- 3.1 **Other Terms and Conditions** - The terms and conditions set out in Rate Schedule 22 apply to ~~and form part of the provision of service under this Rate Schedule~~ with necessary changes and bind BC Gas and the Shipper as if set out in this Rate Schedule, except as excluded by operation of section 3.2 (Inapplicable Terms and Conditions).
- 3.2 **Inapplicable Terms and Conditions** - The following terms and conditions set out in Rate Schedule 22 do not apply, and are not incorporated by reference, into this Rate Schedule 22A and shall not be construed in any way to affect the meaning or intent of any provision this Rate Schedule:

- section 1 (Applicability)
- section 4 (Table of Charges)

If any term or provision of this Rate Schedule is inconsistent with any term or provision of Rate Schedule 22, the term or provision of this Rate Schedule will prevail.

- 3.3 **Shippers on Bypass Rates** - Shippers who have executed long term service agreements on rates, terms and conditions competitive with a bypass pipeline alternative remain subject to the rates, terms and conditions set out in the respective long term service agreement.

3.4 **Curtailment of Firm Service** - Subject to section 3.5 (Firm Curtailment Buyout Alternative), BC Gas may, in order to serve its firm sales customers, curtail firm transportation under this Rate Schedule and use the Shipper's Gas up to a maximum daily quantity of 1/2 the Firm DTQ on for a maximum of 5 Days during each Contract Year. If BC Gas and the Shipper agree, the Shipper may, from time to time, be curtailed by less than 1/2 the Firm DTQ and may be curtailed the balance of such one Day curtailment on a subsequent Day.

3.5 **Firm Curtailment Buyout Alternative** - If BC Gas determines that adequate capacity exists on the BC Gas System and in order to avoid the curtailments provided for in section 3.4 (Curtailment of Firm Service), Shipper may elect to execute an agreement with BC Gas that makes available to BC Gas peaking supplies equal to 1/2 the Firm DTQ for a maximum of ten Days during the period November 1 through March 31 of each Contract Year. } \* given to (2012)

(a) ~~in respect of the Contract Year November 1, 1995 to October 31, 1996 only, to pay the firm curtailment buyout charge set out in the Table of Charges, or~~

(b) ~~to execute an agreement with BC Gas to make available to BC Gas peaking supplies equal to 1/2 the Firm DTQ on a maximum of ten Days during the period November 1 through March 31 of each Contract Year.~~

3.6 **Adjustment to Firm Curtailments** - If the Shipper has a Firm DTQ that is subject to curtailment under section 3.4 (Curtailment of Firm Service), commencing on the first Day of the Month following a Month during which the Shipper becomes subject to a demand surcharge or recalculated surcharge, firm curtailments applicable to the Shipper will be modified, subject to the determination by BC Gas that adequate capacity exists on its system. The adjustment will equal the lesser of the Demand Surcharge Quantity calculated in section 6.3 (Demand Surcharge) of Rate Schedule 22 and the amount otherwise subject to firm curtailment.

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 22B  
LARGE VOLUME TRANSPORTATION SERVICE (CLOSED)  
COLUMBIA SERVICE AREA**

**Effective January 1, 1994**



**BC Gas**

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## 1. Applicability

- 1.1 **Description of Applicability** - This Rate Schedule applies to the provision of firm and interruptible transportation service through one meter station (except as otherwise specified in the Transportation Agreement) to the following existing large industrial Shippers.

<u>NAME OF CUSTOMER-SHIPPER</u>	<u>LOCATION OF CUSTOMER-SHIPPER</u>
Cominco Ltd.	Kimberley
Crestbrook Forest Industries Ltd.	Skookumchuck
Fording Coal Limited (Fording River)	Elkford
Elkview Coal Corporation (Balmer)	Sparwood
Fording Coal Limited (Greenhills)	Elkford
Line Creek Resources Ltd.	Sparwood

- 1.2 **Transportation Agreement** - BC Gas will only transport Gas under this Rate Schedule pursuant to an executed Transportation Agreement under Rate Schedule 22.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

## 2. Table of Charges

- 2.1 **Charges** - In respect of transportation service pursuant to Rate Schedule 22B and the Transportation Agreement, the Shipper will pay to BC Gas all of the charges set out in the Table of Charges attached hereto, and For greater certainty it is expressly confirmed that the Table of Charges attached to Rate Schedule 22 does not apply to this Rate Schedule 22/22A/22B.

## 3. Terms and Conditions

- 3.1 **Other Terms and Conditions** - The terms and conditions set out in Rate Schedule 22 apply to and form part of the provision of service under this Rate Schedule, with necessary changes, and bind BC Gas and the Shipper as if set out in this Rate Schedule, except as excluded by operation of section 3.2 (Inapplicable Terms and Conditions).

3.2 **Inapplicable Terms and Conditions** - The following terms and conditions set out in Rate Schedule 22 do not apply, and are not incorporated by reference, to this Rate Schedule 22B and shall not be construed in any way to affect the meaning or intent of any provision of Rate Schedule 22B:

- section 1 (Applicability)
- ~~- section 2.1 Clause (e)~~
- section 4 (Table of Charges).
- section 7 (Nomination)
- section 8 (Gas Balancing)
- ~~- section 9 (Group Nominations and Balancing)~~

If any term or provision of this Rate Schedule is inconsistent with any term or provision of Rate Schedule 22, the term or provision of this Rate Schedule 22B will prevail.

#### 4. **Increases to Firm DTQ**

4.1 **Increases to Firm DTQ** - ~~Any increase to the Shipper's Firm DTQ will be pursuant to section 9.2 of Rate Schedule 22.~~ Delivery Charges for any increase to the Shipper's Firm DTQ incremental Firm DTQ above the Shipper's lowest Firm DTQ as set on or after January 1, 1994 will be subject to negotiation.

#### 5. **Nomination**

5.1 **Capacity on Transporter's Pipeline** - The Shipper will on or before the Commencement Date notify BC Gas of the identity of the party holding capacity for the Shipper on the Transporter's pipeline, and from time to time when such party changes.

5.2 **Requested Quantity** - It is intended that the Shipper's Requested Quantity for each Day will equal the quantity of Gas the Shipper will actually consume on such Day as measured by BC Gas.

5.3 **Request to Transporter** - Shipper will provide to the Transporter as directed by the Transporter the Shipper's Requested Quantity to the Transporter. Such quantity will not include requests for Gas sold by BC Gas.

5.4 **Delivery to Interconnection Point** - The Shipper will cause to be delivered to the Interconnection Point on each Day a quantity of Gas equal to the Shipper's actual consumption as measured by BC Gas.

- 5.5 **Failure to Deliver to Interconnection Point** - If on any Day the Authorized Quantity from the Transporter is less than the quantity provided pursuant to section 5.43 (~~Delivery to Interconnection Point Request to Transporter~~), BC Gas may, in its discretion, interrupt or curtail service hereunder within each service level to an amount equal to the Authorized Quantity from the Transporter. Alternatively, BC Gas may deliver additional Gas ~~sell the excess amount of Gas above the Authorized Quantity~~ to the Shipper at the Interconnection Point and charge the Shipper the charge for Backstopping Gas set out in the Table of Charges ~~Rate Schedule 13~~. If BC Gas is unable to ascertain which Shipper's supply has caused a deficiency, BC Gas may, in its discretion, interrupt or curtail service to the Shippers on a basis deemed equitable by BC Gas. BC Gas will reallocate the deficiency if it obtains information that allows it to determine responsibility.
- ~~5.6 **Authorized Quantity** - BC Gas will each Day advise the Shipper if the Transporter has limited the Authorized Quantity from the Transporter. Unless so advised, the Authorized Quantity will be equal to the actual gas consumption subject to any notice of curtailment pursuant to section 3.3 of Rate Schedule 22 (Notice of Curtailment).~~
- ~~5.6 **Other Rate Schedule and Nomination** - If the Shipper has elected to purchase Gas under Rate Schedule 10 or 14 from BC Gas, the Shipper will be subject to section 7 the (Nomination) provisions of Rate Schedule 22 for such Gas.~~

## 6. Gas Balancing

- 6.1 **Gas Balancing by Transporter** - Gas balancing hereunder is intended for matching day to day imbalances that cannot be reasonably forecast by the Shipper. The Transporter will deliver on each Day to the Interconnection Point a quantity of Gas equal to the Shipper's actual Gas consumption. It is acknowledged that BC Gas and the Shipper will rely on the Transporter to each Day balance for the Shipper the difference between the Shipper's Authorized Quantity from the Transporter and the Shipper's deliveries to the Transporter. When on any Day the Shipper requires Gas for balancing, the Transporter will provide balancing Gas to the Shipper as it deems appropriate.
- 6.2 **Gas Balancing by BC Gas** - BC Gas will not provide any Gas to the Shipper for balancing purposes and will not maintain an inventory account for the Shipper.
- ~~6.3 **Security of Supply** - It is the responsibility of the Shipper to arrange for a supply of Gas with adequate security to meet the needs of the Shipper. This may include a Rate Schedule 13 Sales Agreement with BC Gas for Peaking Gas and/or a Rate Schedule 14 Sales Agreement for Backstopping Gas, to be used when the~~

~~Shipper's other gas supplies may be insufficient or unavailable.~~

**6.3 Other Rate Schedule and Balancing** - If the Shipper has elected to purchase sales Gas under Rate Schedule 10 or 14 from BC Gas, the Shipper will be subject to the section 8 (Gas Balancing) provisions of Rate Schedule 22 for such Gas.

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 25  
GENERAL FIRM TRANSPORTATION SERVICE**

**Effective November 1, 1993**



**BC Gas**

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**1. Applicability**

- 1.1 **Description of Applicability** - This Rate Schedule applies to the provision of firm transportation service (subject to a minimum of 5,000 gigajoules per Contract Year) through the BC Gas System and through one meter station to one Shipper whose Baseload Quantity, pursuant to this Rate Schedule, represents at least 75% of its annual consumption of Gas for the Contract Year.
- 1.2 **Transportation Agreement** - BC Gas will only transport Gas pursuant to an executed Transportation Agreement. BC Gas is not offering to provide service as a common carrier.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

**2. Conditions of Service**

- 2.1 **Conditions** - This Rate Schedule is available to Shippers in all territory served by BC Gas under the BC Gas tariff of which this Rate Schedule is a part if adequate capacity exists on the BC Gas System.;
- ~~(a) — adequate capacity exists on the BC Gas System,~~
  - ~~(b) — the Shipper has contracted for a supply of Gas, which has been approved by the British Columbia Utilities Commission and any other authorities having jurisdiction,~~
  - ~~(c) — the Shipper has contracted with the Transporter, or has caused to be contracted with the Transporter, firm delivery to the Interconnection Point each Day over the term of the Transportation Agreement of a quantity of Gas equal to the DTQ,~~
  - ~~(d) — where the Shipper is not an End User of the Gas to be transported pursuant to the Transportation Agreement—~~
    - ~~— (i) — the End User is specified in the Transportation Agreement,~~
    - ~~— (ii) — the Shipper does not deliver Gas to a party other than the End User specified in the Transportation Agreement,~~
    - ~~— (iii) — the term of the Transportation Agreement is identical to the term of the gas supply contract between the Shipper and the End User, which will be for a period of not less than one Contract Year, and~~

- ~~(iv) the Shipper has provided to BC Gas prior to the commencement of service under this Rate Schedule in a form acceptable to BC Gas the following~~
  - ~~(A) an irrevocable authorization from the End User permitting BC Gas access to the End User's property, appropriate easements and right of ways on the End User's property to lay, construct and operate the pipeline and facilities and equipment deemed necessary by BC Gas to provide Gas service under this Rate Schedule, and~~
  - ~~(B) a declaration from the End User agreeing to comply with all instructions, orders, notices, directions and requests by BC Gas that would be applicable to the End User if the End User were a Shipper under a Transportation Agreement, and~~
- ~~(e) BC Gas has installed at the Delivery Point the facilities and equipment referred to in section 12.1 (Facilities and Equipment).~~

2.2 **Security** - In order to secure the prompt and orderly payment of the charges to be paid by the Shipper to BC Gas under the Transportation Agreement, BC Gas may require the Shipper to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the estimated maximum amount payable by the Shipper under this Rate Schedule and the Transportation Agreement for a period of 90 Days. Where BC Gas requires a Shipper to provide a letter of credit and the Shipper is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.

2.3 **Warning Relating to Interruptible Transportation Service or Interruptible Sales** - A Shipper wishing to switch from interruptible transportation or interruptible sales to firm transportation under this Rate Schedule must:

- (a) give 13 months prior notice to BC Gas of the Shipper's desire to do so, and
- (b) if BC Gas incurs additional costs to provide such service, reimburse BC Gas for any such additional costs.

Notwithstanding section 2.3(a), BC Gas will endeavour to accommodate a Shipper on less than 13 months prior notice if BC Gas is able, with such shorter notice, to arrange for firm transportation of Gas under this Rate Schedule.

### 3. Transportation

- 3.1 **Transportation of Gas** - Subject to section 13 of the General Terms and Conditions of BC Gas (Interruption of Service), and all of the terms and conditions of this Rate Schedule, BC Gas will on each Day transport for and deliver to the Shipper at one Delivery Point ~~(except as otherwise specified in the Transportation Agreement) on each Day the quantity of Gas, the Authorized Quantity received at the Interconnection Point from the Shipper up to the DTQ~~; ~~received at the Interconnection Point from the Shipper. for the charges and on all of the terms and conditions set out in either this Rate Schedule or the Transportation Agreement.~~
- 3.2 **Curtailment** - If at any time and for any reason BC Gas determines that it is not able to accommodate the provision of Balancing Gas or Backstopping Gas, BC Gas may, for any length of time, curtail the Shipper's take to the Authorized Quantity.
- ~~3.4 **Maximum Hourly Quantities** - BC Gas will not be obliged to receive or deliver in one Hour more than 5% of the DTQ quantity of Gas that the Shipper is authorized to receive on any Day.~~
- ~~3.3 **Pressure at Interconnection Point** - All Gas delivered to BC Gas at the Interconnection Point by or on behalf of the Shipper will not be at less than the pressure specified in the Transporter's Service Terms.~~
- ~~3.4 **Pressure at Delivery Point** - All Gas delivered by BC Gas at the Delivery Point to or on behalf of the Shipper will not be at less than the pressure specified in the Transportation Agreement.~~
- 3.3 **Notice of Curtailment** - ~~Any~~Each notice from BC Gas to the Shipper with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Delivery Point will be by telephone and/or fax ~~be confirmed by facsimile when such means of communication are available~~ and will specify the quantity of Gas to which the Shipper is curtailed and the time at which such curtailment is to be made. BC Gas will endeavour to give the Shipper as much notice as possible with respect to such curtailment, not to be less than 8 hours' prior notice unless prevented by Force Majeure or unless the Transporter does not provide to BC Gas at least 8 hours' prior notice of reduced availability of gas.
- 3.4 **Default Regarding Curtailment** - The Shipper will comply with each notice from BC Gas to interrupt or curtail the Shipper's take. If the Shipper at any time fails or neglects to comply with a notice from BC Gas to interrupt or curtail the Shipper's take as set out in section 6.6 (Failure to Deliver to Interconnection Point), BC Gas may, in addition to any other remedy which it may then or

thereafter have, at its option, without liability therefor and without any prior notice to the Shipper

- (a) turn off the valve at the Delivery Point, or
- (b) deliver such Gas and charge the Shipper for such Gas consumed on that Day the charge for Unauthorized Overrun Gas set out in the Table of Charges.

**3.5 Maximum Hourly Quantities** - BC Gas will not be obliged to receive or deliver in one Hour more than 5% of the DTQ quantity of Gas that the Shipper is authorized to receive on any Day.

~~3.6 Pressure at Interconnection Point~~ All Gas delivered to BC Gas at the Interconnection Point by or on behalf of the Shipper will not be at less than the pressure specified in the Transporter's Service Terms.

~~3.7 Pressure at Delivery Point~~ All Gas delivered by BC Gas at the Delivery Point to or on behalf of the Shipper will not be at less than the pressure specified in the Transportation Agreement.

#### **4. Table of Charges**

4.1 **Charges** - In respect of all quantities of Gas delivered to the Delivery Point pursuant to this Rate Schedule and the Transportation Agreement, the Shipper will pay to BC Gas all of the charges set out in the Table of Charges.

#### **5. Unauthorized Gas Use**

5.1 **Charges for Unauthorized Service** - On any Day the Shipper takes Unauthorized Overrun Gas, the Shipper will pay to BC Gas the charge for Unauthorized Overrun Gas set out in the Table of Charges.

5.2 **Payments Not License** - Payments made by the Shipper to BC Gas for Unauthorized Overrun Gas neither give the Shipper the right to take Unauthorized Overrun Gas, nor exclude or limit any other remedies available to BC Gas for the Shipper's taking of Unauthorized Overrun Gas.

~~5.3 Notice of Curtailment~~ Any Each notice from BC Gas to the Shipper with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Delivery Point will be by telephone and or fax be confirmed by facsimile when such means of communication are available and will specify the quantity of Gas to which the Shipper is curtailed and the time at which such curtailment is to be made. BC

~~Gas will endeavour to give the Shipper as much notice as possible with respect to such curtailment, not to be less than 8 hours' prior notice unless prevented by Force Majeure or unless the Transporter does not provide to BC Gas at least 8 hours' prior notice of reduced availability of gas.~~

~~5.4 Default Regarding Curtailment - If the Shipper at any time fails or neglects to comply with a notice or order, from BC Gas to interrupt or curtail the Shipper's take as set out in section 6.6 (Failure to Deliver to Interconnection Point), BC Gas may, in addition to any other remedy which it may then or thereafter have, at its option, without liability therefor and without any prior notice to the Shipper~~

~~(a) turn off the valve at the Delivery Point, or~~

~~(b) deliver such Gas and charge the Shipper for such Gas consumed on that Day the charge for Unauthorized Overrun Gas set out in the Table of Charges.~~

## **6. Nomination**

6.1 **Capacity on Transporter's Pipeline** - The Shipper will on or before the Commencement Date notify BC Gas of the identity of the party holding capacity for the Shipper on the Transporter's pipeline, and from time to time when such party changes.

6.2 **Requested Quantity** - The Shipper will provide to BC Gas by facsimile fax or other method approved by BC Gas, prior to 7:30 a.m. Pacific Local Time on each Day (or such other time as may be specified from time to time by BC Gas) such information as may be requested by BC Gas, which will include, but is not limited to, the Shipper's Requested Quantity for the Day commencing in approximately 24 hours. It is intended that, except in circumstances beyond the Shipper's forecasting ability, the Shipper's Requested Quantity for each day will approximately equal the quantity of gas the Shipper will actually consume on such Day. If the Shipper does not notify BC Gas in accordance with the foregoing, then the Shipper's Requested Quantity for the Day commencing in approximately 24 hours will be deemed to be the Shipper's Requested Quantity, adjusted as set out in section 6.3 (Adjustment of Requested Quantity), for the Day just commencing.

6.3 **Adjustment of Requested Quantity** - BC Gas will may adjust in cooperation with the Shipper, the Shipper's Requested Quantity, described in section 6.2 (Requested Quantity), when in the reasonable opinion of BC Gas any such modification is required: in order to minimize the Month end balancing quantity; or during any period of interruption or curtailment provided for in this Rate Schedule or the Transportation Agreement; or on any Day between November 1-

~~and April 1 in any Contract Year when BC Gas wishes to increase the Requested Quantity to the level available to the Shipper on the Transporter's pipeline.~~

- 6.4 **Request to Transporter** - BC Gas will provide to the Transporter the Shipper's Requested Quantity, adjusted as set out in section 6.3 (Adjustment of Requested Quantity).
- 6.5 **Delivery to Interconnection Point** - The Shipper will cause to be delivered to the Interconnection Point on each Day a quantity of Gas at least equal to the Shipper's Requested Quantity, adjusted as set out in section 6.3 (Adjustment of Requested Quantity). On any Day BC Gas will be entitled to utilize the balance of the Shipper's Gas delivered overdeliveries at the Interconnection Point ~~if not required by the Shipper.~~
- 6.6 **Failure to Deliver to Interconnection Point** - If on any Day the Authorized Quantity from the Transporter is less than the quantity provided pursuant to section 6.4 (Request to Transporter), BC Gas may, in its discretion, interrupt or curtail service hereunder to such Authorized Quantity. Alternatively, BC Gas ~~or~~ may deliver additional Gas to the Shipper at the Interconnection Point and charge the Shipper for such additional gas consumed on that Day the authorized overrun the charge for Backstopping Gas charge as set out in the Table of Charges. If BC Gas is unable to ascertain which Shipper's supply has caused a deficiency, BC Gas may in its discretion interrupt or curtail service to the Shippers on a basis deemed equitable by BC Gas. BC Gas will reallocate the deficiency if it obtains information that allows it to determine responsibility.

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## 7. **Gas Balancing**

- 7.1 **Monthly Adjustments** - BC Gas will make ~~monthly~~ adjustments at the end of each Month for the differences between the sum of the Authorized Quantities for the applicable Month and the Shipper's actual consumption as measured daily by BC Gas ~~applicable Monthly for the applicable Month and Transportation Quantity as follows~~
- (a) for overdeliveries (the sum of the Authorized Quantities is greater than the Shipper's actual Monthly consumption Transportation Quantity) BC Gas will maintain an inventory account for the Shipper and will increase the balance in the inventory account by the amount of the excess overdeliveries. ~~BC Gas and the Shipper will cooperate to limit the quantity of Gas maintained in the Shipper's inventory account. BC Gas reserves the right to limit Gas quantities maintained in the Shipper's inventory account and may from time to time in cooperation with the Shipper return excess inventory at no charge to the Shipper; this will not relieve the Shipper or the~~

Shipper Agent, where applicable, from its obligation to provide accurate nominations pursuant to section 6.2 (Requested Quantity) , and

- (b) except in the case of Backstopping Gas and Unauthorized Overrun Gas, for underdeliveries (the sum of the Authorized Quantities is less than the Shipper's actual Monthly consumption as measured by BC Gas Transportation Quantity-), and subject to availability of Gas, BC Gas will sell to the Shipper the deficiency quantities at the Balancing Gas authorized-overrun charge set out in the Table of Charges.

- 7.2 **Imbalance Following Termination** - If BC Gas has received a quantity of Gas in excess of the quantity delivered to the Shipper during the term of a Transportation Agreement, then the Shipper may request the excess quantity be returned within 90 Days following termination of the Transportation Agreement.

## 8. **Group Nominations and Balancing**

- 8.1 **Group Nomination and Balancing** - If a Shipper appoints a Customer Shipper Agent and becomes a member of the Shipper Agent's Group and if a Shipper Agent has executed a Customers' Shipper Agent Agreement, and if the members of the Customer Shipper Agent's Group are in the same division/service area of BC Gas and receive service under a transportation this Rate Schedule, the members of the Customer Shipper Agent's Group may, in the discretion of BC Gas, will nominate and balance on behalf of all members of the Group on an aggregate basis pursuant to sections 6 (Nomination) and 7 (Gas Balancing), as modified by this section, and the Customer Shipper Agent will be the agent for each of the members of a Group for the purposes of any and all matters set out in sections 6 (Nomination) and 7 (Gas Balancing). Notwithstanding the foregoing, where a Shipper under a Rate Schedule 22 Transportation Agreement is a member of the Group, Section 9 (Group Nomination and Balancing) of Rate Schedule 22 will apply to the Group on an aggregate basis.

- 8.2 ~~Monthly Transportation Quantity~~ - The Monthly Transportation Quantity for a Group is the sum of the Monthly Transportation Quantity for each member of the Group.

- 8.2 ~~Estimates by Customer Requested Quantity from Shipper Agent~~ - The Customer Shipper Agent will notify BC Gas of the Shipper's Requested Quantity described in section 6.2 (Requested Quantity) on behalf of all members of a Group on an aggregate basis.

- 8.3 **Charges to be Paid by Customer Shipper Agent** - The charges for Authorized-Overrun Gas, Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas, set out in the Table of Charges, will be determined based on the quantities

transported on behalf of all the members of the Group on an aggregate basis as a whole and will be paid to BC Gas by the Customer Shipper Agent as specified in the Customer Shipper Agent Agreement. Notwithstanding the foregoing, each Shipper is jointly and severally liable as principal obligant with the Customer Shipper Agent for all charges for Authorized Overrun Gas Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas, set out in the Table of Charges, applicable to such Shipper.

**8.4 Security** - BC Gas may require the Customer Shipper Agent to provide security, as set out in section 2.2 (Security), with necessary changes, for the performance of the Customer Shipper Agent's obligations under the Customers' Shipper Agent Agreement.

**8.5 Determination of DTQ** - If a Shipper appoints a Shipper Agent to act on its behalf, the Shipper authorizes the Shipper Agent to determine the Firm DTQ set out in the Transportation Agreement, for each Contract Year. This authorization will remain in effect for the term of the Transportation Agreement or so long as the Shipper Agent acts as agent for the Shipper, whichever period is shorter.

## **9. Term of Transportation Agreement**

**9.1 Term** - The initial term of the Transportation Agreement will begin on the Commencement Date and will expire at 8:00 a.m. Local Time on the November 1st next following, provided that if the foregoing results in an initial term of less than one year, then the initial term will instead expire at the end of one further Contract Year.

(a) ~~if the Shipper is the End User, will expire at 8:00 a.m. Standard Time on the November 1st next following, provided that if the foregoing would result in the initial term being for a period of less than one year, then the initial term will instead expire at the end of one further Contract Year, and~~

(b) ~~if the Shipper is not the End User, the term of the Transportation Agreement will be as described in section 2.1(d)(iii).~~

**9.2 Automatic Renewal Where the Shipper is End User** - ~~If the Shipper is the End User, and~~ Except as specified in the Transportation Agreement, the term of the Transportation Agreement will continue on a from year to year basis after the expiry of the initial term ~~until unless~~ cancelled by either BC Gas or the Shipper, subject to Section 2.3, upon not less than 2 months' notice prior to the end of the Contract Year then in effect. ~~If BC Gas or the Shipper fails to request an amended DTQ within 2 months prior to the end of the Contract Year then in effect, the previous DTQ will remain in effect.~~



9.3 **Early Termination** - The term of the Transportation Agreement is subject to early termination in accordance with section 15 (Default or Bankruptcy).

9.4 **Survival of Covenants** - Upon the termination of the Transportation Agreement, whether pursuant to section 15 (Default or Bankruptcy) or otherwise,

- (a) all claims, causes of action or other outstanding obligations remaining or being unfulfilled as at the date of termination, and,
- (b) all of the provisions in this Rate Schedule and in the Transportation Agreement relating to the obligation of any of the parties to account to or indemnify the other and to pay to the other any monies owing as at the date of termination in connection with the Transportation Agreement,

will survive such termination.

## 10. **Statements and Payments**

10.1 **Statements to be Provided** - BC Gas will, on or ~~before about~~ the 15th day of each month, deliver to the Shipper, a statement for the preceding month showing the Gas quantities delivered to the Shipper and the amount due. BC Gas will, on or ~~before about~~ the 45th day after the end of a Contract Year, deliver to the Shipper a separate statement for the preceding Contract Year showing the amount required from the Shipper in respect of any indemnity due under a ~~Transportation Agreement this Rate Schedule or a Transportation Agreement~~. Any errors in any statement will be promptly reported to the other party as provided hereunder, and statements will be final and binding unless questioned within one year after the date of the statement.

10.2 **Payment and ~~Late Payment Charge Interest~~** - Payment for the full amount of the statement, including federal, provincial and municipal taxes or fees applicable thereon, will be made to BC Gas at its Vancouver, British Columbia office, or such other place in Canada as it will designate, on or before the 1st business day after the 21st calendar day following the billing date. If the Shipper fails or neglects to make any payment required under this Rate Schedule, or any portion thereof, to BC Gas when due, BC Gas may include in the next bill to the Shipper ~~Customer a late payment charge interest on the outstanding amount at the rate of~~ 1 1/2% per month (19.56% per annum). Set

10.3 **Examination of Records** - Each of BC Gas and the Shipper will have the right to examine at reasonable times the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Rate Schedule or the Transportation Agreement.

**11. Quality**

- 11.1 **Minimum Standards** - All Gas delivered to the Interconnection Point by or on behalf of the Shipper and all Gas delivered to the Delivery Point will conform to the quality specifications set out in the Transporter's Service Terms.

**12. Measuring Equipment**

- 12.1 **Facilities and Equipment** - BC Gas will install, maintain and operate at the Delivery Point such metering and communications facilities and equipment as BC Gas determines are necessary or desirable for measuring the quantity of Gas delivered pursuant to this Rate Schedule to the Shipper and the Shipper will permit BC Gas, without cost to BC Gas, to use the Shipper's communications lines and power for the purpose of installing, maintaining and operating the measuring equipment of BC Gas.
- 12.2 **Measuring Site** - If BC Gas reasonably determines that it is necessary to install the facilities and equipment referred to in section 12.1 (Facilities and Equipment) on the Shipper's property, the Shipper will, without charge, provide a suitable site along with utilities and enclosures for the installation of the facilities and equipment of BC Gas. BC Gas will at all times have clear access to the site and to all of its facilities and equipment. All facilities and equipment installed by BC Gas on the Shipper's property will remain the property of BC Gas and may be removed by BC Gas upon termination of the Transportation Agreement.
- 12.3 **Calibration and Test of Measuring Equipment** - The accuracy of the measuring equipment of BC Gas will be verified by standard tests and methods at regular intervals and at other times at the initiative of BC Gas or upon the reasonable request of the Shipper. Notice of the time and nature of each test conducted in response to communications with or at the request of the Shipper will be given by BC Gas to the Shipper sufficiently in advance to permit a representative of the Shipper to be present. If during a test the measuring equipment is found to be registering inaccurately, it will be adjusted at once to read as accurately as possible. The results of each test and adjustment, if any, made by BC Gas, whether or not the Shipper is present for such test, will be accepted until the next test. All tests of such measuring equipment of BC Gas will be made at the expense of BC Gas, except that the Shipper will bear the expense of tests made at its request if the measuring equipment is found to be inaccurate by an amount equal to 2% or less.
- 12.4 **Inaccuracy Exceeding 2%** - If upon any test the measuring equipment is found to be inaccurate by an amount exceeding 2%, any previous readings of such equipment will be corrected to zero error for any period during which it is definitely known or is agreed upon that the error existed. If the period is not

definitely known or is not agreed upon, such correction will be for a period covering the last half of the time elapsed since the date of the last test. Provided that under no circumstances will an adjustment be made for a period of more than the preceding 12 months.

**12.5 Correction of Measuring Errors** - If the measuring equipment is out of service or out of repair so that the quantity of Gas delivered cannot be correctly determined by the reading thereof, the Gas delivered during the period such measuring equipment is out of service or out of repair will be estimated on the basis of the best available data, using the first of the following methods which is feasible

- (a) by correcting the error if the percentage of error is ascertained by calibration test or mathematical calculation,
- (b) by using the registration of any check measuring equipment if installed and accurately registering, and
- (c) by estimating the quantity of Gas delivered to the Shipper during the preceding periods under similar conditions when the meter was registering accurately.

**12.6 Shipper's Equipment** - The Shipper may at its own expense install, maintain and operate its own measuring equipment for the purposes of monitoring or checking the measuring equipment of BC Gas, provided that the Shipper will install such equipment so as not to interfere with the operation of the measuring equipment of BC Gas.

**12.7 Right to be Present** - BC Gas and the Shipper will have the right to inspect all equipment installed or furnished by the other and the charts and other measurement or test data of the other at all times during business hours, and to be present at the time of any installing, testing, cleaning, changing, repairing, calibrating or adjusting done in connection with the measuring equipment of the other party, but all such activities will be performed by the party furnishing the measuring equipment.

**12.8 Preservation of Records** - Both parties will cause to be preserved each test datum, chart and other record of Gas measurement for a period of 2 years.

### **13. Measurement**

**13.1 Unit of Volume** - The unit of volume of Gas for all purposes hereunder will be 1 cubic metre at a temperature of 15° Celsius and an absolute pressure of 101.325 kilopascals.

- 13.2 **Determination of Volume** - Gas delivered hereunder will be metered using metering apparatus approved by the Standards Division, ~~Department of Consumer & Corporate Affairs of Canada Industry Canada, Office of Consumer Affairs~~ and the determination of standard volumes delivered hereunder will be in accordance with terms and conditions pursuant to the *Electricity and Gas Inspection Act* of Canada.
- 13.3 **Conversion to Energy Units** - In accordance with the *Electricity and Gas Inspection Act* of Canada, volumes of Gas delivered each Day will be converted to energy units by multiplying the standard volume by the Heat Content of each unit of Gas. Volumes will be specified in  $10^3\text{m}^3$  rounded to two decimal places and energy will be specified in gigajoules rounded to one decimal place.

#### 14. **Representations, Warranties and Covenants**

- 14.1 **Title** - The Shipper ~~covenants, represents and warrants~~ with BC Gas that the Shipper will have good title to all Gas to be delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, free and clear of all liens, encumbrances and claims.
- 14.2 **Title Not That of BC Gas** - BC Gas agrees that title to all Gas transported pursuant to the Transportation Agreement remains with the Shipper.
- 14.3 **Acknowledgement** - The Shipper acknowledges that the Gas transported under the Transportation Agreement will be odorized and commingled with gas within the Transporter's pipeline system and the BC Gas System and the Shipper agrees to accept a proportionate share of any Gas lost by pipeline failure, fire or other similar cause that may affect the Shipper's Gas.

#### 15. **Default or Bankruptcy**

- 15.1 **Default** - If the Shipper at any time fails or neglects
- (a) to make any payment due to BC Gas or to any other person under this Rate Schedule or the Transportation Agreement within 30 days after payment is due, or
  - (b) to ~~cure~~~~correct~~ any default of any of the other terms, covenants, agreements, conditions or obligations imposed upon it under this Rate Schedule or the Transportation Agreement, within 30 days after BC Gas gives to the Shipper notice of such default or, in the case of a default that cannot with due diligence be ~~cured~~~~corrected~~ within a period of 30 days, the Shipper fails to proceed promptly after the giving of such notice with due diligence

to ~~correct~~ the same and thereafter to prosecute the ~~correcting~~ of such default with all due diligence,

then BC Gas may in addition to any other remedy that it has, including the rights of BC Gas set out in section 5.43.4 (Default Regarding Curtailment), and 5 (Unauthorized Gas Use), at its option and without liability therefor

- (a) suspend further transportation service to the Shipper and may refuse to deliver Gas to the Shipper until the default has been fully remedied, and no such suspension or refusal will relieve the Shipper from any obligation under this Rate Schedule or the Transportation Agreement, or
- (b) terminate the Transportation Agreement, and no such termination of the Transportation Agreement pursuant hereto will exclude the right of BC Gas to collect any amount due to it from the Shipper for what would otherwise have been the remainder of the term of the Transportation Agreement.

**15.2 Bankruptcy or Insolvency** - If the Shipper becomes bankrupt or insolvent or commits or suffers an act of bankruptcy or insolvency or a receiver is appointed pursuant to a statute or under a debt instrument or the Shipper seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas will have the right, at its sole discretion, to terminate the Transportation Agreement by giving notice in writing to the Shipper and thereupon BC Gas may cease further delivery of Gas to the Shipper and the amount then outstanding for Gas provided under the Transportation Agreement will immediately be due and payable by the Shipper.

## **16. Notice**

**16.1 Notice** - Any notice, request, statement or bill that is required to be given or that may be given under this Rate Schedule or under the Transportation Agreement will, unless otherwise specified, be in writing and will be considered as fully delivered when mailed, personally delivered or sent by ~~telecopier~~ ~~fax~~ to the other in accordance with the following:

if to BC Gas

MAILING ADDRESS:

BC GAS UTILITY LTD.

1111 West Georgia Street  
Vancouver, B.C.  
V6E 4M4

**NOMINATIONS AND FORCE  
MAJEURE:**

Attention: Transportation Coordinators  
Telephone: (604) 443-6950  
Telecopier-Fax: (604) 443-6952

**BILLING AND PAYMENT:**

Attention: Manager, Customer  
Administration  
Telephone: (604) 443-6507/6509  
Telecopier-Fax: (604) 443-6588

**CUSTOMER RELATIONS**

Attention: Manager, Transportation &  
Industrial Services  
Telephone: (604) 443-6491  
Telecopier-Fax: (604) 443-6770

**LEGAL AND OTHER:**

Attention: V.P. Legal & Regulatory  
Affairs & Secretary  
Telephone: (604) 443-6607  
Telecopier-Fax: (604) 443-6789/6904

if to the Shipper, then as set out in the Transportation Agreement.

- 16.2 **Specific Notices** - Notwithstanding section 16.1 (Notice), notices with respect to Force Majeure will be sufficient if given by BC Gas in writing by facsimile-fax, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by the Shipper as authorized to receive such notices.

**17. Limitation on Liability and Indemnity**

- 17.1 **Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment permitted under the General Terms and Conditions of BC Gas, or this Rate Schedule.

- 17.2 **Indemnity** - The Shipper will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) any defect in title to any Gas delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, or

losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) any defect in title to any Gas delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, or arising from any charges that are applicable to the Gas delivered to BC Gas,
- (b) Franchise Fees not otherwise collected by BC Gas under the Table of Charges,
- (c) nominations made in accordance with sections 6 or 8 of this Rate Schedule by BC Gas to the Transporter with respect to the Shipper's transportation volumes, whether or not the Shipper is a member of a Group,
- (d) Gas delivered by the Shipper to BC Gas failing to meet the quality specifications set out in section 11.1 of this Rate Schedule,
- (e) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Shipper or on the delivery of Gas to the Shipper by BC Gas, or on any other service provided by BC Gas to the Shipper, and
- (f) all charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas, set out in the Table of Charges, whether or not the Shipper is a member of a Group.

**17.3 Principal Obligor** - If the Shipper is a member of a Group, the Shipper's obligations to pay the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges, are that of principal obligor and not of surety and are independent of the obligations of the Shipper Agent pursuant to the Shipper Agent Agreement and a separate action or actions may be brought against the Shipper, whether or not an action is brought against the Shipper Agent and whether or not the Shipper Agent can be or is joined in any such action or actions.

**17.4 Waiver of Defences** - For greater certainty, if the Shipper is a member of a Group, BC Gas will not be bound to exhaust its recourse against the Shipper Agent before being entitled to payment from the Shipper for the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges; the Shipper waives all diligence, demands, notices, protests, of the Shipper's obligations for the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges, and any and all claims or defences relating to lack of diligence or delays in collection or enforcement of any and all other securities taken by BC Gas and consents to any

## **18. Force Majeure**

**18.1 Force Majeure** - Subject to the other provisions of this section 18, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Rate Schedule under which service is rendered or in the Transportation Agreement, the obligations of both BC Gas and the Shipper will be suspended to the extent necessary for the period of the Force Majeure condition.

**18.2 Curtailment Notice** - If BC Gas claims suspension pursuant to this section 18, BC Gas will be deemed to have issued to the Shipper a notice of curtailment.

**18.3 Exceptions** - Neither party will be entitled to the benefit of the provisions of section 18.1 under any of the following circumstances

- (a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,
- (b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or
- (c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under the Rate Schedule or the Transportation Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.

**18.4 Notice to Resume** - The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.

**18.5 Settlement of Labour Disputes** - Notwithstanding any of the provisions of this section 18, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 18.1.



- 18.6 **No Exemption for Payments** - Notwithstanding any of the provisions of this section 18, Force Majeure will not relieve or release either party from its obligations to make payments to the other.
- 18.7 **Periodic Repair by BC Gas** - BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Shipper as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.
- 18.8 **Shipper's Gas** - If BC Gas curtails or interrupts transportation of Gas by reason of Force Majeure the Shipper will make its supply of Gas available to BC Gas, to the extent required by BC Gas, to maintain service priority to those customers or classes of customers which BC Gas determines should be served.
- 18.9 **Alteration of Facilities** - The Shipper will pay to BC Gas all reasonable costs associated with the alteration of facilities made at the discretion of BC Gas to measure quantities reduced by reason of Force Majeure claimed by the Shipper and to restore such facilities after the Force Majeure condition ends.

## 19. **Arbitration**

- 19.1 **Arbitration** - Any dispute between the parties arising from this Rate Schedule or the Service Agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.
- 19.2 **Demand for Arbitration** - Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.
- 19.3 **Arbitrator** - The parties will have 10 days from receipt of the demand referred to in section 19.2 of this Rate Schedule to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Shipper or BC Gas.
- 19.4 **Commencement and Decision** - The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable

delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.

**19.5 Decision** - The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.

## **20 Interpretation**

**20.1 Definitions in General Terms and Conditions of BC Gas** - Except where the context requires otherwise or except as otherwise expressly provided in the Definitions which form part of this Rate Schedule, all words and phrases defined in the General Terms and Conditions of BC Gas and used in this Rate Schedule or in a Transportation Agreement have the meanings set out in the General Terms and Conditions of BC Gas.

**20.2 Change in Definition of "Day"** - BC Gas may amend the definition of "Day" from time to time to suitably align its operations with those of its Transporters. If BC Gas amends the meaning definition of "Day", a pro-rata adjustment of quantities of Gas and charges to account for any Day of more or less than 24 hours will be made and the term of the Transportation Agreement will be similarly adjusted.

**20.3 Further Definitions** - ~~Additionally, except where the context requires otherwise, each of the words and phrases described in the Definitions have the meanings ascribed thereto in the Definitions.~~

**20.3 Interpretation** - Except where the context requires otherwise or except as otherwise expressly provided, in this Rate Schedule or in a Transportation Agreement

- (a) all references to a designated section are to the designated section of this Rate Schedule unless otherwise specifically stated,
- (b) the singular of any term includes the plural, and vice versa, and the use of any term is equally applicable to any gender and, where applicable, body corporate,
- (c) any reference to a corporate entity includes and is also a reference to any corporate entity that is a successor to such entity,
- (d) all words, phrases and expressions used in this Rate Schedule or in a Transportation Agreement that have a common usage in the gas industry and that are not defined in the General Terms and Conditions of BC Gas,

the Definitions or in the Transportation Agreement have the meanings commonly ascribed thereto in the gas industry, and

- (e) the headings of the sections set out in this Rate Schedule or in the Transportation Agreement are for convenience of reference only and will not be considered in any interpretation of this Rate Schedule or the Transportation Agreement.

## **21. Miscellaneous**

- 21.1 Waiver** - No waiver by either BC Gas or the Shipper of any default by the other in the performance of any of the provisions of this Rate Schedule or the Transportation Agreement will operate or be construed as a waiver of any other or future default or defaults, whether of a like or different character.
- 21.2 Enurement** - The Transportation Agreement will enure to the benefit of and be binding upon the parties and their respective successors and permitted assigns, including without limitation successors by merger, amalgamation or consolidation.
- 21.3 Assignment** - The Shipper will not assign the Transportation Agreement or any of its rights or obligations thereunder without the prior written consent of BC Gas which consent will not be unreasonably withheld or delayed. No assignment will release the Shipper from its obligations under this Rate Schedule or under the Transportation Agreement that existed prior to the date on which the assignment takes effect. This provision applies to every proposed assignment by the Shipper.
- 21.4 Amendments to be in Writing** - Except as set out in this Rate Schedule, no amendment or variation of the Transportation Agreement will be effective or binding upon the parties unless such amendment or variation is set out in writing and duly executed by the parties.
- 21.5 Proper Law** - The Transportation Agreement will be construed and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein.
- 21.6 Time is of Essence** - Time is of the essence of this Rate Schedule, the Transportation Agreement and of the terms and conditions thereof.
- 21.7 Subject to Legislation** - Notwithstanding any other provision hereof, this Rate Schedule and the Transportation Agreement and the rights and obligations of BC Gas and the Shipper under this Rate Schedule and the Transportation Agreement are subject to all present and future laws, rules, regulations and orders of any legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over BC Gas or the Shipper.

- 21.8 Further Assurances** - Each of BC Gas and the Shipper will, on demand by the other, execute and deliver or cause to be executed and delivered all such further documents and instruments and do all such further acts and things as the other may reasonably require to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Rate Schedule and the Transportation Agreement and to assure the completion of the transactions contemplated hereby.
- 21.9 Form of Payments** - All payments required to be made under statements and invoices rendered pursuant to this Rate Schedule or the Transportation Agreement will be made by telegraphic-wire transfer to, or cheque or bank cashier's cheque drawn on, a Canadian chartered bank or trust company, payable in lawful money of Canada at par in immediately available funds in Vancouver, British Columbia.

## DEFINITIONS

- (a) ~~A.N.G. means Alberta Natural Gas Company, a Canadian corporation.~~
- (b) ~~Authorized Overrun Gas means any Gas taken by the Shipper during a Month which is in excess of the applicable Monthly Transportation Quantity less any Unauthorized Overrun Gas taken during such Month.~~
- (a) **Authorized Quantity** - means the quantity of energy (in gigajoules) for each Day approved by the Transporter for transportation service on the Transporter's pipeline system, based on the quantity requested by the Shipper, adjusted as set out in section 6.3 (Adjustment to Requested Quantity).
- (b) **Backstopping Gas** - means Gas sold by BC Gas to the Shipper as an interruptible backup supply if on any Day the Authorized Quantity from the Transporter is less than the Shipper's Requested Quantity.
- (c) **Balancing Gas** - means any Gas taken by the Shipper during a Month which is in excess of the Authorized Quantity, subject to section 7.1 (Monthly Adjustments).
- (d) **Baseload Quantity** - means the Shipper's consumption in either the Month of July or August, whichever is lower, multiplied by 12 Months.
- (e) **BC Gas** - means BC Gas Utility Ltd., a body corporate incorporated pursuant to the laws of the Province of British Columbia under number 368681.
- (f) **BC Gas System** - means the Gas transmission and distribution system owned and operated by BC Gas, as such system is expanded, reduced or modified from time to time.
- (g) **British Columbia Utilities Commission** - means the British Columbia Utilities Commission constituted under the *Utilities Commission Act* of British Columbia and includes and is also a reference to
  - (i) any commission that is a successor to such commission, and
  - (ii) any commission that is constituted pursuant to any statute that may be passed which supplements or supersedes the *Utilities Commission Act* of British Columbia.
- (h) **Commencement Date** - means the day specified as the Commencement Date in the Transportation Agreement.

- (i) **Contract Year** - means a period of 12 consecutive Months commencing at the beginning of the 1st Day of November and ending at the beginning of the next succeeding 1st Day of November.
- ~~(j) **Customer Agent** means a person who enters into a Customers' Agent Agreement with BC Gas.~~
- ~~(j) **Customers' Agent Agreement** means an agreement between BC Gas and a Customer Agent pursuant to which the Customer Agent agrees to pay to BC Gas the charges for Authorized Overrun Gas and Unauthorized Overrun Gas, set out in the Table of Charges, applicable to the Group.~~
- (j) **Day** - means, subject to section 17-220.2 (Change in Definition of "Day"), any period of twenty-four consecutive hours beginning and ending at 8:00 a.m. Standard Local Time.
- ~~(k) **Definitions** means the definitions appended to this Rate Schedule.~~
- (k) **Delivery Point** - means the point specified in a Transportation Agreement where BC Gas delivers Gas to a Shipper.
- (l) **DTQ or Daily Transportation Quantity**- means the maximum quantity of Gas that BC Gas is obligated to transport for and deliver to a Shipper at the Delivery Point on any particular Day, which in the discretion of BC Gas reasonably reflects the Shipper's requirements and which is specified in a Transportation Agreement.
- ~~(m) **End User** means a person specified in a Transportation Agreement who is a consumer of Gas within the service area of BC Gas.~~
- (m) **Force Majeure** - means any acts of God, strikes, lockouts, or other industrial disturbances, civil disturbances, arrests and restraints of rulers or people, interruptions by government or court orders, present or future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, blackouts, insurrections, failure or inability to secure materials or labour by reason of priority, regulations or orders of government, serious epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, breakage or accident to machinery or lines of pipes, or freezing of wells or pipelines, or the failure of gas supply, temporary or otherwise, from a Supplier of gas, which act of Force Majeure was not due to negligence of the party claiming Force Majeure. Further, Force Majeure will also include a declaration of force majeure by a Transporter that results in Gas being unavailable for delivery at the Interconnection Point.
- (n) **Franchise Fees** - means the aggregate of all monies payable by BC Gas to a municipality

- (i) for the use of the municipality's streets and other property to construct and operate the utility business of BC Gas,
- (ii) relating to the revenues received by BC Gas for services provided and Gas consumed within the municipality, and
- (iii) relating, if applicable, to the value of Gas transported by BC Gas through the municipality.

**(g) Gas** - means the residue remaining after raw gas has been subjected to any or all of the following permissible processes

- (i) the removal of any of its constituent parts other than methane, and the removal of methane to such extent as is necessary in removing other constituents,
- (ii) the compression, regulation, cooling, cleaning or any other chemical or physical process other than the addition of diluents, such as air or nitrogen, to such extent as may be required in its production, gathering, transmission, transportation, storage, removal from storage and delivery, and
- (iii) the addition of odorant by BC Gas,

but for greater certainty Gas does not include propane.

**(h) General Terms and Conditions of BC Gas** - means the general terms and conditions of BC Gas from time to time approved by the British Columbia Utilities Commission.

**(i) Group** - means a group of Shippers ~~or End-Users~~ who each transport Gas under this Rate Schedule, using a ~~common gas supply pool and common nomination and balancing~~ procedure ~~s with the BC Gas Transporter, and, in the case of Shippers,~~ who have each entered into a Transportation Agreement ~~or, in the case of End-Users, for whom one Shipper has entered into Transportation Agreements.~~

**(j) Heat Content** - means the gross heating value of the Gas, determined on the basis of a temperature of 15° Celsius with the Gas free of all water vapour and at an absolute pressure of 101.325 kilopascals, with the products of combustion cooled to the initial temperature of the Gas and the water formed by the combustion condensed to the liquid state. The Heat Content will be expressed in megajoules per cubic metre of Gas (MJ/M<sup>3</sup>) rounded to two decimal places.

**(k) Hour** - means any consecutive 60 minute period.

**(l) Interconnection Point** - means a point ~~(specified as the "Delivery Point" in the Transportation Agreement relied upon by a Shipper for the movement of gas~~

through the Transporter's pipeline system) where the BC Gas System interconnects with the facilities of one of the Transporters of BC Gas, as specified in a Transportation Agreement.

- (u) **Local Time** - means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area or daylight savings time as the case may be.
- (v) **Month** - means, subject to any changes from time to time required by BC Gas in the starting time of its Gas Day, the period beginning at 8:00 a.m. ~~Local Standard Time~~ on the first day of the calendar month and ending at 8:00 a.m. ~~Local Standard Time~~ on the first day of the next succeeding calendar month.
- (w) ~~MTQ or Monthly Transportation Quantity~~ subject to section 8.2 (Monthly Transportation Quantity), means the lesser of the following quantities of Gas
  - (i) ~~the quantity of Gas BC Gas has received from a Shipper during a Month plus any imbalance carried forward from the previous Month, and~~
  - (ii) ~~the quantity of Gas obtained by multiplying the DTQ by the number of days in the Month, adjusted to reflect any quantity of Gas the Shipper fails to deliver to the Interconnection Point when provided by BC Gas to the Transporter pursuant to section 6.4 (Request to Transporter) and any Gas interrupted or curtailed below the DTQ, such adjustments, if overlapping, to only count once.~~
- (x) **Rate Schedule 25 or this Rate Schedule** - means this Rate Schedule, including all rates, terms and conditions, the Definitions and the Table of Charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (y) **Requested Quantity** - means the quantity of energy for each Day requested by the Shipper or Shipper Agent for firm transportation under Rate Schedule 25.
- (y) **Shipper** - means a person who enters into a Transportation Agreement with BC Gas who is also the consumer of the Gas transported. ~~If the Shipper is not an End User, then the word "Shipper" in the context of each of Delivery Point, property, deliveries of Gas, using of Gas, consuming of Gas, taking of Gas, curtailing of Gas, interrupting of Gas, limiting the taking of Gas, receiving of Gas, purchasing of Gas, accepting of Gas, supplying of Gas and requesting quantities of Gas, will also mean "End User".~~
- (z) **CustomerShipper Agent** - means a person who enters into a Customers' Shipper Agent Agreement with BC Gas.



- (aa) **Customers' Shippers Agent Agreement** - means an agreement between BC Gas and a Customer Shipper Agent pursuant to which the Customer Shipper Agent agrees to pay to BC Gas the charges for Backstopping Gas, Balancing Gas, Authorized Overrun Gas and Unauthorized Overrun Gas, set out in the Table of Charges, applicable to the Group.
- (ac) ~~Standard Time~~ means ~~Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area.~~
- (ab) **Supplier** - means a party who sells Gas to a Shipper or BC Gas or has access to its own supplies of gas.
- (ac) **Table of Charges** - means the table of prices, fees and charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission, appended to this Rate Schedule.
- (ad) **Transportation Agreement** - means an agreement between BC Gas and a Shipper to provide service pursuant to this Rate Schedule.
- (ae) **Transporter** - means, in the case of the Columbia service area, A.N.G. Alberta Natural Gas Company, and Nova Corporation of Alberta, and in the case of the Inland and Lower Mainland service areas, Westcoast Energy Inc., and any other gas pipeline transportation company connected to the facilities of BC Gas from which BC Gas receives Gas for the purposes of Gas transportation or resale.
- (af) **Transporter's Service Terms** - means the general terms and conditions of the applicable Transporter, as filed with and approved from time to time by the National Energy Board or other applicable governmental authority.
- (ag) **Unauthorized Overrun Gas** - means any Gas taken on any Day by a Shipper in excess of the curtailed quantity specified in any notice from BC Gas, to interrupt or curtail the Shipper's take, and for greater certainty, Unauthorized Overrun Gas includes all Gas taken by a Shipper to the extent that the obligation of BC Gas to deliver such Gas is suspended by reason of Force Majeure.
- (aj) ~~Westcoast~~ means ~~Westcoast Energy Inc., a Canadian corporation.~~
- (ah) **"10<sup>3</sup>m<sup>3</sup>"** means 1,000 cubic metres.

**BC GAS UTILITY LTD.**

**RATE SCHEDULE 27  
GENERAL INTERRUPTIBLE TRANSPORTATION SERVICE**

**Effective November 1, 1993**



**BC Gas**

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## 1. **Applicability**

- 1.1 **Description of Applicability** - This Rate Schedule applies to the provision of interruptible transportation service through the BC Gas System and through one meter station to one Shipper.
- 1.2 **Transportation Agreement** - BC Gas will only transport Gas pursuant to an executed Transportation Agreement. BC Gas is not offering to provide service as a common carrier.
- 1.3 **British Columbia Utilities Commission** - This Rate Schedule may be amended from time to time with the consent of the British Columbia Utilities Commission.

## 2. **Conditions of Service**

- 2.1 **Conditions** - This Rate Schedule is available to Shippers in all territory served by BC Gas under the BC Gas tariff of which this Rate Schedule is a part
- (a) adequate capacity exists on the BC Gas System, and
  - ~~(b) the Shipper has contracted for a supply of Gas, which has been approved by the British Columbia Utilities Commission and any other authorities having jurisdiction,~~
  - (b) ~~the End User has and continues to have, to the satisfaction of BC Gas, an alternative fuel burning installation in good operating order with an adequate supply of fuel in order that the End User can continue its operations on occasions when the transportation of Gas is discontinued, interrupted or curtailed and the Shipper the End User acknowledges that the transportation service under this Rate Schedule is interruptible, and the Shipper is able to accommodate such interruption or curtailment and releases BC Gas of any liability for the Shipper's inability to accommodate such interruption or curtailment. BC Gas will waive this requirement provided that the End User agrees and acknowledges that any interruption of its operations due to Gas discontinuance, interruption or curtailment results solely from the End User's election not to install and maintain standby facilities,~~
  - ~~(e) where the Shipper is not an End User of the Gas to be transported pursuant to the Transportation Agreement~~
    - ~~(i) the End User is specified in the Transportation Agreement,~~

- ~~— (ii) the Shipper does not deliver Gas to a party other than the End-User specified in the Transportation Agreement,~~
- ~~— (iii) the term of the Transportation Agreement is identical to the term of the gas supply contract between the Shipper and the End-User, which will be for a period of not less than one Contract Year, and~~
- ~~— (iv) the Shipper has provided to BC Gas prior to the commencement of service under this Rate Schedule in a form acceptable to BC Gas the following~~
  - ~~(A) an irrevocable authorization from the End User permitting BC Gas access to the End User's property, appropriate easements and right of ways on the End User's property to lay, construct and operate the pipeline and facilities and equipment deemed necessary by BC Gas to provide Gas service under this Rate Schedule, and~~
  - ~~(B) a declaration from the End User agreeing to comply with all instructions, orders, notices, directions and requests by BC Gas that would be applicable to the End User if the End User were a Shipper under a Transportation Agreement, and~~
- ~~(d) BC Gas has installed at the Delivery Point the facilities and equipment referred to in section 12.1 (Facilities and Equipment).~~

2.2 **Security** - In order to secure the prompt and orderly payment of the charges to be paid by the Shipper to BC Gas under the Transportation Agreement BC Gas may require the Shipper to provide, and at all times maintain, an irrevocable letter of credit in favour of BC Gas issued by a financial institution acceptable to BC Gas in an amount equal to the estimated maximum amount payable by the Shipper under this Rate Schedule and the Transportation Agreement for a period of 90 Days. Where BC Gas requires a Shipper to provide a letter of credit and the Shipper is able to provide alternative security acceptable to BC Gas, BC Gas may accept such security in lieu of a letter of credit.

2.3 **Warning Relating to Firm Sales or Firm Transportation Rate Schedule - An End-User** A Shipper wishing to switch from interruptible transportation or interruptible sales at the end of the term of a Transportation Agreement to a firm Gas sales Rate Schedule or to firm transportation Rate Schedule must comply with the requirements for firm service set out in the applicable Rate Schedule, including the following

- (a) giving 13 months' prior notice to BC Gas of the ~~End User Shipper's~~ desire to do so, and
- (b) if BC Gas is subjected to higher transportation costs incurs additional costs to provide such service, reimbursing BC Gas for any such higher additional costs.

Notwithstanding section 2.3(a), BC Gas will endeavour to accommodate a ~~Customer Shipper~~ on less than 13 months' prior notice if BC Gas is able, with such shorter notice, to arrange for the ~~firm purchase and firm~~ transportation of Gas under a ~~firm sales Rate Schedule~~, or transportation of Gas under a ~~firm~~ transportation Rate Schedule.

### 3. Transportation

3.1 Transportation of Gas - Subject to section 13 of the General Terms and Conditions of BC Gas (Interruption of Service), and all of the terms and conditions of this Rate Schedule, BC Gas will on each Day transport for and deliver to the Shipper at one Delivery Point ~~(except as otherwise specified in the Transportation Agreement)~~ on each Day the quantity of Gas the Authorized Quantity, up to the DTQ received at the Interconnection Point from the Shipper, up to the DTQ where adequate capacity exists on the BC Gas System received at the Interconnection Point from the Shipper for the charges and on all of the terms and conditions set out in either this Rate Schedule or the Transportation Agreement.

3.2 Curtailment - If BC Gas at any time and for any reason BC Gas determines that it does not have sufficient capacity on the BC Gas System to accommodate the Shipper's request for interruptible transportation under this Rate Schedule, or is not able to accommodate the provision of Balancing Gas or Backstopping Gas, BC Gas may for any length of time

(a) interrupt or curtail transportation service under this Rate Schedule, or ~~The criterion for capacity curtailment will be as established from time to time by BC Gas' systems planning department. Additional capacity curtailments may occur on the basis of day to day operating conditions experienced on the BC Gas System.~~

(b) curtail the Shipper's take to the Authorized Quantity,

as the case may be.

3.3 Notice of Curtailment - Each notice from BC Gas to the Shipper with respect to the interruption or curtailment by BC Gas of deliveries of Gas to the Delivery



Point will be by telephone ~~and/or fax and be confirmed by facsimile when such means of communication are available~~ and will specify the quantity of Gas to which the Shipper is curtailed and the time at which such curtailment is to be made. BC Gas will endeavour to give the Shipper as much notice as possible with respect to such curtailment, not to be less than 82 hours' prior notice unless prevented by Force Majeure ~~or unless the Transporter does not provide to BC Gas at least 8 hours' prior notice of reduced availability of gas.~~

**3.4 Default Regarding Curtailment** - The Shipper will comply with each notice from BC Gas to interrupt or curtail the Shipper's take. If the Shipper at any time fails or neglects to comply with a notice from BC Gas to interrupt or curtail the Shipper's take, BC Gas may, in addition to any other remedy ~~which that~~ it may then or thereafter have, at its option, without liability therefor and without any prior notice to the Shipper

- (a) turn off the valve at the Delivery Point, or
- (b) deliver such Gas and charge the Shipper for such Gas consumed on that Day the charge for Unauthorized Overrun Gas set out in the Table of Charges.

**3.5 Failure to Comply** - If during any one Contract Year the Shipper fails or neglects to comply with three notices from BC Gas to interrupt or curtail the Shipper's take, unless the Shipper provides to BC Gas assurances, to the ~~complete~~ satisfaction of BC Gas, that the Shipper will comply with all further interruption or curtailment notices, BC Gas may, in addition to any other remedy ~~which that~~ it may then or thereafter have, at its option and without liability therefor, switch the Shipper to a firm transportation Rate Schedule, beginning ~~on at~~ the commencement of the next following Contract Year ~~Month~~. If the Shipper and BC Gas do not execute a new Transportation Agreement pursuant to the firm transportation Rate Schedule, from the date of such switch, the Transportation Agreement will be deemed to a Transportation Agreement pursuant to the firm transportation Rate Schedule, with all necessary changes.

**3.6 Maximum Hourly Quantities** - BC Gas will not be obliged to receive or deliver in one Hour more than 5% of the DTQ quantity of Gas that the Shipper is authorized to receive on any day.

~~3.7 Pressure at Interconnection Point~~ - All Gas delivered to BC Gas at the Interconnection Point by or on behalf of the Shipper will not be at less than the pressure specified in the Transporter's Service Terms.

~~3.8 Pressure at Delivery Point~~ - All gas delivered by BC Gas at the Delivery Point to or on behalf of the Shipper will not be at less than the pressure specified in the Transportation Agreement.

#### 4. Table of Charges

- 4.1 **Charges** - In respect of all quantities of Gas delivered to the Delivery Point pursuant to this Rate Schedule and the Transportation Agreement, the Shipper will pay to BC Gas all of the charges set out in the Table of Charges.

#### 5. Unauthorized Gas Use

- 5.1 **Charges for Unauthorized Service** - On any Day the Shipper takes Unauthorized Overrun Gas or Unauthorized Transportation Service, the Shipper will pay to BC Gas the charge for Unauthorized Overrun Gas or Unauthorized Transportation Service set out in the Table of Charges.
- 5.2 **Payments Not License** - Payments made by the Shipper to BC Gas for Unauthorized Overrun Gas or Unauthorized Transportation Service neither give the Shipper the right to take Unauthorized Overrun Gas or Unauthorized Transportation Service, nor exclude or limit any other remedies available to BC Gas for the Shipper's taking of Unauthorized Overrun Gas or Unauthorized Transportation Service.

#### 6. Nomination

- 6.1 **Capacity on Transporter's Pipeline** - The Shipper will on or before the Commencement Date notify BC Gas of the identity of the party holding capacity for Shipper on the Transporter's pipeline, and from time to time when such party changes.
- 6.2 **Requested Quantity** - The Shipper will provide BC Gas by facsimile fax or other method approved by BC Gas, prior to 7:30 a.m. Pacific Local Time on each Day (or such other time as may be specified from time to time by BC Gas) such information as may be requested by BC Gas, which will include, but is not limited to, the Shipper's Requested Quantity for the Day commencing in approximately 24 hours. It is intended that, except in circumstances beyond the Shipper's forecasting ability, the Shipper's Requested Quantity for each Day will approximately equal the quantity of Gas the Shipper will actually consume on such Day. If the Shipper does not notify BC Gas in accordance with the foregoing, the Shipper's Requested Quantity for the Day commencing in approximately 24 hours will be deemed to be the Shipper's Requested Quantity, or adjusted as set out in section 6.3 (Adjustment of Requested Quantity), for the Day just commencing.
- 6.3 **Adjustment of Requested Quantity** - BC Gas will adjust, in cooperation with the Shipper, the Shipper's Requested Quantity, described in section 6.2

- 6.3 **Adjustment of Requested Quantity** - BC Gas will may adjust, in cooperation with the Shipper, the Shipper's Requested Quantity, described in section 6.2 (Requested Quantity), when in the reasonable opinion of BC Gas any such modification is required: in order to minimize the Month end balancing quantity; or during any period of interruption or curtailment provided for in this Rate Schedule or the Transportation Agreement; or on any Day between November 1 and April 1 in any Contract Year when BC Gas wishes to increase the Requested Quantity to the level available to the Shipper on the Transporter's pipeline.
- 6.4 **Request to Transporter** - BC Gas will provide to the Transporter the Shipper's Requested Quantity, adjusted as set out in section 6.3 (Adjustment of Requested Quantity).
- 6.5 **Delivery to Interconnection Point** - The Shipper will cause to be delivered to the Interconnection Point on each Day a quantity of Gas at least equal to the Shipper's Requested Quantity, adjusted as set out in section 6.3 (Adjustment of Requested Quantity). On any Day BC Gas will be entitled to utilize the balance of the Shipper's overdeliveries Gas delivered at the Interconnection Point if not required by the Shipper.
- 6.6 **Failure to Deliver to Interconnection Point** - If on any day the Authorized Quantity from the Transporter is less than the quantity provided pursuant to section 6.4 (Request to Transporter), in addition to curtailments permitted under section 3 (Transportation), BC Gas may, in its discretion, interrupt or curtail service hereunder to such Authorized Quantity. Alternatively, BC Gas or may deliver additional Gas to the Shipper at the Interconnection Point and charge the Shipper the charge for Backstopping Gas for such additional gas consumed on that day the authorized overrun charge as set out in the Table of Charges. If BC Gas is unable to ascertain which Shipper's supply has caused a deficiency, BC Gas may in its discretion interrupt or curtail service to the Shippers on a basis deemed equitable by BC Gas. BC Gas will reallocate the deficiency if it obtains information that allows it to determine responsibility.

## 7. **Gas Balancing**

- 7.1 **Monthly Adjustments** - BC Gas will make monthly adjustments at the end of each Month for the differences between the sum of the Authorized Quantities for the applicable Month and the Shipper's actual consumption as measured daily by BC Gas applicable Monthly Transportation Quantity as follows
- (a) for overdeliveries (the sum of the Authorized Quantities is greater than the Monthly Shipper's actual daily consumption Transportation Quantity) - BC Gas will maintain an inventory account for the Shipper and will increase the balance in the inventory account by the amount of the excess.

~~BC Gas and the Shipper will cooperate to limit the quantity of Gas maintained in the Shipper's inventory account, BC Gas reserves the right to limit Gas quantities maintained in the Shipper's inventory account and may from time to time in cooperation with the Shipper return excess inventory at no charge to the Shipper; this will not relieve the Shipper or the Shipper Agent, where applicable, from its obligation to provide accurate nominations pursuant to section 6.2 (Requested Quantity).~~ and

- (b) ~~Except in the case of Backstopping Gas and Unauthorized Overrun Gas, for underdeliveries (the sum of the Authorized Quantities is less than the Shipper's actual Monthly consumption as measured by BC Gas Monthly Transportation Quantity), and subject to availability of Gas, BC Gas will sell to the Shipper the deficiency quantities at the authorized Balancing Gas charge overrun charge set out in the Table of Charges.~~

- 7.2 **Imbalance Following Termination** - If BC Gas has received a quantity of Gas in excess of the quantity delivered to the Shipper during the term of a Transportation Agreement, then the Shipper may request the excess quantity be returned within 90 Days following termination of the Transportation Agreement.

## 8. **Group Nomination and Balancing**

- 8.1 **Group Nomination and Balancing** - ~~If a Shipper appoints a Shipper Agent and becomes a member of the Shipper Agent Group and if a Customer Shipper Agent has executed a Customers' Shipper Agent Agreement, and if the members of the Customer Shipper Agent's Group are in the same division/service area of BC Gas and receive service under this a transportation Rate Schedule, the members of the Customer Shipper Agent's Group may, in the discretion of BC Gas, will nominate and balance on behalf of a Group on an aggregate basis pursuant to sections 6 (Nomination) and 7 (Gas Balancing), as modified by this section, and the Customer Shipper Agent will be the agent for each of the members of a Group for the purposes of any and all matters set out in sections 6 (Nomination) and 7 (Gas Balancing). Notwithstanding the foregoing, where a Shipper under a Rate Schedule 22 Transportation Agreement is a member of the Group, section 9 (Group Nominations and Balancing) of Rate Schedule 22 will apply to the Group on an aggregate basis.~~

- 8.2 ~~**Monthly Transportation Quantity** - The Monthly Transportation Quantity for a Group is the sum of the Monthly Transportation Quantity for each member of the Group.~~

- 8.2 ~~**Estimates by Customer Requested Quantity from Shipper Agent** - The Customer Shipper Agent will notify BC Gas of the Shipper's Requested Quantity,~~

described in section 6.2 (Requested Quantity) on behalf of all members of the Group on an aggregate basis.

**8.3** ~~Charges to be Paid by Customer Shipper Agent~~ - The charges for ~~Authorized-Overrun Gas Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas~~, set out in the Table of Charges, will be determined based on the quantities transported on behalf of all the members of the Group on an aggregate basis as a whole and will be paid to BC Gas by the ~~Customer Shipper Agent~~ as specified in the ~~Customer Shipper Agent Agreement~~. Notwithstanding the foregoing, each Shipper is jointly and severally liable as principal obligant with the ~~Customer Shipper Agent~~ for all charges for ~~Authorized-Overrun Gas Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas~~, set out in the Table of Charges, ~~applicable to such Shipper.~~

**8.4** **Security** - BC Gas may require the ~~Customer Shipper Agent~~ to provide security, as set out in section 2.2 (Security), with necessary changes, for the performance of the ~~Customer Shipper Agent's~~ obligations under the ~~Customer Shipper Agent Agreement~~.

**8.5** **Determination of DTQ** - If a Shipper appoints a Shipper Agent to act on its behalf, the Shipper authorizes the Shipper Agent to determine the Firm DTQ set out in the Transportation Agreement, for each Contract Year. This authorization will remain in effect for the term of the Agreement or so long as the Shipper Agent acts as agent for the Shipper, whichever period is shorter.

## **9. Term of Transportation Agreement**

**9.1** **Term** - The initial term of the Transportation Agreement will begin on the Commencement Date and will expire at 8:00 a.m. Local Time on the November 1st next following, provided that if the foregoing results in an initial term being of less than one year, then the initial term will instead expire at the end of one further Contract Year.

(a) ~~if the Shipper is the End User, will expire at 8:00 a.m. Standard Time on the November 1st next following, provided that if the foregoing would result in the initial term being for a period of less than one year, then the initial term will instead expire at the end of one further Contract Year, and~~

(b) ~~if the Shipper is not the End User, the term of the Transportation Agreement will be as described in section 2.1(d)(iii).~~

**9.2** **Automatic Renewal Where the Shipper is End User** - ~~If the Shipper is the End User, and~~ Except as specified in the Transportation Agreement, the term of the

Transportation Agreement will continue ~~on a from~~ year to year basis after the expiry of the initial term ~~until unless~~ cancelled by either BC Gas or the Shipper, and subject to Section 2.3, upon not less than 10 days notice prior to the end of the Contract Year then in effect. ~~If BC Gas or the Shipper fails to request an amended DTQ within 10 days prior to the end of the Contract Year then in effect, the previous DTQ will remain in effect.~~

- 9.3 **Early Termination** - The term of the Transportation Agreement is subject to early termination in accordance with section 15 (Default or Bankruptcy).
- 9.4 **Survival of Covenants** - Upon the termination of the Transportation Agreement, whether pursuant to section 15 (Default or Bankruptcy) or otherwise,
- (a) all claims, causes of action or other outstanding obligations remaining or being unfulfilled as at the date of termination, and,
  - (b) all of the provisions in this Rate Schedule and in the Transportation Agreement relating to the obligation of any of the parties to account to or indemnify the other and to pay to the other any monies owing as at the date of termination in connection with the Transportation Agreement,

will survive such termination.

## 10. **Statements and Payments**

- 10.1 **Statements to be Provided** - BC Gas will, on or ~~before about~~ the 15th day of each month, deliver to the Shipper, a statement for the preceding month showing the Gas ~~quantities~~ delivered to the Shipper and the amount due. BC Gas will, on or ~~before about~~ the 45th day after the end of a Contract Year, deliver to the Shipper a separate statement for the preceding Contract Year showing the amount required from the Shipper in respect of any indemnity due under ~~a Transportation Agreement this Rate Schedule or a Transportation Agreement~~. Any errors in any statement will be promptly reported to the other party as provided hereunder, and statements will be final and binding unless questioned within one year after the date of the statement.
- 10.2 **Payment and ~~Late Payment~~ Interest Charge** - Payment for the full amount of the statement, including federal, provincial and municipal taxes or fees applicable thereon, will be made to BC Gas at its Vancouver, British Columbia office, or such other place in Canada as it will designate, on or before the 1st business day after the 21st calendar day following the billing date. If the Shipper fails or neglects to make any payment required under this Rate Schedule, or any portion thereof, to BC Gas when due, BC Gas may include in the next bill to the

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~~Customer-Shipper a late payment interest on the outstanding amount at the rate of charge of 1 1/2% per month (19.56% per annum).~~

- 10.3 **Examination of Records** - Each of BC Gas and the Shipper will have the right to examine at reasonable times the books, records and charts of the other to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Rate Schedule or the Transportation Agreement.

## 11. **Quality**

- 11.1 **Minimum Standards** - All Gas delivered to the Interconnection Point by or on behalf of the Shipper and all Gas delivered to the Delivery Point will conform to the quality specifications set out in the Transporter's Service Terms.

## 12. **Measuring Equipment**

- 12.1 **Facilities and Equipment** - BC Gas will install, maintain and operate at the Delivery Point such metering and communications facilities and equipment as BC Gas determines are necessary or desirable for measuring the quantity of Gas delivered pursuant to this Rate Schedule to the Shipper and the Shipper will permit BC Gas, without cost to BC Gas, to use the Shipper's communications lines and power for the purpose of installing, maintaining and operating the measuring equipment of BC Gas.
- 12.2 **Measuring Site** - If BC Gas reasonably determines that it is necessary to install the facilities and equipment referred to in section 12.1 (Facilities and Equipment) on the Shipper's property, the Shipper will, without charge, provide a suitable site along with utilities and enclosures for the installation of the facilities and equipment of BC Gas. BC Gas will at all times have clear access to the site and to all of its facilities and equipment. All facilities and equipment installed by BC Gas on the Shipper's property will remain the property of BC Gas and may be removed by BC Gas upon termination of the Transportation Agreement.
- 12.3 **Calibration and Test of Measuring Equipment** - The accuracy of the measuring equipment of BC Gas will be verified by standard tests and methods at regular intervals and at other times at the initiative of BC Gas or upon the reasonable request of the Shipper. Notice of the time and nature of each test conducted in response to communications with or at the request of the Shipper will be given by BC Gas to the Shipper sufficiently in advance to permit a representative of the Shipper to be present. If during a test the measuring equipment is found to be registering inaccurately, it will be adjusted at once to read as accurately as possible. The results of each test and adjustment, if any, made by BC Gas,

whether or not the Shipper is present for such test, will be accepted until the next test. All tests of such measuring equipment of BC Gas will be made at the expense of BC Gas, except that the Shipper will bear the expense of tests made at its request if the measuring equipment is found to be inaccurate by an amount equal to 2% or less.

- 12.4 **Inaccuracy Exceeding 2%** - If upon any test the measuring equipment is found to be inaccurate by an amount exceeding 2%, any previous readings of such equipment will be corrected to zero error for any period during which it is definitely known or is agreed upon that the error existed. If the period is not definitely known or is not agreed upon, such correction will be for a period covering the last half of the time elapsed since the date of the last test. Provided that under no circumstances will an adjustment be made for a period of more than the preceding 12 months.
- 12.5 **Correction of Measuring Errors** - If the measuring equipment is out of service or out of repair so that the quantity of Gas delivered cannot be correctly determined by the reading thereof, the Gas delivered during the period such measuring equipment is out of service or out of repair will be estimated on the basis of the best available data, using the first of the following methods which is feasible
- (a) by correcting the error if the percentage of error is ascertained by calibration test or mathematical calculation,
  - (b) by using the registration of any check measuring equipment if installed and accurately registering, and
  - (c) by estimating the quantity of Gas delivered to the Shipper during the preceding periods under similar conditions when the meter was registering accurately.
- 12.6 **Shipper's Equipment** - The Shipper may at its own expense install, maintain and operate its own measuring equipment for the purposes of monitoring or checking the measuring equipment of BC Gas, provided that the Shipper will install such equipment so as not to interfere with the operation of the measuring equipment of BC Gas.
- 12.7 **Right to be Present** - BC Gas and the Shipper will have the right to inspect all equipment installed or furnished by the other and the charts and other measurement or test data of the other at all times during business hours, and to be present at the time of any installing, testing, cleaning, changing, repairing, calibrating or adjusting done in connection with the measuring equipment of the other party, but all such activities will be performed by the party furnishing the measuring equipment.



### **13. Measurement**

- 13.1 **Unit of Volume** - The unit of volume of Gas for all purposes hereunder will be 1 cubic metre at a temperature of 15° Celsius and an absolute pressure of 101.325 kilopascals.
- 13.2 **Determination of Volume** - Gas delivered hereunder will be metered using metering apparatus approved by the Standards Division, ~~Department of Consumer & Corporate Affairs of Canada~~ ~~Industry Canada, Office of Consumer Affairs~~ and the determination of standard volumes delivered hereunder will be in accordance with terms and conditions pursuant to the *Electricity and Gas Inspection Act* of Canada.
- 13.3 **Conversion to Energy Units** - In accordance with the *Electricity and Gas Inspection Act* of Canada, volumes of Gas delivered each Day will be converted to energy units by multiplying the standard volume by the Heat Content of each unit of Gas. Volumes will be specified in 10<sup>3</sup>m<sup>3</sup> rounded to two decimal places and energy will be specified in gigajoules rounded to one decimal place.

### **14. Representations, Warranties and Covenants**

- 14.1 **Title** - The Shipper ~~covenants represents and warrants~~ with BC Gas that the Shipper will have good title to all Gas to be delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, free and clear of all liens, encumbrances and claims.
- 14.2 **Title Not That of BC Gas** - BC Gas agrees that title to all gas transported pursuant to the Transportation Agreement remains with the Shipper.
- 14.3 **Acknowledgement** - The Shipper acknowledges that the Gas transported under the Transportation Agreement will be odorized and commingled with gas within the Transporter's pipeline system and the BC Gas System and the Shipper agrees to accept a proportionate share of any Gas lost by pipeline failure, fire or other similar cause that may affect the Shipper's Gas.

### **15. Default or Bankruptcy**

- 15.1 **Default** - If the Shipper at any time fails or neglects
- (a) to make any payment due to BC Gas or to any other person under this Rate Schedule or the Transportation Agreement within 30 days after payment is due, or

- (b) to ~~eure-correct~~ any default of any of the other terms, covenants, agreements, conditions or obligations imposed upon it under this Rate Schedule or the Transportation Agreement, within 30 days after BC Gas gives to the Shipper notice of such default or, in the case of a default that cannot with due diligence be ~~eured-corrected~~ within a period of 30 days, the Shipper fails to proceed promptly after the giving of such notice with due diligence to ~~eure-correct~~ the same and thereafter to prosecute the ~~euring-correcting~~ of such default with all due diligence,

then BC Gas may in addition to any other remedy that it has, including the rights of BC Gas set out in section 3.4 (Default Regarding Curtailment) and 5 (~~Unauthorized Gas Use~~), at its option and without liability therefor

- (a) suspend further transportation service to the Shipper and may refuse to deliver Gas to the Shipper until the default has been fully remedied, and no such suspension or refusal will relieve the Shipper from any obligation under this Rate Schedule or the Transportation Agreement, or
- (b) terminate the Transportation Agreement, and no such termination of the Transportation Agreement pursuant hereto will exclude the right of BC Gas to collect any amount due to it from the Shipper for what would otherwise have been the remainder of the term of the Transportation Agreement.

15.2 **Bankruptcy or Insolvency** - If the Shipper becomes bankrupt or insolvent or commits or suffers an act of bankruptcy or insolvency or a receiver is appointed pursuant to a statute or under a debt instrument or the Shipper seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas will have the right, at its sole discretion, to terminate the Transportation Agreement by giving notice in writing to the Shipper and thereupon BC Gas may cease further delivery of Gas to the Shipper and the amount then outstanding for Gas provided under the Transportation Agreement will immediately be due and payable by the Shipper.

## 16. **Notice**

16.1 **Notice** - Any notice, request, statement or bill that is required to be given or that may be given under this Rate Schedule or under the Transportation Agreement will, unless otherwise specified, be in writing and will be considered as fully delivered when mailed, personally delivered or sent by ~~telecopier-fax~~ to the other in accordance with the following:

if to BC Gas

BC GAS UTILITY LTD.

MAILING ADDRESS: 1111 West Georgia Street  
Vancouver, B.C.  
V6E 4M4

NOMINATIONS AND FORCE MAJEURE: Attention: Transportation Coordinators  
Telephone: (604) 443-6950  
~~Telecopier-Fax:~~ (604) 443-6952

BILLING AND PAYMENT: Attention: Manager, Customer Administration  
Telephone: (604) 443-6507/6509  
~~Telecopier-Fax:~~ (604) 443-6588

CUSTOMER RELATIONS Attention: Manager, Transportation & Industrial Services  
Telephone: (604) 443-6491  
~~Telecopier-Fax:~~ (604) 443-6770

LEGAL AND OTHER: Attention: V.P. Legal & Regulatory Affairs & Secretary  
Telephone: (604) 443-6607  
~~Telecopier-Fax:~~ (604) 443-6789/6904

if to the Shipper, then as set out in the Transportation Agreement.

- 16.2 **Specific Notices** - Notwithstanding section 16.1 (Notice), notices with respect to Force Majeure will be sufficient if given by BC Gas in writing by facsimile, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by the Shipper as authorized to receive such notices.

## **17. Limitation on Liability and Indemnity**

- 17.1 **Limitation on Liability** - Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment of permitted under the General Terms and Conditions of BC Gas or this Rate Schedule.
- 17.2 **Indemnity** - The Shipper will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs,

**17.2 Indemnity** - The Shipper will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following

- (a) any defect in title to any Gas delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, or arising from any charges that are applicable to the Gas delivered to BC Gas,
- (b) Franchise Fees not otherwise collected by BC Gas under the Table of Charges,
- (c) nominations made in accordance with section 6 or 8 of this Rate Schedule by BC Gas to the Transporter with respect to the Shipper's transportation volumes, whether or not the Shipper is a member of a Group,
- (d) Gas delivered by the Shipper to BC Gas failing to meet the quality specifications set out in section 11.1 of this Rate Schedule,
- (e) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Shipper or on the delivery of Gas to the Shipper by BC Gas, or on any other service provided by BC Gas to the Shipper, and
- (f) all charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas, set out in the Table of Charges, whether or not the Shipper is a member of a Group.

**17.3 Principal Obligor** - If the Shipper is a member of a Group, the Shipper's obligations to pay the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges, are that of principal obligor and not of surety and are independent of the obligations of the Shipper. Customer Agent pursuant to the Shipper Agent Agreement and a separate action or actions may be brought against the Shipper, whether or not an action is brought against the Shipper Agent and whether or not the Shipper Agent can be or is joined in any such action or actions.

**17.4 Waiver of Defences** - For greater certainty, if the Shipper is a member of a Group, BC Gas will not be bound to exhaust its recourse against the Shipper Agent before being entitled to payment from the Shipper for the charges for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges; the Shipper waives all diligence, demands, notices, protests, of the Shipper's obligations for the charges for Backstopping Gas, Balancing Gas and

and all renewals and extensions of the time for payment; and this agreement will not be affected by the dissolution, arrangement, reorganization, assignment for the benefit of creditors, proposal or notice of intention to make a proposal to creditors or bankruptcy of the Shipper Agent (whether voluntary or compulsory), or by any amalgamation of the Shipper Agent.

## **18. Force Majeure**

**18.1 Force Majeure** - Subject to the other provisions of this section 18, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in this Rate Schedule under which service is rendered or in the Transportation Agreement, the obligations of both BC Gas and the Shipper will be suspended to the extent necessary for the period of the Force Majeure condition.

**18.2 Curtailment Notice** - If BC Gas claims suspension pursuant to this section 18, BC Gas will be deemed to have issued to the Shipper a notice of curtailment.

**18.3 Exceptions** - Neither party will be entitled to the benefit of the provisions of section 18.1 under any of the following circumstances

- (a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,
- (b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or
- (c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under the Rate Schedule or the Transportation Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.

**18.4 Notice to Resume** - The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.

- 18.5 Settlement of Labour Disputes** - Notwithstanding any of the provisions of this section 18, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 18.1.
- 18.6 No Exemption for Payments** - Notwithstanding any of the provisions of this section 18, Force Majeure will not relieve or release either party from its obligations to make payments to the other.
- 18.7 Periodic Repair by BC Gas** - BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Shipper as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.
- 18.8 Shipper's Gas** - If BC Gas curtails or interrupts transportation of Gas by reason of Force Majeure the Shipper will make its supply of Gas available to BC Gas, to the extent required by BC Gas, to maintain service priority to those customers or classes of customers which BC Gas determines should be served.
- 18.9 Alteration of Facilities** - The Shipper will pay to BC Gas all reasonable costs associated with the alteration of facilities made at the discretion of BC Gas to measure quantities reduced by reason of Force Majeure claimed by the Shipper and to restore such facilities after the Force Majeure condition ends.

## **19. Arbitration**

- 19.1 Arbitration** - Any dispute between the parties arising from this Rate Schedule or the Service Agreement will be resolved by a single arbitrator pursuant to the *Commercial Arbitration Act* of British Columbia or successor legislation, save as expressly provided herein.
- 19.2 Demand for Arbitration** - Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.
- 19.3 Arbitrator** - The parties will have 10 days from receipt of the demand referred to in section 19.2 of this Rate Schedule to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the

arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Shipper or BC Gas.

**19.4 Commencement and Decision** - The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.

**19.5 Decision** - The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.

## **20. Interpretation**

**20.1 Definitions in General Terms and Conditions of BC Gas** - Except where the context requires otherwise or except as otherwise expressly provided in the Definitions which form part of this Rate Schedule, all words and phrases defined in the General Terms and Conditions of BC Gas and used in this Rate Schedule or in a Transportation Agreement have the meanings set out in the General Terms and Conditions of BC Gas.

**20.2 Change in Definition of "Day"** - BC Gas may amend the definition of "Day" from time to time to suitably align its operations with those of its Transporters. If BC Gas amends the meaning definition of "Day", a pro-rata adjustment of quantities of Gas and charges to account for any Day of more or less than 24 hours will be made and the term of the Transportation Agreement will be similarly adjusted.

~~**20.3 Further Definitions** - Additionally, except where the context requires otherwise, each of the words and phrases described in the Definitions have the meanings ascribed thereto in the Definitions.~~

**20.3 Interpretation** - Except where the context requires otherwise or except as otherwise expressly provided, in this Rate Schedule or in a Transportation Agreement

- (a) all references to a designated section are to the designated section of this Rate Schedule unless otherwise specifically stated,



- (b) the singular of any term includes the plural, and vice versa, and the use of any term is equally applicable to any gender and, where applicable, body corporate,
- (c) any reference to a corporate entity includes and is also a reference to any corporate entity that is a successor to such entity,
- (d) all words, phrases and expressions used in this Rate Schedule or in a Transportation Agreement that have a common usage in the gas industry and that are not defined in the General Terms and Conditions of BC Gas, the Definitions or in the Transportation Agreement have the meanings commonly ascribed thereto in the gas industry, and
- (e) the headings of the sections set out in this Rate Schedule or in the Transportation Agreement are for convenience of reference only and will not be considered in any interpretation of this Rate Schedule or the Transportation Agreement.

## **21 Miscellaneous**

- 21.1 Waiver** - No waiver by either BC Gas or the Shipper of any default by the other in the performance of any of the provisions of this Rate Schedule or the Transportation Agreement will operate or be construed as a waiver of any other or future default or defaults, whether of a like or different character.
- 21.2 Enurement** - The Transportation Agreement will enure to the benefit of and be binding upon the parties and their respective successors and permitted assigns, including without limitation successors by merger, amalgamation or consolidation.
- 21.3 Assignment** - The Shipper will not assign the Transportation Agreement or any of its rights or obligations thereunder without the prior written consent of BC Gas which consent will not be unreasonably withheld or delayed. No assignment will release the Shipper from its obligations under this Rate Schedule or under the Transportation Agreement that existed prior to the date on which the assignment takes effect. This provision applies to every proposed assignment by the Shipper.
- 21.4 Amendments to be in Writing** - Except as set out in this Rate Schedule, no amendment or variation of the Transportation Agreement will be effective or binding upon the parties unless such amendment or variation is set out in writing and duly executed by the parties.
- 21.5 Proper Law** - The Transportation Agreement will be construed and interpreted in accordance with the laws of the Province of British Columbia and the laws of Canada applicable therein.



- 21.7 Subject to Legislation** - Notwithstanding any other provision hereof, this Rate Schedule and the Transportation Agreement and the rights and obligations of BC Gas and the Shipper under this Rate Schedule and the Transportation Agreement are subject to all present and future laws, rules, regulations and orders of any legislative body, governmental agency or duly constituted authority now or hereafter having jurisdiction over BC Gas or the Shipper.
- 21.8 Further Assurances** - Each of BC Gas and the Shipper will, on demand by the other, execute and deliver or cause to be executed and delivered all such further documents and instruments and do all such further acts and things as the other may reasonably require to evidence, carry out and give full effect to the terms, conditions, intent and meaning of this Rate Schedule and the Transportation Agreement and to assure the completion of the transactions contemplated hereby.
- 21.9 Form of Payments** - All payments required to be made under statements and invoices rendered pursuant to this Rate Schedule or the Transportation Agreement will be made by ~~telegraphic wire~~ transfer to, or cheque or bank cashier's cheque drawn on, a Canadian chartered bank or trust company, payable in lawful money of Canada at par in immediately available funds in Vancouver, British Columbia.

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DEFINITIONS

- (a) ~~A.N.G. means Alberta Natural Gas Company, a Canadian corporation.~~
- (b) ~~Authorized Overrun Gas means any Gas taken by the Shipper during a Month which is in excess of the applicable Monthly Transportation Quantity less any Unauthorized Overrun Gas taken during such Month.~~
- (a) **Authorized Quantity** - means the quantity of energy (in gigajoules) for each Day approved by the Transporter for transportation service on the Transporter's pipeline system, based on the quantity requested by the Shipper, adjusted as set out in section 6.3 (Adjustment to Requested Quantity).
- (b) **Backstopping Gas** - means Gas sold by BC Gas to the Shipper as an interruptible backup supply if on any Day the Authorized Quantity from the Transporter is less than the Shipper's Requested Quantity.
- (c) **Balancing Gas** - means any Gas taken by the Shipper during a Month which is in excess of the Authorized Quantity, subject to section 7.1 (Monthly Adjustments).
- (d) **BC Gas** - means BC Gas Inc., a body corporate incorporated pursuant to the laws of the Province of British Columbia under number 368681.
- (e) **BC Gas System** - means the Gas transmission and distribution system owned and operated by BC Gas, as such system is expanded, reduced or modified from time to time.
- (f) **British Columbia Utilities Commission** - means the British Columbia Utilities Commission constituted under the *Utilities Commission Act* of British Columbia and includes and is also a reference to
- (i) any commission that is a successor to such commission, and
  - (ii) any commission that is constituted pursuant to any statute that may be passed which supplements or supersedes the *Utilities Commission Act* of British Columbia.
- (g) **Commencement Date** - means the day specified as the Commencement Date in the Transportation Agreement.
- (h) **Contract Year** - means a period of 12 consecutive Months commencing at the beginning of the 1st Day of November and ending at the beginning of the next succeeding 1st Day of November.

- (i) **Day** - means, subject to section 17.220.2 (Change in Definition of "Day"), any period of twenty-four consecutive hours beginning and ending at 8:00 a.m. Standard Local Time.
- ~~(j) **Definitions** means the definitions appended to this Rate Schedule.~~
- (i) **Delivery Point** - means the point specified in a Transportation Agreement where BC Gas delivers Gas to a Shipper.
- (k) **DTQ or Daily Transportation Quantity** - means the maximum quantity of Gas that BC Gas is obligated to transport for and deliver to a Shipper at the Delivery Point on any particular Day, which in the discretion of BC Gas reasonably reflects the Shipper's requirements and which is specified in a Transportation Agreement.
- ~~(m) **End User** means a person specified in a Transportation Agreement who is a consumer of Gas within the service area of BC Gas.~~
- (l) **Force Majeure** - means any acts of God, strikes, lockouts, or other industrial disturbances, civil disturbances, arrests and restraints of rulers or people, interruptions by government or court orders, present or future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, blackouts, insurrections, failure or inability to secure materials or labour by reason of priority, regulations or orders of government, serious epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, breakage or accident to machinery or lines of pipes, or freezing of wells or pipelines, or the failure of gas supply, temporary or otherwise, from a Supplier of gas, which act of Force Majeure was not due to negligence of the party claiming Force Majeure. Further, Force Majeure will also include a declaration of force majeure by a Transporter that results in gas being unavailable for delivery at the Interconnection Point.
- (m) **Franchise Fees** - means the aggregate of all monies payable by BC Gas to a municipality
- (i) for the use of the municipality's streets and other property to construct and operate the utility business of BC Gas,
  - (ii) relating to the revenues received by BC Gas for services provided and Gas consumed within the municipality, and
  - (iii) relating, if applicable, to the value of Gas transported by BC Gas through the municipality.
- (n) **Gas** - means the residue remaining after raw gas has been subjected to any or all of the following permissible processes

- (i) the removal of any of its constituent parts other than methane, and the removal of methane to such extent as is necessary in removing other constituents,
- (ii) the compression, regulation, cooling, cleaning or any other chemical or physical process other than the addition of diluents, such as air or nitrogen, to such extent as may be required in its production, gathering, transmission, transportation, storage, removal from storage and delivery, and
- (iii) the addition of odorant by BC Gas,

but for greater certainty Gas does not include propane.

- (o) **General Terms and Conditions of BC Gas** - means the general terms and conditions of BC Gas from time to time approved by the British Columbia Utilities Commission.
- (p) **Group** - means a group of Shippers ~~or End Users~~ who each transport Gas under this Rate Schedule, using a ~~common gas supply pool and common nomination and balancing~~ procedure ~~s with the Transporter, BC Gas and, in the case of Shippers,~~ who have each entered into a Transportation Agreement ~~or, in the case of End Users, for whom one Shipper has entered into Transportation Agreements.~~
- (q) **Heat Content** - means the gross heating value of the Gas, determined on the basis of a temperature of 15° Celsius with the Gas free of all water vapour and at an absolute pressure of 101.325 kilopascals, with the products of combustion cooled to the initial temperature of the Gas and the water formed by the combustion condensed to the liquid state. The Heat Content will be expressed in megajoules per cubic metre of Gas (MJ/M<sup>3</sup>) rounded to two decimal places.
- (r) **Hour** - means any consecutive 60 minute period.
- (s) **Interruption Period** - means the period or periods during which the Shipper is required pursuant to section 4 of the Transportation Agreement or sections 3.2 (Curtailement) or 3.3 (Notice of Curtailement) to interrupt, cease, limit or curtail the receipt of Gas.
- (t) **Interconnection Point** - means a point ~~(specified as the "Delivery Point" in the Transportation Agreement relied upon by a Shipper for the movement of gas through the Transporter's pipeline system)~~ where the BC Gas System interconnects with the facilities of one of the Transporters of BC Gas, as specified in a Transportation Agreement.

- (u) **Local Time** - means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area or daylight savings time as the case may be.
- (v) **Month** - means, subject to any changes from time to time required by BC Gas in the starting time of its Gas Day, the period beginning at 8:00 a.m. Standard-Local Time on the first day of the calendar month and ending at 8:00 a.m. Standard-Local Time on the first day of the next succeeding calendar month.
- ~~(aa) **MTQ or Monthly Transportation Quantity** - subject to section 8.2 (Monthly Transportation Quantity), means the lesser of the following quantities of Gas~~
- ~~(i) — the quantity of Gas BC Gas has received from a Shipper during a Month plus any imbalance carried forward from the previous Month, and~~
- ~~(ii) — the quantity of Gas obtained by multiplying the DTQ by the number of days in the Month, adjusted to reflect any quantity of gas the Shipper fails to deliver to the Interconnection Point when provided by BC Gas to the Transporter pursuant to section 6.4 (Request to Transporter) and any gas interrupted or curtailed below the DTQ, such adjustments, if overlapping, to only count once.~~
- (w) **Rate Schedule 27 or this Rate Schedule** - means this Rate Schedule, including all rates, terms and conditions, the Definitions and the Table of Charges, as amended from time to time by BC Gas with the consent of the British Columbia Utilities Commission.
- (x) **Requested Quantity** - means the quantity of energy for each Day requested by the Shipper or Shipper Agent for interruptible transportation under this Rate Schedule 27.
- (y) **Shipper** - means a person who enters into a Transportation Agreement with BC Gas who is also the consumer of the Gas transported. ~~If the Shipper is not an End User, then the word "Shipper" in the context of each of Delivery Point, property, deliveries of Gas, using of Gas, consuming of Gas, taking of Gas, curtailing of Gas, interrupting of Gas, limiting the taking of Gas, receiving of Gas, purchasing of Gas, accepting of Gas, supplying of Gas and requesting quantities of Gas, will also mean "End User".~~
- (z) **Shipper Agent** - means a person who enters into a Shipper Agent Agreement with BC Gas
- (aa) **Shippers Agent Agreement** - means an agreement between BC Gas and a Shipper Agent pursuant to which the Shipper Agent agrees to pay to BC Gas the charges

for Backstopping Gas, Balancing Gas and Unauthorized Overrun Gas set out in the Table of Charges, applicable to the Group.

- (af) ~~Standard Time~~ means Pacific Standard Time for the Inland and Lower Mainland service areas and Mountain Standard Time for the Columbia service area.
- (ab) **Supplier** - means a party who sells gas to a Shipper or BC Gas or has access to its own supplies of gas.
- (ac) **Table of Charges** - means the table of prices, fees and charges, as amended from time to time by BC Gas with the consent of by the British Columbia Utilities Commission, appended to this Rate Schedule.
- (ad) **Transportation Agreement** - means an agreement between BC Gas and a Shipper to provide service pursuant to this Rate Schedule.
- (ae) **Transporter** - means, in the case of the Columbia service area, A.N.G. Alberta Natural Gas Company, and Nova Corporation of Alberta, and in the case of the Inland and Lower Mainland service areas, Westcoast Energy Inc., and any other gas pipeline transportation company connected to the facilities of BC Gas from which BC Gas receives Gas for the purposes of Gas transportation or resale.
- (af) **Transporter's Service Terms** - means the general terms and conditions of the applicable Transporter, as filed with and approved from time to time by the National Energy Board or other applicable governmental authority.
- (ag) **Unauthorized Overrun Gas** - means any Gas taken on any Day by a Shipper in excess of the curtailed quantity specified in any notice from BC Gas, to interrupt or curtail the Shipper's take, and for greater certainty, Unauthorized Overrun Gas includes all Gas taken by a Shipper to the extent that the obligation of BC Gas to deliver such Gas is suspended by reason of Force Majeure.
- (ah) **Unauthorized Transportation Service** - means any transportation service utilized by a Shipper in excess of the curtailed quantity specified in any notice or order from BC Gas, to interrupt or curtail the Shipper's transportation service.
- (ai) ~~Westcoast~~ means Westcoast Energy Inc., a Canadian corporation.
- (aj) **"10<sup>3</sup>m<sup>3</sup>"** means 1,000 cubic metres.

**LARGE VOLUME**  
**TRANSPORTATION AGREEMENT FOR RATE SCHEDULES 22, 22A, 22B, 25 AND 27**

This Agreement is dated the \_\_\_\_ day of \_\_\_\_\_, 19 \_\_, between BC Gas Utility Ltd. ("BC Gas") and \_\_\_\_\_ (the "Shipper").

**WHEREAS:**

- A. BC Gas owns and operates the BC Gas System; and
- B. The Shipper has requested that BC Gas arrange for the transportation of Gas on a firm and/or interruptible basis through the BC Gas System to \_\_\_\_\_ located in or near \_\_\_\_\_ in the Province of British Columbia in accordance with a transportation Rate Schedule as set out below and the terms set out herein ~~22 and subject to the amending conditions of Rate Schedule 22A or 22B if Shipper is an End User under either of these Rate Schedules.~~

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the terms, conditions and limitations contained herein, the parties agree as follows:

**1. Specific Information**

Applicable Rate Schedule:

~~Rate Schedule~~

☐ 22   ☐ 22A   ☐ 22B   ☐ 25   ☐ 27

Firm DTQ:

\_\_\_\_\_ gigajoules per day

Interruptible DTQ:

\_\_\_\_\_ gigajoules per day ?

Shipper Agent and/or Group, if applicable

~~Nomination for Firm Curtailment Buyout:~~

\_\_\_\_\_ gigajoules per day

Commencement Date:

Expiry Date:

(only specify expiry date if term not automatically renewed as set out in section 9.2 of Rate Schedule 22 or if Shipper is not End User Automatic Renewal section of the applicable transportation Rate Schedule)

End User:-

(insert name of End User only if it differs from name of Shipper)

Delivery Point: \_\_\_\_\_

~~Gauge Pressure at the  
Delivery Point:~~ \_\_\_\_\_

Interconnection Point: \_\_\_\_\_

the point at ( \_\_\_\_\_ km-post \_\_\_\_\_ )  
where the Transporter's pipeline system in  
British Columbia interconnects with the BC  
Gas System

Address of Shipper for receiving notices:

\_\_\_\_\_  
(name of Shipper)

Attention: \_\_\_\_\_

\_\_\_\_\_  
(address of Shipper)

Telephone: \_\_\_\_\_

Telecopier Fax: \_\_\_\_\_

~~Gas price for sales to BC Gas under  
section 7.3 of Rate Schedule 22:~~

~~Consent by Shipper to supply Gas  
under section 7.3 of Rate Schedule  
22:~~

\_\_\_\_\_  
(signature of Shipper)

The information set out above is hereby approved by the parties and each reference in either this agreement or the applicable transportation Rate Schedule 22 to any such information is to the information set out above.

## 2. Rate Schedule 22/22A/22B/25/27

- 2.1 **Additional Terms** - All rates, terms and conditions set out in the applicable transportation Rate Schedule (22, 22A, or 22B, 25, or 27) and the General Terms and Conditions of BC Gas, as either of them may be amended by BC Gas and approved from time to time by the British Columbia Utilities Commission, are in addition to the rates, terms and conditions contained in this Transportation Agreement and form part of this Transportation Agreement and bind BC Gas and the Shipper as if set out herein in this Transportation Agreement.
- 2.2 **Payment of Amounts** - Without limiting the generality of the foregoing, the Shipper will pay to BC Gas all of the amounts set out in the applicable transportation Rate Schedule for the services provided under such Rate Schedule and this Transportation Agreement.



- 2.3 **Conflict** - Where anything in either the applicable transportation Rate Schedule or the General Terms and Conditions of BC Gas conflicts with any of the rates, terms and conditions set out in this Transportation Agreement, this Transportation Agreement governs. Where anything in the applicable transportation Rate Schedule conflicts with any of the rates, terms and conditions set out in the General Terms and Conditions of BC Gas, the Rate Schedule governs.
- 2.4 **Acknowledgement** - The Shipper acknowledges receiving and reading a copy of the applicable transportation Rate Schedule (22, 22A, 22B, 25 or 27) and the General Terms and Conditions of BC Gas and, without limiting the generality of the foregoing, where the transportation service is interruptible, the Shipper is able to accommodate such interruption or curtailment and releases BC Gas of any liability for the Shipper's inability to accommodate such interruption or curtailment of transportation service.

### **~~3. Limitation on Liability and Indemnity~~**

- 3.1 **~~Limitation on Liability~~** ~~Neither BC Gas, its employees, contractors or agents will be liable in damages for or on account of any interruption or curtailment permitted under the General Terms and Conditions of BC Gas, this Transportation Agreement or the applicable Rate Schedule.~~
- 3.2 **~~Indemnity~~** ~~The Shipper will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgements, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of each of the following~~
- ~~(a) any defect in title to any Gas delivered to BC Gas at the Interconnection Point on behalf of the Shipper from Suppliers other than BC Gas, or arising from any charges that are applicable to the Gas delivered to BC Gas,~~
  - ~~(b) Franchise Fees not otherwise collected by BC Gas under the Table of Charges,~~
  - ~~(c) nominations made in accordance with section 7 of Rate Schedule 22 by BC Gas to the Transporter with respect to the Shipper's transportation volumes,~~
  - ~~(d) Gas delivered by the Shipper to BC Gas failing to meet the quality specifications set out in section 11.1 of Rate Schedule 22,~~

- ~~(e) all federal, provincial, municipal taxes (or payments made in lieu thereof) and royalties, whether payable on the delivery of Gas to BC Gas by the Shipper or on the delivery of Gas to the Shipper by BC Gas, or on any other service provided by BC Gas to the Shipper, and~~
- ~~(f) failure by the Shipper to meet its commitment hereunder or under Rate Schedule 22 to deliver Gas during periods in which BC Gas is entitled to interrupt or curtail and in which the Shipper is to make its supply of Gas available to BC Gas.~~

#### **4. Force Majeure**

- ~~4.1 Force Majeure Subject to the other provisions of this section 4, if either party is unable or fails by reason of Force Majeure to perform in whole or in part any obligation or covenant set out in the Rate Schedule under which service is rendered or in this Transportation Agreement, the obligations of both BC Gas and the Shipper will be suspended to the extent necessary for the period of the Force Majeure condition.~~
- ~~4.2 Curtailment Notice If BC Gas claims suspension pursuant to this section 4, BC Gas will be deemed to have issued to the Shipper a notice of curtailment.~~
- ~~4.3 Exceptions Neither party will be entitled to the benefit of the provisions of section 4.1 of this agreement under any of the following circumstances~~
  - ~~(a) to the extent that the failure was caused by the negligence or contributory negligence of the party claiming suspension,~~
  - ~~(b) to the extent that the failure was caused by the party claiming suspension having failed to diligently attempt to remedy the condition and to resume the performance of the covenants or obligations with reasonable dispatch, or~~
  - ~~(c) unless as soon as possible after the happening of the occurrence relied on or as soon as possible after determining that the occurrence was in the nature of Force Majeure and would affect the claiming party's ability to observe or perform any of its covenants or obligations under this Transportation Agreement, the party claiming suspension will have given to the other party notice to the effect that the party is unable by reason of Force Majeure (the nature of which will be specified) to perform the particular covenants or obligations.~~
- ~~4.4 Notice to Resume The party claiming suspension will likewise give notice, as soon as possible after the Force Majeure condition has been remedied, to the~~

~~effect that it has been remedied and that the party has resumed, or is then in a position to resume, the performance of the covenants or obligations.~~

- ~~4.5 Settlement of Labour Disputes Notwithstanding any of the provisions of this section 4, the settlement of labour disputes or industrial disturbances will be entirely within the discretion of the particular party involved and the party may make settlement of it at the time and on terms and conditions as it may deem to be advisable and no delay in making settlement will deprive the party of the benefit of section 4.1 of this agreement.~~
- ~~4.6 No Exemption for Payments Notwithstanding any of the provisions of this section 4, Force Majeure will not relieve or release either party from its obligations to make payments to the other.~~
- ~~4.7 Periodic Repair by BC Gas BC Gas may temporarily shut off the delivery of Gas for the purpose of repairing or replacing a portion of the BC Gas System or its equipment and BC Gas will endeavour to give the Shipper as much notice as possible with respect to such interruption, not to be less than 8 hours' prior notice except when prevented by Force Majeure. BC Gas will use all diligence to restore service as quickly as possible.~~
- ~~4.8 Shipper's Gas If BC Gas curtails or interrupts transportation of Gas by reason of Force Majeure the Shipper will make its supply of Gas available to BC Gas, to the extent required by BC Gas, to maintain service priority to those customers or classes of customers which BC Gas determines should be served.~~
- ~~4.9 Alteration of Facilities The Shipper will pay to BC Gas all reasonable costs associated with the alteration of facilities made at the discretion of BC Gas to measure quantities reduced by reason of Force Majeure and to restore such facilities after the Force Majeure condition ends.~~

## ~~5. Arbitration~~

- ~~5.1 Arbitration Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the Commercial Arbitration Act of British Columbia or successor legislation, save as expressly provided herein.~~
- ~~5.2 Demand for Arbitration Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting out the nature of the dispute.~~
- ~~5.3 Arbitrator The parties will have 10 days from receipt of the demand referred to in section 5.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training~~

~~to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any customer or supplier of the Shipper or BC Gas.~~

~~5.4 Commencement and Decision The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.~~

~~5.5 Decision The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.~~

IN WITNESS WHEREOF the parties hereto have executed this Transportation Agreement.

BC GAS UTILITY LTD.

\_\_\_\_\_  
(here insert name of Shipper)

BY: \_\_\_\_\_  
(Signature)

BY: \_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

\_\_\_\_\_  
(Name - Please Print)

DATE: \_\_\_\_\_

DATE: \_\_\_\_\_

**WAIVER**

To: ~~BC Gas Utility Ltd.~~  
~~1111 West Georgia Street~~  
~~Vancouver, B.C.~~  
~~V6E 4M4~~

~~("BC Gas")~~

From: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

~~(the "End User")~~

~~In consideration of BC Gas waiving the requirement that the End User have an alternative fuel burning installation in order to obtain Gas service under Rate Schedule 22, the End User agrees and acknowledges that any interruption of its operations due to Gas discontinuance, interruption or curtailment results solely from the End User's election not to install and maintain standby facilities.~~

~~Concurrently with the signing of this waiver, the End User further acknowledges receiving and reading a copy of Rate Schedule 22.~~

\_\_\_\_\_  
~~(here insert name of End User)~~

BY: \_\_\_\_\_  
\_\_\_\_\_  
~~(Signature)~~

\_\_\_\_\_  
~~(Title)~~

\_\_\_\_\_  
~~(Name Please Print)~~

DATE: \_\_\_\_\_

**GENERAL INTERRUPTIBLE TRANSPORTATION  
CUSTOMER/SHIPPER AGENT AGREEMENT FOR TRANSPORTATION SERVICE**

This Agreement is dated the \_\_\_\_ day of \_\_\_\_\_, 19\_\_, between BC Gas Utility Ltd. ("BC Gas") and \_\_\_\_\_ (the "Customer-Shipper Agent").

**WHEREAS:**

- A. ~~The Customer-Shipper Agent wishes to nominate, balance and manage Gas inventory accounts on behalf of the all members of a Group for transportation service on the Transporter's pipeline system and on the BC Gas System; and~~
- B. ~~A Shipper or Shippers have entered into Transportation Agreements with BC Gas in respect of each of the members of the Group.~~

NOW THEREFORE THIS AGREEMENT WITNESSES THAT in consideration of the terms, conditions and limitations contained herein, the parties agree as follows:

## 1. Specific Information

**Members of Group:**

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

(if space is insufficient, continue list on an additional page)

**Beginning Commencement** Date of this agreement:

**Expiry Date of this agreement:**

(no expiry date need be specified)

Address of ~~Customer~~ Shipper Agent  
for receiving notices:

(name of Customer-Shipper Agent)

(address of Customer-Shipper Agent)

**Attention:**

Telephone: \_\_\_\_\_

~~Telecopier Fax~~

The information set out above is hereby approved by the parties and each reference in either this agreement or the applicable Transportation Rate Schedule § 27 to any such information is to the information set out above.

## **2. Group Nominations and Balancing Schedule 27**

~~2.1 Definitions in Rate Schedule 27 - Except where the context requires otherwise or except as otherwise expressly provided in this agreement, all words and phrases defined in Rate Schedule 27 and used in this agreement have the meanings set out in Rate Schedule 27.~~

~~2.2 Applicable Provisions of Rate Schedule 27 - The terms and conditions set out in sections, 10 (Statements and Payments), 13 (Measurement), 15 (Default or Bankruptcy), 16 (Notice), 17 (Interpretation) and 18 (Miscellaneous) of Rate Schedule 27 apply to this agreement, with necessary changes, including the substitution of "Customer Agent" for "Shipper", as if set out in this agreement.~~

**2.1 Group Nominations and Balancing** - Group nomination and balancing will be done by the Shipper Agent in accordance with the sections of the applicable transportation Rate Schedules except where Shippers under a Rate Schedule 22 Transportation Agreement are members of the Group, in which case section 9 (Group Nominations and Balancing) of Rate Schedule 22 will apply to the Group on an aggregate basis.

## **3. Gas Supply Charges**

**3.1 Payments by Customer Shipper Agent** - The Customer Shipper Agent premises agrees as principal obligant (and not as surety) to pay to BC Gas the charges for Authorized Overrun Gas, Backstopping Gas, Balancing Gas and the charges for Unauthorized Overrun Gas, both as set out in the Table of Charges of the applicable transportation Rate Schedule 27, determined based on the quantities transported from time to time on behalf of all members of the Group as a whole on an aggregate basis.

## **4. Changes to Group**



- 4.1 **Amendment to Agreement Required** - No Shipper ~~or End-User~~ may be added to or deleted from the Group without amending this agreement in writing and in accordance with the terms of this section.
- 4.2 **Deletions From Group** - If the ~~Customer-Shipper~~ Agent wishes to cease nominating for a Shipper ~~or End-User~~ and ~~or the Customer-Shipper~~ Agent has given to BC Gas not less than 30 days' prior notice that such Shipper ~~or End-User~~ wishes to cease ~~to be being~~ a member of the Group, BC Gas agrees that it will amend this agreement to delete such Shipper ~~or End-User~~ from the Group and thereafter the ~~Customer-Shipper~~ Agent will not be liable for any subsequently incurred charges for ~~Authorized-Overrun-Gas Backstopping Gas, Balancing Gas or Unauthorized Overrun Gas~~, both as set out in the Table of Charges of the applicable Rate Schedule 27, in respect of any such Shipper ~~or End-User~~.
- 4.3 **Additions To Group** - If the Shipper Agent wishes to add a Shipper to a Group, and the Shipper has entered into a Transportation Agreement and the Shipper Agent has given to BC Gas not less than 30 days prior notice, BC Gas agrees that it will amend this agreement to add such Shipper to the Group on the first Day of the Month following the expiry of the notice period.

## 5. Term

- 5.1 **Term** - The term of this agreement will commence on the ~~beginning commencement~~ date specified in section 1 of this agreement and will expire ~~either on the earliest to occur of the following~~
- (a) 30 days following notice from the ~~Customer-Shipper~~ Agent to BC Gas that the ~~Customer-Shipper~~ Agent wishes to cease to nominate for transportation service and balance ~~ing~~ on behalf of the Group, ~~or~~
  - (b) the expiry or termination of the Transportation Agreements of all of the members of the Group, ~~or~~
  - (c) the expiry date specified in section 1 of this agreement, ~~and or~~
  - (d) 30 days following notice from BC Gas to the ~~Customer-Shipper~~ Agent that BC Gas no longer wishes the members of the Group to nominate and balance on a Group basis
- ~~whichever date is earlier.~~

5.2 **Survival of Covenants** - Upon the termination of this agreement, whether pursuant to ~~the section 15 (Default or Bankruptcy) provision of the applicable~~ Rate Schedule 27 or otherwise,

- (a) all claims, causes of action or other outstanding obligations remaining or being unfulfilled as at the date of termination, and,
- (b) all of the provisions in this agreement relating to the obligation of any of the parties to account to or indemnify the other and to pay to the other any monies owing as at the date of termination in connection with this agreement,

will survive such termination.

## 6. **Representations, Warranties and Covenants**

6.1 **Representations and Warranties** - The ~~Customer-Shipper~~ Agent represents and warrants to and covenants with BC Gas as follows

- (a) the members of the Group are listed in section 1 of this agreement,
- (b) the ~~Customer-Shipper~~ Agent is the agent of each of the members of the Group and has the authority of each of the members of the Group for the purposes of any and all matters set out in the applicable transportation Rate Schedule pertaining to sections ~~6 (Nomination), 7 (Gas Balancing) and 8 (Group Nomination & Balancing)~~ of Rate Schedule 27, and
- (c) BC Gas may rely on any act or thing done, or document executed, by the ~~Customer-Shipper~~ Agent in connection with of any and all matters set out in the applicable transportation Rate Schedule pertaining to sections ~~6 (Nomination), 7 (Gas Balancing) and 8 (Group Nomination & Balancing)~~ of Rate Schedule 27.

~~6.2 **Changes in Group** - The Customer Agent will give to BC Gas not less than 30 days' prior notice of each addition to or deletion from the Group.~~

## 7. **Limitation on Liability and Indemnity**

7.1 **Limitation on Liability** - ~~None~~ Neither of BC Gas, its employees, contractors and/or agents will be liable in damages for or on account of any interruption or curtailment of transportation service.

- 7.2 **Indemnity** - The ~~Customer Shipper~~ Agent will indemnify and hold harmless each of BC Gas, its employees, contractors and agents from and against any and all adverse claims, losses, suits, actions, judgments, demands, debts, accounts, damages, costs, penalties and expenses (including all legal fees and disbursements) arising from or out of nominations or balancing made in accordance with the applicable transportation Rate Schedule pertaining to Nomination, Gas Balancing and Group Nominations and Balancing sections 6, 7 or 8 of Rate Schedule 27 with respect to the Group's transportation volumes.

8. **Arbitration** *Leave in?*

- 8.1 ~~Arbitration~~ Any dispute between the parties arising from this agreement will be resolved by a single arbitrator pursuant to the ~~Commercial Arbitration Act of British Columbia or successor legislation, save as expressly provided herein.~~
- 8.2 ~~Demand for Arbitration~~ Either party may commence arbitration proceedings by sending to the other party a demand for arbitration setting forth the nature of the dispute.
- 8.3 ~~Arbitrator~~ The parties will have 10 days from receipt of the demand referred to in section 8.2 of this agreement to agree upon the arbitrator, failing which either party may apply to the Supreme Court of British Columbia to select the arbitrator. The arbitrator must be sufficiently qualified by education and training to decide the particular questions in dispute. Unless otherwise agreed, the arbitrator may not be a past or present employee, officer or director of any of the parties or their respective successors or affiliates, any member or former member of the Group or any Supplier of any member or former member of the Group or BC Gas.
- 8.4 ~~Commencement and Decision~~ The arbitrator will proceed immediately to hear and determine the matter in dispute and will render a written decision, signed by the arbitrator, within 45 days after the appointment, subject to any reasonable delay due to unforeseen circumstances. Notwithstanding the foregoing, if the arbitrator fails to render a decision within 60 days after the appointment then either party may elect to have a new arbitrator appointed in like manner as if none had previously been appointed.
- 8.5 ~~Decision~~ The decision of the arbitrator will be final and binding upon the parties and the parties will abide by the decision and perform the terms and conditions thereof.

9. **Principal Obligant**

- 9.1 **Principal Obligant** - The ~~Customer-Shipper~~ Agent's obligations under this agreement are that of principal obligant and not of surety and are independent of the obligations pursuant to the ~~Group's Transportation Agreement~~ of each member of the Group and a separate action or actions may be brought against the ~~Customer-Shipper~~ Agent, whether or not an action is brought against any members of the Group and whether or not any members of the Group can be or are joined in any such action or actions.
- 9.2 **Waiver of Defences** - For greater certainty, BC Gas will not be bound to exhaust its recourse against the members of the Group before being entitled to payment from the ~~Customer-Shipper~~ Agent hereunder; the ~~Customer-Shipper~~ Agent waives all diligence, demands, notices, protests, of the ~~Customer-Shipper~~ Agent's obligations under this agreement, and any and all claims or defences relating to lack of diligence or delays in collection or enforcement of any and all other securities taken by BC Gas and consents to any and all renewals and extensions of the time for payment; and this agreement will not be affected by the dissolution, arrangement, reorganization, assignment for the benefit of creditors, proposal or notice of intention to make a proposal to creditors or bankruptcy of any member of the Group (whether voluntary or compulsory), or by any amalgamation of any member of the Group.

## 10. Acknowledgement

- 10.1 **Acknowledgement** - The Shipper Agent acknowledges receiving and reading a copy of Rate Schedules 22, 25 and 27 and the General Terms and Conditions of BC Gas and will comply with and be bound by all terms and conditions set out therein.

IN WITNESS WHEREOF the parties hereto have executed this agreement.

BC GAS UTILITY LTD.

\_\_\_\_\_  
(here insert name of ~~Customer-Shipper~~ Agent)

BY: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

BY: \_\_\_\_\_

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Name - Please Print)

**REVISIONS TO GAS COST ALLOCATIONS UNDER THE PROPOSED RATE  
DESIGN CHANGES**

1 By letter dated April 18, 1996, BC Gas indicated that the 1996  
2 Rate Design Application would not apply for any gas cost  
3 allocation methodology changes which suggest a departure from  
4 the methodology approved in the February 1992 BCUC Phase A  
5 Rate Design Decision. The following material addresses the  
6 gas cost allocation impact of updating the load factor for  
7 Rate Schedule 5 customers, but does not introduce any change  
8 in principle to the approved Phase A methodology.

9  
10 In the preparation of the current rate design application, the  
11 input factors in the gas cost allocation methodology were  
12 examined for their current applicability. With the exception  
13 of the Schedule 5 load factor, all of these factors were  
14 either quite similar to their previous level or such that  
15 introducing the updated factor had little or no impact on the  
16 allocated gas costs by rate class.

17  
18 **1.0 SCHEDULE 5 LOAD FACTOR INCREASE**

19  
20 The rate class load factors determine the allocation of fixed  
21 gas supply costs to each class. Fixed costs, including  
22 transportation demand tolls, supplier reservation fees and  
23 storage fixed charges, are allocated to the firm sales classes  
24 based on each class' share of coincident peak demand. In the  
25 Phase A Rate Design Decision, initial load factors were  
26 approved based on the rate classes in existence in the former  
27 service areas of BC Gas prior to consolidation as approved in  
28 Phase B of Rate Design. In Rate Design Phase B revised load  
29 factors were adopted for commercial/general service customers  
30 consistent with the load characteristics of the new Schedules  
31 2, 3 and 5. The initial load factors for these classes were  
32 identified as 27.9%, 33.9% and 44.6%, respectively (Phase B  
33 Application, Volume 1, Tab 11, Page 2, Lines 8-10).

1 It should be noted that the load factor estimates for  
2 Schedules 2, 3 and 5 in the Phase B Application were prepared  
3 in advance, based on the Company's best estimates of which  
4 class the customers would move to. The Schedule 5 load factor  
5 in particular was susceptible to movement based on the number  
6 of customers and customer mix since it was expected to be a  
7 small rate class in terms of both customer numbers and sales  
8 volumes compared to Schedules 2 and 3. Load factor studies  
9 conducted by BC Gas since the establishment of the Phase B  
10 customer classes in 1994, using the same linear regression  
11 methodology as in the Phase A and Phase B load factor studies,  
12 confirm the validity of the load factors adopted for Schedules  
13 2 and 3 (as well as for Schedule 1 - Residential). The  
14 current Schedule 5 load factor, however, appears to be too low  
15 according to the post-Phase B studies, which suggest a load  
16 factor of 65% would be more appropriate rather than the  
17 current level of about 45%.

18  
19 BC Gas proposes to revise the Schedule 5 load factor to 65%  
20 for gas cost flow-through purposes commencing with the next  
21 application to pass through gas cost changes.

22  
23 Further confirmation on the customer class load factors is  
24 being gained through load factor studies using demand meters  
25 at approximately one thousand sites throughout the BC Gas  
26 service territory. While these demand meters have been in  
27 place for less than a year, the preliminary results confirm  
28 the load factors presently being used for Schedules 1 and 2.  
29 Schedules 3 and 5 have higher load factors based on the  
30 preliminary demand meter results, than those currently in use.  
31 The Schedule 3 results do not tie in well with what is  
32 determined by the existing method of load factor  
33 determination. There may be problems with the  
34 representativeness of the sample of Schedule 3 customers in  
35 the demand meter study relative to all Schedule 3 customers.

1 In the case of Schedule 5, the higher load factor resulting  
2 from the demand meter study gives preliminary confirmation of  
3 the results being obtained using the existing method and  
4 provides additional support for the decision to raise the load  
5 factor to 65%. Periodic reviews of the demand meter results  
6 are planned as this program matures.

7  
8 The table on Page 4 of this tab provides an example of the gas  
9 cost shifts based on 1996 gas costs caused by this Schedule 5  
10 load factor increase. Overall, Schedule 5 customers would  
11 experience a \$1.3 million decrease in gas costs while  
12 Schedules 1, 2 and 3 gas costs would increase by amounts of  
13 \$0.8 million, \$0.2 million and \$0.3 million respectively.

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BC GAS UTILITY LTD.

1996 RATE DESIGN APPLICATION

COST OF GAS SHIFTS ARISING FROM THE SCHEDULE 5 LOAD FACTOR INCREASE

Line No.	Particulars	1996 Volumes (TJ)	1996 Unit Gas Cost – (\$/GJ)			1996 Gas Cost Shift (\$000)
			Existing BCUC Order No. G-113-95	Revised Rate 5 Load Factor @ 65%	Increase (Decrease) (4) – (3)	
	(1)	(2)	(3)	(4)	(5)	(6)
1	<b>Lower Mainland Service Area</b>					
2	Schedule 1 – Residential	54,524.2	\$2.5911	\$2.6019	\$0.0108	\$588.9
3	Schedule 2 – Small Commercial	15,123.1	2.7330	2.7449	0.0119	180.0
4	Schedule 3 – Large Commercial	23,265.4	2.3925	2.4022	0.0097	225.7
5	Schedule 4 – Seasonal	242.2	1.1656	1.1656	0.0000	0.0
6	Schedule 5 – General Firm	2,339.7	2.0120	1.6343	(0.3777)	(883.7)
7	Schedule 6 – NGV and VRA	777.8	1.3450	1.3450	0.0000	0.0
8	Total Lower Mainland	96,272.4				110.9
9						
10	<b>Inland Service Area</b>					
11	Schedule 1 – Residential	17,559.5	2.4045	2.4144	0.0099	173.8
12	Schedule 2 – Small Commercial	5,429.8	2.5331	2.5439	0.0108	58.6
13	Schedule 3 – Large Commercial	4,101.6	2.2247	2.2335	0.0088	36.1
14	Schedule 4 – Seasonal	177.7	1.1154	1.1154	0.0000	0.0
15	Schedule 5 – General Firm	1,157.2	1.8802	1.5376	(0.3426)	(396.5)
16	Schedule 6 – NGV and VRA	76.8	1.2787	1.2787	0.0000	0.0
17	Total Inland	28,502.6				(128.0)
18						
19	<b>Columbia Service Area</b>					
20	Schedule 1 – Residential	1,997.3	2.4328	2.4425	0.0097	19.4
21	Schedule 2 – Small Commercial	742.1	2.5624	2.5737	0.0113	8.4
22	Schedule 3 – Large Commercial	400.1	2.2502	2.2596	0.0094	3.8
23	Schedule 4 – Seasonal	0.0	0.0000	0.0000	0.0000	0.0
24	Schedule 5 – General Firm	65.4	1.8959	1.5535	(0.3424)	(22.4)
25	Schedule 6 – NGV and VRA	0.7	1.2904	1.2904	0.0000	0.0
26	Total Columbia	3,205.6				9.2
27						
28	Rounding Differences	0.0				7.9
29	Total Cost of Gas Shifts	127,980.6				\$0.0



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## BC GAS UTILITY LTD.

## 1996 RATE DESIGN APPLICATION

## COST OF GAS SHIFTS ARISING FROM SCHEDULES 4 AND 5 CHANGES (1)

Line No.	Particulars	1996 Volumes (TJ)	Unit Gas Cost - (\$/GJ)		Increase (Decrease) (4) - (3)	Gas Cost Shift (2) x (5) (\$000)
			Existing	Revised		
	(1)	(2)	(3)	(4)	(5)	(6)
1	Lower Mainland Service Area					
2	Schedule 1 - Residential	54,524.2	\$2.5911	\$2.5943	\$0.0032	\$174.5
3	Schedule 2 - Small Commercial	15,123.1	2.7330	2.7366	0.0036	54.4
4	Schedule 3 - Large Commercial	23,265.4	2.3925	2.3955	0.0030	69.8
5	Schedule 4 - Seasonal	242.2	1.1656	1.3500	0.1844	44.7
6	Schedule 5 - General Firm	2,339.7	2.0120	1.8778	(0.1342)	(314.0)
7	Schedule 6 - NGV and VRA	777.8	1.3450	1.3430	(0.0020)	(1.6)
8	Total Lower Mainland	96,272.4				27.8
9						
10	Inland Service Area					
11	Schedule 1 - Residential	17,559.5	2.4045	2.4072	0.0027	47.4
12	Schedule 2 - Small Commercial	5,429.8	2.5331	2.5361	0.0030	16.3
13	Schedule 3 - Large Commercial	4,101.6	2.2247	2.2271	0.0024	9.8
14	Schedule 4 - Seasonal	177.7	1.1154	1.3500	0.2346	41.7
15	Schedule 5 - General Firm	1,157.2	1.8802	1.7583	(0.1219)	(141.1)
16	Schedule 6 - NGV and VRA	76.8	1.2787	1.2761	(0.0026)	(0.2)
17	Total Inland	28,502.6				(26.1)
18						
19	Columbia Service Area					
20	Schedule 1 - Residential	1,997.3	2.4328	2.4353	0.0025	5.0
21	Schedule 2 - Small Commercial	742.1	2.5624	2.5654	0.0030	2.2
22	Schedule 3 - Large Commercial	400.1	2.2502	2.2537	0.0035	1.4
23	Schedule 4 - Seasonal	0.0	1.1150	1.3500	0.2350	0.0
24	Schedule 5 - General Firm	65.4	1.8959	1.7766	(0.1193)	(7.8)
25	Schedule 6 - NGV and VRA	0.7	1.2904	1.2828	(0.0076)	0.0
26	Total Columbia	3,205.6				0.8
27						
28	Rounding Differences	0.0				(2.5)
29	Total Cost of Gas Shifts	127,980.6				\$0.0
30						
31						

32 Notes: (1) Rate 5 load factor set at 50% and Rate 4 charged Rate 7 seasonal (summer) gas cost.

**REVIEW OF BC GAS COST ALLOCATION  
AND RATE PROPOSALS**

*Prepared for:*  
**BC GAS UTILITY LTD.**

*Prepared by:*  
Dana Toulson  
Michael Pretto  
**BARAKAT & CHAMBERLIN, INC.**

**June 6, 1996**

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# **BARAKAT & CHAMBERLIN REVIEW OF BC GAS COST ALLOCATION AND RATE PROPOSALS**

## **1.0 INTRODUCTION**

This report presents the results of Barakat & Chamberlin, Inc.'s review of BC Gas' embedded and long-run incremental cost (LRIC) studies, and rate design proposals. BC Gas Utility Ltd. (BC Gas) is proposing an \$11.2 million increase in residential rates and a commensurate decrease in general firm industrial and interruptible rates. The decrease in general firm industrial rates will bring revenue/cost ratios into better alignment with other rate schedules. The decrease in interruptible service rates maintains the current relationship between interruptible and general firm industrial service tariffs. BC Gas proposes revenue neutral changes to residential and commercial rates which will reduce delivery charges and raise basic monthly charges. The cost studies also support revenue neutral changes to general firm industrial and interruptible rates, which raise the delivery charges and reduce basic monthly charges.

We support the BC Gas cost studies and rate proposal. The methods used in the cost allocation studies are based on standard approaches, and use a series of cases as a guide to rate design. BC Gas' revenue shift and rate design proposals are consistent with the underlying cost of service studies and the objectives of rate design. In our opinion, the BC Gas cost allocation studies and rate design proposals are reasonable and should be adopted by the Commission.

## **2.0 BACKGROUND**

### **2.1 Framework for Analysis**

Barakat & Chamberlin's analysis involved:

- Developing an understanding of the BC Gas system operations, costs and rates;
- Reviewing previous BCUC decisions to identify possible issues with respect to cost of service and rate design for BC Gas;
- Reviewing and providing input to the BC Gas 1996 embedded cost of service allocation study;

- Reviewing and providing input to the BC Gas 1996 LRIC study; and
- Reviewing the BC Gas rate design proposal as it relates to the embedded cost and LRIC studies.

## **2.2 Recent BCUC Decisions and Orders**

The current BC Gas rate structure became effective on November 1, 1993, and January 1, 1994, pursuant to BCUC orders in the BC Gas Phase B rate design proceeding. In that proceeding, the BCUC, among other things, adopted BC Gas' proposal to equalize the non-gas portion of residential and commercial rates across the BC Gas service area, established winter-summer rate differentials for non-core rates, and set interruptible delivery charges at a discount to general firm industrial delivery charges. The BCUC also ordered BC Gas to implement a seasonal rate structure for residential and commercial customers.

With respect to class revenue levels, the BCUC uses embedded cost studies (i.e., fully distributed cost of service, or FDC) to identify the embedded cost of service for each customer class. These costs are compared to the revenue expected from each class. In previous decisions the Commission has determined that a revenue to cost ratio of 90% to 110% "shall be seen as revenue cost equality."<sup>1</sup> When revenue cost ratios have fallen outside this band, the BCUC has generally ordered rate changes to move revenue cost ratios toward or within the band. In 1991, the Commission expressed a preference for allocated costs based on the coincident peak method of allocation, as compared to the modified partial plant allocation method, for Pacific Northern Gas (PNG).<sup>2</sup> In its 1995 PNG rate design decision, the Commission accepted a PNG study using a non-coincident peak approach because the results were similar to a coincident peak approach.<sup>3</sup> In the 1993 BC Gas Phase B rate design decision, the Commission considered three cost allocation approaches that BC Gas presented — coincident peak, non-coincident peak, and average and excess, but did not indicate a preference for any one of them.

Barakat & Chamberlin's review of the BC Gas cost studies and rate proposal submitted in this application has carefully considered these Commission orders and guidelines.

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<sup>1</sup>BCUC decision dated February 27, 1991, in PNG's 1991 rate design proceeding, p. 38.

<sup>2</sup>BCUC decision dated February 27, 1991, in PNG rate design, p. 30-31.

<sup>3</sup>Decision dated December 15, 1995, at p. 9.

## **2.3 Current BC Gas Rate Structure**

BC Gas currently offers firm sales service to residential, small commercial, large commercial, seasonal and natural gas vehicle (NGV) users. BC Gas offers firm sales and transportation service, as well as interruptible sales and transportation service to larger volume users.<sup>4</sup> BC Gas also has a number of special contracts and bypass agreements which are approved as tariff supplements. BC Gas rate schedules are listed below.<sup>5</sup>

Rate 1: Residential

Rate 2: Small Commercial

Rate 3: Large Commercial

Rate 4: Seasonal

Rate 5/25: General Firm Industrial Sales/Transportation

Rate 6: NGV

Rate 7/27: General Interruptible Sales/Transportation

Rate 22/22A/22B: Large Volume Firm/Interruptible Transportation

Each schedule generally consists of a basic (customer) charge, a delivery charge, and for sales schedules, a gas cost recovery charge. Transportation-only schedules also contain an administration fee. The customer, administration fee, and delivery charges represent all of BC Gas' cost of doing business other than gas supply costs. Gas cost recovery charges represent BC Gas' gas supply costs, which include purchased capacity, commodity, and storage costs. Delivery charges vary according to summer and winter seasons, while gas cost recovery charges are constant throughout the year.

## **2.4 Embedded Cost Allocation Studies — Generally**

The general purpose of an FDC study is to apportion the utility's total costs of providing service in a manner that is fair and consistent with the reason the cost was incurred. The basic process involves arranging costs according to functions (gas supply, storage, transmission, distribution, customer service), and then classifying them into customer-related, demand-related, and commodity-related categories. These functionalized and classified costs are allocated to customer classes based on demand, number of customers, usage, or other measures. The allocation of demand-related

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<sup>4</sup>Service under certain large volume schedules (Rates 22A and 22B) is closed to new customers.

<sup>5</sup>Certain schedules with few or no customers are excluded. In addition, BC Gas provides gas sales and transportation service under special contracts to BC Hydro for its Burrard plant, and transportation service to PCEC for its Vancouver Island pipeline.

costs is usually the most difficult. This is because, according to NARUC, "No method is universally accepted, although some definitely have more merit than others."<sup>6</sup> Allocated costs by class are compared to revenues to determine how well rates relate to costs.

The most commonly used demand allocation methods include the coincident peak method, the non-coincident peak method, and the average and excess method. Under the coincident peak approach, demand costs are allocated based on the demand of each customer class at the time of system peak. This approach assumes that the utility system is sized to meet peak needs. The primary criticism of this method is that no costs are allocated to users of the system at times other than the system peak, even though it is clear that off-peak users may derive substantial benefits from such use.

The non-coincident demand method allocates system costs in proportion to the maximum demand of a customer class, regardless of when that demand occurs. Thus, no customer class can escape cost assignment.

Under the average and excess method, total demand costs are multiplied by the system's load factor to arrive at capacity costs attributable to average use. These capacity costs are apportioned to the various customer classes on an annual volumetric basis. The remaining demand costs are assumed to have been incurred to meet the excess over average demands, and are allocated on the basis of the noncoincident peak minus average demand of each rate class.

The mere existence of multiple methods of apportioning costs illustrates perhaps the biggest single question in cost allocation studies: Who should pay for capacity costs? Should those customers for whom the system was designed be required to pay, or should those customers who use the system in off-peak periods (e.g., interruptible customers) also share some of the capacity costs? There is no definitive, "bright line" answer to this question.

There are a number of other issues that should be taken into account when reviewing FDC studies:

- Allocation of shared-use facilities. Cost allocation studies are a vehicle for assigning cost responsibility for shared-use facilities; however, the

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<sup>6</sup>Gas Rate Design Manual, National Association of Regulatory Utility Commissioners (NARUC) Staff Subcommittee on Gas, June 1989, p. 26.

degree of sharing for any given customer or subgroup of customers may vary significantly from the customer class profiles used for cost allocation.

- Vintaging of costs. Cost allocation studies do not distinguish between old and new plant, or old and new customers; thus, attribution of costs to any given customer or group of customers involves averaging plant ages across customer classes.
- Lumpy investment. Large single investments can have a significant effect on cost responsibility measures from one period to another.
- Derivative allocations. Operating and maintenance (O&M) expense and administrative and general (A&G) expense are frequently allocated on the basis of plant investment; however, because plant investment can be lumpy, lumpy new plant can trigger a potentially disproportionate allocation of O&M and A&G, even though the lumpy investment, because it is new, probably does not initially cause any noticeable increase in these expenses.
- Geographic/divisional separations. Historic geographic or other administrative divisions (e.g., Lower Mainland, Inland, and Columbia service areas) may or may not provide logical cost responsibility units.

For these reasons, the results of embedded cost of service studies are inherently imprecise, and as to individual customers, more and more imprecise as customers deviate from the profile of the "average" customer.

## **2.5 The Purpose and Use of LRIC Studies**

Long-run incremental cost (LRIC) studies look at how costs will change as the demand for gas grows. They measure the operating expenses and investments required to meet load growth from existing customers as well as the cost of serving additional customers. This information is of interest for rate design, because it permits assessment of the efficiency aspects of rate proposals.

An efficient price is one that enables consumers to compare the value expected with the incremental cost of producing the good or service they wish to purchase. Such prices ignore fixed costs, which are not affected by the customer's purchase decision. Although theoretically sound, there are practical difficulties involved in applying incremental cost pricing to a regulated utility. First, incremental costs vary



depending on load levels. An increase in the demand for one GJ in the summer, for example, has different cost consequences than an increase in demand during the peak day. This information cannot be easily conveyed. Second, rates based on incremental costs will not necessarily equal a utility's revenue requirements. At any point in time, incremental cost-based prices will produce revenues that either exceed or fall short of the embedded costs rates must recover.

Incremental costs can, however, be used to assess the efficiency of a rate structure. By comparing incremental costs with rate designs we can determine if the revenue from additional sales will cover variable costs; if the cost of adding a new customer is captured in customer charges; if seasonal differentials are proportional to costs; and if discounts for interruptible service appear reasonable. We can also determine the direction of change required to align rate elements — demand, commodity, and customer charges — with LRIC relationships.

LRIC studies have their imprecision. Because they are forward-looking, the long-run forecasts that feed them are subject to varying degrees of uncertainty, including:

- The accuracy of long-term (20 years and more) capital spending forecasts;
- The accuracy of long-term natural gas price forecasts; and
- The probability of technological improvements that would reduce future capital and operating costs.

Long-term forecast uncertainty means that there is always a substantial risk of forecast error in LRIC results. For this reason, conclusions based on comparing LRIC results to proposed rates or proposed revenues are equally subject to error.

However, like embedded cost studies, LRIC studies provide policymakers with an important part of an overall framework for the pricing of utility services.

## **2.6 Objectives of Rate Design**

Rate design attempts to balance a wide range of ratemaking objectives. These objectives include the following.<sup>7</sup>

- Recover the revenue requirement;

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<sup>7</sup>Adapted from James C. Bonbright, *Principles of Public Utility Rates*, 1961, p. 291.

- Incorporate simplicity, understanding, public acceptability and feasibility of application;
- Assure fairness of rates in the apportionment of total costs of service among the various classes;
- Efficiently allocate resources and discourage wasteful use;
- Avoid "undue discrimination" in rate relationships; and
- Promote revenue and rate stability.

There is no prescription that tells us how to observe these objectives. However, some of these attributes are clearly more important than others. Moreover, their relative importance may shift depending on the specific situation. Rate design objectives are frequently mutually exclusive, meaning that rate design cannot be all things to all people. These factors suggest that any rate proposal will be a compromise, and that considerable judgment is required to develop a sound and stable rate structure.

### **3.0 THE BC GAS 1996 FDC STUDY**

BC Gas' 1996 FDC study relies on the settlement establishing the 1996 BC Gas gross margin approved by the Commission. In compliance with the Commission's Phase B rate design decision, BC Gas is presenting cost of service results on a consolidated basis, as well as for the Lower Mainland, Inland, and Columbia service areas.

BC gas has analyzed three different methods for allocating demand-related costs: coincident peak, non-coincident peak, and average and excess approach. While the 1996 FDC study follows substantially the same approach taken in the Phase B rate design application, there are several differences. They include:

- Classifying a portion of distribution mains costs as customer-related, as opposed to only demand-related;
- Allocating transmission-related plant on a systemwide basis; and
- Applying a load factor more representative of general firm industrial loads.

The reasons for these changes are as follows:

- The classification of a portion of distribution mains-related costs as customer-related is common in gas and electric industry practice;
- The allocation of transmission-related plant on a systemwide basis better reflects the joint use of the transmission system for providing local service during peak periods and throughput service to all BC Gas service areas during non-peak periods; and
- The application of a higher load factor assumption for general firm industrial customers is based on more recent information.

We support these changes because, compared to the 1993 FDC study, they achieve a better relationship between system design, operations, and rate class cost responsibility.

### **3.1 Discussion of Revenue/Cost Ratio Results and Proposed Revenue Realignment**

The primary outputs of the cost of service study are revenue cost ratios, customer-related costs, demand-related costs, and commodity-related costs by rate schedule and by service area. Table 1 compares revenue cost ratios produced by the current FDC study with the 1993 FDC study adjusted to reflect the BCUC's October 25, 1993, Phase B rate design decision. The ratios have changed as follows:

- Residential revenue cost ratios have generally declined;
- Small Commercial revenue cost ratios have generally stayed the same; and
- Large Commercial, General Industrial service and large volume revenue cost ratios, both firm and interruptible, have generally increased.

Reasons for these changes in revenue cost ratios include:

- Reclassifying a portion of distribution mains costs as customer-related shifts relatively more costs to lower load factor schedules (e.g., residential and commercial);
- Applying a higher load factor assumption for general firm industrial customers results in a relatively higher allocation of demand costs to residential and commercial customers; and

- Updating for test year 1996 values - demands, commodity throughput and sales, revenues at present rates, plant balances, operating expenses, etc.

With respect to the three capacity cost allocation approaches, revenue cost ratios for firm rate schedules are lowest under the coincident peak approach. This is because capacity costs are not allocated to interruptible customers under the coincident peak method. The results in Table 1 indicate that regardless of the cost allocation method selected, general industrial service (Rate 5/25) ratios exceed the BCUC's target 90% to 110% bandwidth for revenue cost neutrality.

This suggests that Rate 5/25 should be reduced. Because interruptible rates (Rates 7/27 and 22) are generally a discount from Rate 5/25, a reduction to Rate 5/25 rate should trigger commensurate reductions to Rates 7/27 and 22. Of the major schedules, Residential revenue cost ratios rank the lowest, regardless of the capacity cost allocation approach selected. This suggests that any increase arising from a reduction to Rates 5/25, 7/27, and 22 should first be assigned to Schedule 1.

Under the coincident demand approach, a margin increase of 3.3% for the residential class would bring revenues up to 90% of costs. However, an increase in gas margin revenues of 3.3% from the residential class would not generate sufficient revenue to bring Rate 5/25 to 110% of costs. Table 2 shows that under the coincident peak approach, including proportionate reductions for the interruptible schedules, the Rate 5/25 RC ratio would be approximately 143%. Therefore, a margin increase of more than 3.3% was considered.

BC Gas tested three revenue realignment options. The results of these options are summarized in Table 3. In the first option, BC Gas set the Rate 5/25 revenue cost ratio equal to that of Rate 3. This assumption resulted in an \$11.2 million, or 5.5% margin increase, and an overall 2.9% increase for the residential class. The margin for Rates 5/25, 7/27, and interruptible 22 customers decreased by 37.9%.<sup>8</sup>

In the second option, BC Gas considered a revenue alignment where both Rate 3 and Rate 5/25 RC ratios were set at 110%. This option resulted in a \$14.9 million, or 7.4%, margin increase (3.8% overall increase) for residential customers, a 6.0% decrease for Rate 3 and a 41% margin decrease for Rates 5/25, 7/27, and interruptible 22. BC Gas investigated a third option where the margin decrease to

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<sup>8</sup>As part of this initial screening process, we focused on those schedules that would involve significant revenue shifts, and did not initially impute reductions to other schedules with revenue/cost ratios over 110% (e.g., Rate 4).

Rate 5/25 was limited to 30%. In this option, the residential margin increased by 4.3% (2.2% overall increase). The resultant Rate 5/25 revenue/cost ratio was 130%.

BC Gas proposes to implement the first option. This option leaves both Rate 3 and Rate 5/25 outside the 90% to 110% target range. BC Gas believes the decrease needed to achieve the 110% bandwidth (i.e., the 41% margin reductions to Rate 5/25 et al. customers) would not be well received by residential customers. BC Gas is also concerned that, even at the proposed Rate 5/25 rates, higher load Rate 3 customers will have an incentive to transfer to Rate 5/25. This would initially cause a loss of revenue, and later may cause relatively higher Rate 3 delivery charges, because remaining Rate 3 customers would likely have a lower average load factor.

Barakat & Chamberlin supports the BC Gas revenue realignment proposal for the following reasons:

- Revenue realignment is supported by the BC Gas FDC study;
- While the proposed revenue realignment does not produce revenue cost ratios within the BCUC's target range for Rate 3 and 5/25 customers, the proposed rate decreases are nonetheless significant.
- The impact on residential customers is also significant, given that a 2.9% increase exceeds the forecasted rate of inflation. Asking for a larger increase while simultaneously lowering general service and large volume rates is likely to meet with customer resistance.
- The impact of Rate 3 customers transferring to Rate 2/25 is difficult to quantify at this time. BC Gas is justified in taking a cautious approach.

#### **4.0 BC GAS 1996 LRIC STUDY**

The LRIC study filed in the 1993 Phase B rate design application represented BC Gas' first attempt at developing a formal LRIC study. The study concentrated on the costs associated with adding new customers to the system and the change in gross margin costs caused by their additional loads. In this application, BC Gas has taken a broader view — including both gross margin and gas supply costs elements, and developing figures that apply to existing as well as new customers.

#### **4.1 Discussion of BC Gas Approach and Results**

Incremental costs can be divided into the three categories: commodity, demand, and customer costs.

1. Commodity Costs are the cost at the margin of purchasing or producing an additional GJ of gas.
2. Demand Costs represent the incremental costs associated with ensuring adequate gas supply and delivery capacity to meet annual, seasonal, or peak-day demands.
3. Customer Costs equal the costs of providing service to an additional customer.

Each cost category requires a different analytical approach.

To estimate incremental supply costs, both demand and commodity, BC Gas relied on its Gas Supply Optimization Model (GSOM). This model uses a linear programming method to select a least-cost portfolio of supply resources from a given set of resource options for a given set of customer loads. The model recognizes that resources have widely varying supply characteristics and contractual obligations that constrain the solution. It also recognizes that surplus supplies can be marketed off-system to non-core customers.

The results of the model are expressed in terms of both fixed and variable costs. Fixed costs reflect contract demand charges incurred as well as capital costs associated with selected plant options such as storage facilities. The variable costs identified by the model reflect commodity purchases.

For the LRIC study, the incremental costs of gas supply were calculated by identifying the amount by which costs would rise if customer loads increase each day by 2% over current expectations. The 2% increment was judged the minimum increment that would allow meaningful results from the GSOM model. Incremental gas supply costs were divided by the change in load to develop unit costs on a \$/GJ basis for both demand and commodity costs.

BC Gas divided the demand-related supply costs into two categories — those related to increases in peak-day demand and those related to increases in demand at other times of the year. This-separation accounts for the role of load factors in the economics of supply options. An LNG peak shaving facility, for example, would be

appropriate for meeting needle peak demands. However, with its high fuel cost, a peak shaving facility is usually not a cost-effective way to serve higher load factor loads. Instead, a purchase supply contract would likely prove more economical from a total cost (both demand and commodity) point of view.

This means that any contract or supply option selected by the GSOM model (other than a pure peaking facility) can be thought of as serving two functions: (1) meeting peak-day demands, and (2) meeting corresponding increases in demand on other days in the most economical way possible.

To separate peak-day costs from the total costs identified by the GSOM model, BC Gas hypothesized that it would respond to an increase in peak-day demands *only* (without corresponding increases in loads at other times of the year) by building an LNG peaking/storage plant. In its IRP, BC Gas identified a generic 2.0 Bcf LNG option. The cost of such a plant is approximately \$53/peak day GJ (in 1996\$). BC Gas assumed this amount fairly represented the peak-day-related portion of fixed costs. The remaining demand-related fixed costs produced by the GSOM model amount to \$0.77/GJ (for a 100% load factor customer).

Incremental demand costs also include the cost of new transmission and distribution capacity required to serve increases in peak-day loads. BC Gas calculated these costs by comparing investment plans over the next 20 years with projected new loads. The results are shown in Table 4

Customer costs include service lines and metering equipment, as well as the distribution network costs associated with serving a new customer. They also include administrative expenses associated with billing and customer service. BC Gas estimated incremental customer costs by identifying the typical cost of a meter, main, and service for new Rate 1, 2, or 3 customers. Customer costs were not developed for the other rate schedules, because it is virtually impossible to identify characteristics for a "typical" new customer in these classes.

We found the BC Gas 1996 LRIC study substantially improved from its past effort. By using a sophisticated planning model like GSOM to estimate incremental supply costs, BC Gas can simulate the decision-making process of its gas planners. Utilities that use other approaches for estimating incremental supply costs only do so when detailed planning models are not available. These alternative approaches generally involve assigning generic supply sources to the separate segments of a utility's load curve. The accuracy of this manual-type approach, necessarily falls short of that possible with a comprehensive planning model.

BC Gas used the "planned investment" method to develop incremental transmission and distribution costs. This method is preferred (when data is available), because it is forward-looking and captures the Company's planned response to demand increases. The "lumpy" nature of transmission investments can sometimes make it difficult to capture typical investment-to-load relationships. BC Gas solved this problem by using a 20-year forecast of load-related transmission reinforcements.

To develop incremental customer costs, BC Gas followed an "engineering" approach - obtaining typical main, meter, and service connection costs from the Company's planning engineers. This is a common approach found in both the gas and electric utility industries.

Overall, we found BC Gas' LRIC study to be reasonable, both in terms of the approaches used and the results obtained. The study identifies costs for all elements of gas service for both new and existing customers. In that and other respects, we believe the study conforms to the BCUC's 1993 Phase B decision.

As in any LRIC study, the results, while reasonable, are nevertheless imprecise. For instance, GSOM, relies on long-term price forecasts and supply options specified by the user. While these inputs represent the best information available, they are inherently uncertain. The well-head price of natural gas, for example, could differ significantly from BC Gas' twenty-year forecast and new supply options not now anticipated could become available, reducing the Company's future costs. The estimates of transmission and distribution incremental costs are also uncertain - because BC Gas' actual investments over the twenty years will likely differ from those currently forecasted. We highlight these uncertainties because the degree of precision offered by an LRIC study should be kept in mind when applying the results to specific rate proposals.

## **5.0 REVIEW OF BC GAS RATE PROPOSALS**

BC Gas requested Barakat & Chamberlin to review its rate design proposals, particularly as these options affected intra-class and inter-class rate relationships. Our review included discussions concerning the relationship between cost-of-service results (both embedded and incremental) and specific rates.

### **5.1 BC Gas Rate Design Proposals**

BC Gas proposes to increase the residential (Rate 1), small commercial (Rate 2) and large commercial (Rate 3) monthly basic charges as follows:



Rate	Present	1997 Proposed	1998 Proposed	1999 Proposed
Rate 1	\$6.32	\$9.00	\$10.00	\$11.00
Rate 2	\$12.64	\$15.00	\$17.00	\$20.00
Rate 3	\$12.64	\$75.00	\$75.00	\$75.00

To achieve target revenues, these basic charge increases will be offset by delivery charge decreases. BC Gas justifies this restructuring based on the level of customer-related costs under both the embedded and LRIC studies and a desire to stabilize revenues from these schedules. In addition, the Rate 3 increase is also designed to provide a better demarcation between Rates 2 and 3. Proposed 1997 basic charges compared to embedded and LRIC customer costs are set forth below.

Rate	Proposed	Embedded	LRIC
Rate 1	\$9.00	\$17.59	\$21.00
Rate 2	\$15.00	\$22.66	\$22.00
Rate 3	\$75.00	\$84.05	\$52.00

BC Gas proposes to revise seasonal (Rate 4) rates to place them in a more logical relationship to summer general firm industrial service (Rate 5) rates. In addition, BC Gas proposes to maintain the "2 to 1" seasonal delivery charge differential established in the 1993 Phase B rate design decision, even though LRIC study values (see Section 5.2.2), if taken at face value, would support increasing this differential. BC Gas believes that any increase in this differential would meet with even more consumer resistance than occurred when the differential was initially ordered in 1993.

Consistent with the proposed movement of revenues away from Rates 5/25, 7/27, and 22, BC Gas proposes to revise rates<sup>9</sup> under these schedules as summarized below:

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<sup>9</sup>Proposed rates shown herein do not reflect riders or 1/1/97 Revenue Requirements increases.

<b>Present</b>	<b>Rate 5/25</b>	<b>Rate 7/27</b>	<b>Rate 22</b>
Month basic charge	\$366.00	\$1,643.00	\$1,643.00
Month admin. fee	\$213.00	\$608.00	\$608.00
Winter charge per GJ	\$1.645	\$0.976	\$0.976
Summer charge per GJ	\$0.853	\$0.671	\$0.671
<b>Proposed</b>	<b>Rate 5/25</b>	<b>Rate 7/27</b>	<b>Rate 22</b>
Month basic charge	\$300.00	\$600.00	\$2,500.00
Month admin. fee	\$100.00	\$100.00	\$100.00
Winter charge per GJ	\$1.05	\$0.77	\$0.67
Summer charge per GJ	\$0.52	\$0.52	\$0.34

The relationship between the delivery charges under Rates 5/25, 7/27, and 22 generally retains the same discounts, in percentage terms, as reflected in present BC Gas rates. BC Gas justifies the proposed reductions in basic charges and administration fees based on FDC and LRIC study results.

## 5.2 Analysis of the BC Gas Proposal

Our analysis of the BC Gas rate design proposal focused on the relationship between:

- Revenue at proposed rates and revenues based on LRIC;
- Proposed seasonal delivery plus gas cost recovery charge rates and seasonal rates based on demand plus supply-related LRIC;
- Proposed general firm industrial and interruptible rates; and
- Proposed basic charges and customer-related costs from the FDC and LRIC studies.

### 5.2.1 Proposed Revenues versus LRIC Revenues

Our review of proposed revenues versus LRIC revenues focused on the signals that proposed rates give with respect to increased consumption. We limited our analysis

to Rates 1, 2, and 3 because they capture 99.9% of BC Gas customers, and because we felt the LRIC estimates were too generic to be applied to other rate schedules. Our findings are set forth in Table 5. Table 5 develops “revenues” based on incremental peak demand, commodity-related demand and commodity unit costs applied to incremental measures—sales and peak-day demand—for Rates 1, 2, and 3. Both incremental customer costs and basic charge revenues are excluded from this calculation because they do not vary with incremental use. Table 5 shows that at proposed rates incremental cost-based revenues exceed proposed revenues.

All other things being equal, these results suggest that proposed Rate 1, 2, and 3 commodity rates should be higher. However, we do not believe that the magnitude of the differences is large enough to warrant a response because of the inherent uncertainty associated with long-term supply cost forecasts.

### **5.2.2 Seasonal Delivery Charges**

Proposed BC Gas rates contain a seasonally differentiated delivery charge and a flat gas cost recovery charge. Our analysis involved comparing combined delivery and gas cost recovery charges to LRIC stated on a comparable basis.

Table 6 sets forth a comparison of proposed summer and winter seasonal delivery charges by schedule, and summer and winter incremental demand and commodity costs from the LRIC study expressed on a comparable basis. Table 7 shows the derivation of winter and summer incremental costs by rate schedule and by service area. These tables show that at proposed rates, seasonal incremental (trailing) summer commodity rates generally exceed long-run incremental costs, that winter trailing rates for Rates 1, 2, and 3 are lower than long-run incremental costs, and that trailing rates in other schedules are generally at or above long-run incremental costs. These LRIC results indicate that the “2 to 1” winter-summer delivery charge differentials in Rates 1, 2, and 3 should be increased. However, as noted above, BC Gas is proposing to retain the current “2 to 1” delivery charge differential at this time.

Barakat and Chamberlin supports the BC Gas proposal not to change the “2 to 1” differential at this time. We would likely favor closer linkage of seasonal delivery charges and seasonal LRIC under the following conditions:

- Better definition of the bounds of long-term forecast uncertainty captured in LRIC methods; and

- BC Hydro shifts from flat electric rates to seasonally differentiated rates.

We feel that increasing the winter–summer differential at this time would give consumers an even more inconsistent winter price signal than at present<sup>10</sup>, with respect to the overall economic preference for gas relative to electricity for space heating and water heating.

We also recognize that customer acceptance is a significant objective of rate design. Increasing the current differential will tend to adversely affect customer acceptance. In our view, the existing winter–summer differential signals that winter service is more costly than summer service. Increasing the winter–summer differential will not improve the basic signal. More important, increasing the winter–summer differential may inefficiently tilt consumer purchase decisions toward electricity.

### 5.2.3 Interruptible Rates

The BC Gas proposal to decrease interruptible rates generally maintains the current differences (or discounts), in percentage terms, between General Firm Industrial Service rates (Rate 5/25) and Interruptible (Rate 7/27 and 22) rates. We reviewed the proposed discounts from firm industrial service, which will be smaller, to determine if the discounts at proposed rates are reasonable. The relevant average rates are:

Rate	Average Rate	Discount from 5/25
Rate 5/25	\$0.86	
Rate 7/27	\$0.76	\$0.10
Rate 22	\$0.56	\$0.30

Interruptible rates typically reflect a balancing of factors, including:

- The quality of the service. Interruptible service is inferior to firm service, and price would logically reflect that reduction in quality.
- The value to firm customers of the ability to interrupt other customers on the system peak. Interruption can help to avoid construction of peaking

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<sup>10</sup>Because present BC Gas rates are seasonally differentiated, while BC Hydro rates are not seasonally differentiated.

facilities; interruptible discounts can be viewed as a payment for peaking capacity.

- The value of the service to the customer. There are substitutes for natural gas whose prices place a competitive ceiling on the price of natural gas.
- The minimum cost of providing delivery service. It takes a minimum transmission system to provide delivery service; this minimum is frequently expressed as a 100% load factor equivalent rate.

Our evaluation focused first on the differential between Rate 5/25 and Rate 22. We support this differential for the following reason. Rate 5/25 is based on a 65% load factor demand allocation. At 100% load factor, Rate 5/25 equates to \$0.56 per GJ. Thus, the Rate 22 discount is consistent with the minimum cost of providing delivery service.

The differential between Rate 5/25 and Rate 7/27, at \$0.10 per GJ, is clearly smaller than that between Rate 5/25 and Rate 22. Our reasons for supporting this smaller differential are as follows. Rate 7/27 customers receive a higher quality of service due to more liberal balancing provisions as compared to Rate 22. Rate 7/27 customers are smaller than Rate 22 customers. They are likely to place a higher value on gas service because they have fewer practical alternatives to natural gas. Further, we would expect the minimum cost of providing delivery service to be higher than for Rate 22.

#### **5.2.4 Basic Charges**

Generally speaking, customer-related costs in both the FDC and LRIC studies provide support for increasing Rate 1, 2, and 3 basic charges and decreasing basic charges in the other schedules. BC Gas is concerned that smaller-use customers are not carrying their share of system costs, and are therefore being subsidized by larger-use customers. We agree with BC Gas in this regard. BC Gas proposes a three-year phase-in of proposed basic charge increases for Rates 1 and 2. A phase-in is appropriate based on the magnitude of the proposed increases.

The fundamental issue that we considered was the conflict between recognition of customer charges as each customer "paying for" the investment that BC Gas undertakes to provide facilities to that customer, and the commensurate reduction in commodity rates created by increasing customer charges, at a time when LRIC results, if taken at face value, suggest that commodity rates should be higher. As

indicated earlier, we are discounting current LRIC results to some degree, and for this reason, the movement to higher customer charges is reasonable.

## **6.0 SUMMARY AND CONCLUSION**

Barakat and Chamberlin, Inc., has reviewed BC Gas' embedded and marginal cost studies, and rate design proposal. The methods used in the cost allocation studies are based on standard industry approaches, and use a series of cases as a guide to rate design. BC Gas' revenue shift and rate design proposals are consistent with the underlying cost of service studies and appropriately balance the various objectives of rate design. In our opinion, BC Gas' rate design proposal is reasonable and should be adopted by the Commission.

## **LIST OF TABLES**

Table 1:	Summary of Revenue to Cost Ratios Excluding Cost of Gas
Table 2:	Illustration of Increasing Residential Revenue Cost Ratio to 90%
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**Table 1**  
**BC Gas**  
**Summary of Revenue to Cost Ratios Excluding Cost of Gas**

Line No.	Description	Rate Schedule	Coincident Peak Post Phase B Decision	Coincident Peak	Noncoincident Peak	Average and Excess
1	<u>Consolidated</u>					
2	Residential	1	0.90	0.871	0.908	0.916
3	Small Commercial	2	0.95	0.950	1.010	1.031
4	Large Commercial	3	1.00	1.170	1.276	1.283
5	Firm Small Industrial – Captive	5/25	1.12	1.861	2.037	1.840
6	Interr. Small Industrial – Captive	7/27	7.80	8.754	1.714	1.558
7	NGV/VRA	6/6A	0.82	0.678	0.684	0.669
8	Seasonal	4	1.27	1.811	1.582	1.375
9	Firm Small Industrial – Non–Captive	25	1.17	1.278	1.211	1.083
10	Large Industrial Sales	8				
11	Large Indust. T–Service – Captive	22	7.54	18.278	1.649	1.449
12	Large Indust. T–Service – Non–Captive	22		8.793	1.197	1.054
13	Large Indust. T–Service – Captive	22A	1.23	1.112	0.894	0.837
14	Large Indust. T–Service – Non–Captive	22A	1.69	1.928	1.711	1.655
15	Large Indust. T–Service – Captive	22B	0.90	1.155	1.264	1.217
16	Other	22B	2.69	1.278	0.790	0.760
17						
18	Total		1.01	1.000	1.000	1.000
19						
20	<u>Lower Mainland</u>					
21	Residential	1	0.89	0.863	0.904	0.913
22	Small Commercial	2	0.92	0.917	0.983	1.003
23	Large Commercial	3	0.98	1.146	1.258	1.265
24	Firm Small Industrial – Captive	5/25	1.03	1.906	2.015	1.832
25	Interr. Small Industrial – Captive	7/27	7.63	8.909	1.717	1.561
26	NGV/VRA	6/6A	0.99	0.766	0.775	0.755
27	Seasonal	4	1.34	2.210	1.915	1.649
28	Large Industrial Sales	8				
29	Large Indust. T–Service – Captive	22	7.54	18.278	1.649	1.449
30	Large Indust. T–Service – Non–Captive	22		21.057	1.235	1.079
31	Other		2.70	1.277	0.784	0.754
32						
33	Total		1.01	1.001	0.995	0.996
34						
35	<u>Inland</u>					
36	Residential	1	0.93	0.886	0.908	0.915
37	Small Commercial	2	1.05	1.032	1.074	1.095
38	Large Commercial	3	1.13	1.298	1.370	1.373
39	Firm Small Industrial – Captive	5/25	1.27	1.867	2.047	1.836
40	Interr. Small Industrial – Captive	7/27		3.476	1.451	1.341
41	NGV/VRA	6/6A	0.45	0.390	0.391	0.388
42	Seasonal	4	1.20	1.344	1.185	1.041
43	Firm Small Industrial – Non–Captive	25	1.17	1.278	1.211	1.083
44	Large Indust. T–Service – Captive	22A	1.23	1.112	0.894	0.837
45	Large Indust. T–Service – Non–Captive	22A	1.69	1.928	1.711	1.655
46						
47	Total		1.01	0.986	1.001	1.000
48						
49	<u>Coincident Peak – Columbia</u>					
50	Residential	1	0.89	1.002	1.024	1.031
51	Small Commercial	2	1.04	1.157	1.200	1.222
52	Large Commercial	3		1.471	1.543	1.540
53	Firm Small Industrial – Captive	5/25	1.09	1.325	2.290	2.037
54	NGV/VRA	6/6A	0.10	0.341	0.341	0.339
55	Large Indust. T–Service – Captive	22B	0.90	1.155	1.264	1.217
56	Large Indust. T–Service – Non–Captive	22		0.679	0.740	0.713
57	Other		0.97	1.392	1.392	1.392
58						
59	Total		0.93	1.081	1.136	1.134



**Table 2**  
**Analysis of Revenue Alignment by Rate Schedule**  
**Increase Residential Revenue/Cost Ratio to 90%**  
**Coincident Peak Method**

**Schedule 1 RC Ratio = 90%**

Description	Gross Margin	Cost of Service	Cost of Gas	Sales/T-Svc Volume – TJ	Gross Marg \$/GJ	RC Ratio	Rev. @ Adj RC Ratio	Trial Rate (1)	Trial Rev. Shift	% Margin Increase	% Total Increase	New Margin	New RC Ratio
Sched 1	\$202,238	\$232,106	\$188,784	74,174.2	\$2.7265	0.871							
Sched 2	\$45,870	\$48,284	\$57,326	21,368.6	\$2.1466	0.950			\$6,741	3.3%	1.7%	\$208,979	0.900
Sched 3	\$46,386	\$39,654	\$65,994	27,833.0	\$1.6666	1.170	\$46,386	\$1.6666				\$45,870	0.950
Sched 5/25	\$11,448	\$6,151	\$7,027	8,487.2	\$1.3489	1.861	\$8,796	\$1.0364	(\$2,652)	-23.2%	NA	\$46,386	1.170
Sched 7/27	\$7,126	\$814	\$5,841	6,171.3	\$1.1547	8.754		\$0.8872	(\$1,651)	-23.2%	NA	\$8,796	1.430
NGV	\$2,798	\$4,128	\$1,143	855.3	\$3.2714	0.678						\$5,475	6.726
Sched 4	\$468	\$258	\$495	422.8	\$1.1069	1.814						\$2,798	0.678
Non-Capt 25	\$721	\$564	\$2	1,393.1	\$0.5176	1.278						\$468	1.814
Captive 22	\$10,524	\$576	\$8	11,824.2	\$0.8900	18.271		\$0.6839	(\$2,438)	-23.2%	NA	\$721	1.278
Non-Capt 22	\$1,463	\$166	\$2	2,382.9	\$0.6140	8.813		\$0.6140	\$0	0.0%	NA	\$8,086	14.038
Captive 22a	\$4,010	\$3,605	\$28	9,761.4	\$0.4108	1.112						\$1,463	8.813
Non-Capt 22a	\$1,708	\$886	\$17	14,543.4	\$0.1174	1.928						\$4,010	1.112
Non-Capt 22b	\$1,495	\$1,295	\$41	4,353.9	\$0.3434	1.154						\$1,708	1.928
Other	\$10,265	\$8,030	\$19,542	48,871.4	\$0.2100	1.278						\$1,495	1.154
												\$10,265	1.278
Total	\$346,520	\$346,517	\$346,250	232,442.7	\$1.4908				\$0			\$346,520	1.000

(1) Where interruptible/transport rates are in the same proportion to Schedule 5/25 rates as present interruptible/transport rates are to present Schedule 5/25 rates

**BC Gas Utility Ltd.**

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**David M. Masuhara**  
Vice President  
Legal & Regulatory Affairs  
and Secretary



June 17, 1996

British Columbia Utilities Commission  
6th Floor - 900 Howe Street  
Vancouver, British Columbia  
V6Z 2N3

Attention: R.J. Pellatt  
Commission Secretary

Dear Sirs:

**RE: 1996 Rate Design Application**

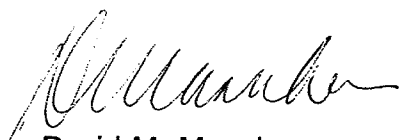
Please find attached additional information to be inserted immediately after Table 2 in Volume 1 under Tab 7 of BC Gas' 1996 Rate Design Application. The tables labelled Tables 2.1, 2.2 and 2.3 provide the revenue to cost ratios under the various margin re-allocation scenarios discussed in the Application.

One copy of all materials attached will be filed with registered intervenors who participated in the BC Gas 1996/1997 Revenue Requirement settlement negotiations under Order G-99-95.

All of which is respectfully submitted.

Yours very truly,

BC GAS UTILITY LTD.



David M. Masuhara

**Table 2.1**  
**Analysis of Revenue Alignment by Rate Schedule**  
**Option 1 – Set Schedule 3/5 = 1.17**  
**Coincident Peak Method**

Schedule 3/5 RC Ratio = 1.17

Description	Gross Margin	Cost of Service	Cost of Gas	Sales/T–Svc Volume – TJ	Gross Marg \$/GJ	RC Ratio	Rev. @ Adj RC Ratio	Trial Rate (1)	Trial 1 Rev. Shift	Respread Rate 3	% Margin Increase	% Total Increase	New Margin	New RC Ratio
Sched 1	\$202,238	\$232,106	\$188,784	74,174.2	\$2.7265	0.871			\$11,152	\$11,152	5.5%	2.9%	\$213,390	0.919
Sched 2	\$45,870	\$48,284	\$57,326	21,368.6	\$2.1466	0.950							\$45,870	0.950
Sched 3	\$46,386	\$39,654	\$65,994	27,833.0	\$1.6666	1.170	\$46,237	\$1.6612	(\$149)		0.0%	0.0%	\$46,386	1.170
Sched 5/25	\$11,448	\$6,151	\$7,027	8,487.2	\$1.3489	1.861	\$7,172	\$0.8450	(\$4,276)	(\$4,334)	-37.9%	-23.5%	\$7,114	1.157
Sched 7/27	\$7,126	\$814	\$5,841	6,171.3	\$1.1547	8.754		\$0.7234	(\$2,662)	(\$2,698)	-37.9%	-20.8%	\$4,428	5.440
NGV	\$2,798	\$4,128	\$1,143	855.3	\$3.2714	0.678							\$2,798	0.678
Sched 4	\$468	\$258	\$495	422.8	\$1.1069	1.814							\$468	1.814
Non–Capt 25	\$721	\$564	\$2	1,393.1	\$0.5176	1.278							\$721	1.278
Captive 22	\$10,524	\$576	\$8	11,824.2	\$0.8900	18.271		\$0.5576	(\$3,931)	(\$3,984)	-37.9%	NA	\$6,540	11.354
Non–Capt 22	\$1,463	\$166	\$2	2,382.9	\$0.6140	8.813		\$0.5576	(\$134)	(\$136)	-9.3%	NA	\$1,327	7.993
Captive 22a	\$4,010	\$3,605	\$28	9,761.4	\$0.4108	1.112							\$4,010	1.112
Non–Capt 22a	\$1,708	\$886	\$17	14,543.4	\$0.1174	1.928							\$1,708	1.928
Non–Capt 22b	\$1,495	\$1,295	\$41	4,353.9	\$0.3434	1.154							\$1,495	1.154
Other	\$10,265	\$8,030	\$19,542	48,871.1	\$0.2100	1.278							\$10,265	1.278
Total	\$346,520	\$346,517	\$346,250	232,442.4	\$1.4908				\$0	\$0			\$346,520	1.000

(1) Where interruptible/transport rates are in the same proportion to Schedule 5/25 rates as present interruptible/transport rates are to present Schedule 5/25 rates

**Table 2.2**  
**Analysis of Revenue Alignment by Rate Schedule**  
**Option 2 – Set Schedule 3/5 RC Ratio = 1.10**  
**Coincident Peak Method**

Schedule 3/5 RC Ratio = 1.10

Description	Gross Margin	Cost of Service	Cost of Gas	Sales/T–Svc Volume – TJ	Gross Marg \$/GJ	RC Ratio	Rev. @ Adj RC Ratio	Trial Rate (1)	Trial Rev. Shift	% Margin Increase	% Total Increase	New Margin	New RC Ratio
Sched 1	\$202,238	\$232,106	\$188,784	74,174.2	\$2.7265	0.871			\$14,876	7.4%	3.8%	\$217,114	0.935
Sched 2	\$45,870	\$48,284	\$57,326	21,368.6	\$2.1466	0.950	1.1					\$45,870	0.950
Sched 3	\$46,386	\$39,654	\$65,994	27,833.0	\$1.6666	1.170	\$43,619	\$1.5672	(\$2,767)	–6.0%	–2.5%	\$43,619	1.100
Sched 5/25	\$11,448	\$6,151	\$7,027	8,487.2	\$1.3489	1.861	\$6,766	\$0.7972	(\$4,682)	–40.9%	–25.3%	\$6,766	1.100
Sched 7/27	\$7,126	\$814	\$5,841	6,171.3	\$1.1547	8.754		\$0.6825	(\$2,914)	–40.9%	–22.5%	\$4,212	5.174
NGV	\$2,798	\$4,128	\$1,143	855.3	\$3.2714	0.678						\$2,798	0.678
Sched 4	\$468	\$258	\$495	422.8	\$1.1069	1.814						\$468	1.814
Non–Capt 25	\$721	\$564	\$2	1,393.1	\$0.5176	1.278						\$721	1.278
Captive 22	\$10,524	\$576	\$8	11,824.2	\$0.8900	18.271		\$0.5260	(\$4,304)	–40.9%	NA	\$6,220	10.799
Non–Capt 22	\$1,463	\$166	\$2	2,382.9	\$0.6140	8.813		\$0.5260	(\$210)	–14.3%	NA	\$1,253	7.551
Captive 22a	\$4,010	\$3,605	\$28	9,761.4	\$0.4108	1.112						\$4,010	1.112
Non–Capt 22a	\$1,708	\$886	\$17	14,543.4	\$0.1174	1.928						\$1,708	1.928
Non–Capt 22b	\$1,495	\$1,295	\$41	4,353.9	\$0.3434	1.154						\$1,495	1.154
Other	\$10,265	\$8,030	\$19,542	48,871.1	\$0.2100	1.278						\$10,265	1.278
Total	\$346,520	\$346,517	\$346,250	232,442.4	\$1.4908				\$0			\$346,520	1.000

(1) Where interruptible/transport rates are in the same proportion to Schedule 5/25 rates as present interruptible/transport rates are to present Schedule 5/25 rates

**Table 2.3**  
**Analysis of Revenue Alignment by Rate Schedule**  
**Option 3 – Set Schedule 5 RC Ratio = 1.30**  
**Coincident Peak Method**

**Schedule 5 RC Ratio = 1.300**

Description	Gross Margin	Cost of Service	Cost of Gas	Sales/T–Svc Volume – TJ	Gross Marg \$/GJ	RC Ratio	Rev. @ Adj RC Ratio	Trial Rate (1)	Trial Rev. Shift	% Margin Increase	% Total Increase	New Margin	New RC Ratio
Sched 1	\$202,238	\$232,106	\$188,784	74,174.2	\$2.7265	0.871			\$8,773	4.3%	2.2%	\$211,011	0.909
Sched 2	\$45,870	\$48,284	\$57,326	21,368.6	\$2.1466	0.950						\$45,870	0.950
Sched 3	\$46,386	\$39,654	\$65,994	27,833.0	\$1.6666	1.170	\$46,386	\$1.6666	\$0	0.0%	0.0%	\$46,386	1.170
Sched 5/25	\$11,448	\$6,151	\$7,027	8,487.2	\$1.3489	1.861	\$7,996	\$0.9422	(\$3,452)	-30.2%	-18.7%	\$7,996	1.300
Sched 7/27	\$7,126	\$814	\$5,841	6,171.3	\$1.1547	8.754		\$0.8065	(\$2,149)	-30.2%	-16.6%	\$4,977	6.115
NGV	\$2,798	\$4,128	\$1,143	855.3	\$3.2714	0.678						\$2,798	0.678
Sched 4	\$468	\$258	\$495	422.8	\$1.1069	1.814						\$468	1.814
Non–Capt 25	\$721	\$564	\$2	1,393.1	\$0.5176	1.278						\$721	1.278
Captive 22	\$10,524	\$576	\$8	11,824.2	\$0.8900	18.271		\$0.6217	(\$3,173)	-30.2%	NA	\$7,351	12.762
Non–Capt 22	\$1,463	\$166	\$2	2,382.9	\$0.6140	8.813		\$0.6140	\$0	0.0%	NA	\$1,463	8.813
Captive 22a	\$4,010	\$3,605	\$28	9,761.4	\$0.4108	1.112						\$4,010	1.112
Non–Capt 22a	\$1,708	\$886	\$17	14,543.4	\$0.1174	1.928						\$1,708	1.928
Non–Capt 22b	\$1,495	\$1,295	\$41	4,353.9	\$0.3434	1.154						\$1,495	1.154
Other	\$10,265	\$8,030	\$19,542	48,871.1	\$0.2100	1.278						\$10,265	1.278
Total	\$346,520	\$346,517	\$346,250	232,442.4	\$1.4908				\$0			\$346,520	1.000

(1) Where interruptible/transport rates are in the same proportion to Schedule 5/25 rates as present interruptible/transport rates are to present Schedule 5/25 rates

**Table 3**  
**BC Gas**  
**Analysis of Revenue Realignment by Rate Schedule**  
**Summary of Options**

	Option 1	Option 2	Option 3
Residential	Sched 3/5/25	Sched 3/5/25	Sched 5/25
RC Ratio = .9	RC Ratio = 1.17	RC Ratio = 1.10	RC Ratio = 1.3

**Amount – M\$**

Residential	Rate 1	\$6,741	\$11,152	\$14,876	\$8,773
Large Commercial	Rate 3	\$0	\$0	(\$2,767)	\$0
Firm Industrial	Rate 5/25	(\$2,652)	(\$4,334)	(\$4,682)	(\$3,452)
Interruptible	Rate 7/27	(\$1,651)	(\$2,698)	(\$2,914)	(\$2,149)
Transportation	Rate 22C	(\$2,438)	(\$3,984)	(\$4,304)	(\$3,173)
Transportation	Rate 22NC	\$0	(\$136)	(\$210)	\$0

**Percent Excl. Cost of Gas)**

Residential	Rate 1	3.3%	5.5%	7.4%	4.3%
Large Commercial	Rate 3	0.0%	0.0%	-6.0%	0.0%
Firm Industrial	Rate 5/25	-23.2%	-37.9%	-40.9%	-30.2%
Interruptible	Rate 7/27	-23.2%	-37.9%	-40.9%	-30.2%
Transportation	Rate 22C	-23.2%	-37.9%	-40.9%	-30.2%
Transportation	Rate 22NC	0.0%	-9.3%	-14.3%	0.0%

**Percent (Incl. Cost of Gas)**

Residential	Rate 1	1.7%	2.9%	3.8%	2.2%
Large Commercial	Rate 3	0.0%	0.0%	-2.5%	0.0%
Firm Industrial	Rate 5/25	NA	NA	NA	NA
Interruptible	Rate 7/27	NA	NA	NA	NA
Transportation	Rate 22C	NA	NA	NA	NA
Transportation	Rate 22NC	NA	NA	NA	NA

**Table 4**  
**BC Gas**  
**Summary of Long-Run Incremental Cost Results**

<u>Demand Costs</u>	Peak Day \$/GJ
Peak Day Supply	\$53
Transmission	\$40
Distribution	\$47
Total	\$140

<u>Supply Costs</u>	\$/GJ		
	Annual	Winter	Summer
Commodity	\$0.95	\$1.08	\$0.70
Demand-related	\$0.77	\$0.77	\$0.77
Total	\$1.72	\$1.85	\$1.47

<u>Customer Costs</u>	\$/Cust	
	Annual	Monthly
Rate 1	\$251	\$21
Rate 2	\$269	\$22
Rate 3	\$628	\$52

**Table 5**  
**Analysis of Incremental Cost Revenues vs. Revenue at Present Rates**  
**Excluding Incremental Customer Costs and Basic Charge Revenues**  
**Residential, Small and Large Commercial**

Description	Increm. Measures		Incremental Costs			Incremental Demand and Commodity Revenue				Revenue @ Proposed Rates			Increm. Cost Exceeds Revenue	
	Sales/Trans	Peak Day	Peak	Commod-Re	Commodity	Peak	Commod-Re	Commodity	Total	Total	Cust Chg	Excl.	Amount	Percent
	Volume	Respons. (1)	Dem	Dem. Cost		Demand	Demand			M\$	M\$	Cust Chg		
	TJ	GJ	Cost	0.77		M\$	M\$	M\$	M\$			M\$		
<b>Margin Plus Gas Supply</b>														
Rate 1	74,174.2	687,398	\$140	\$2.5975	\$0.95	96,236	192,664	70,465	359,365	402,222	\$68,182	\$334,040	\$25,325	7.58%
Rate 2	21,368.6	213,701	\$140	\$2.8030	\$0.95	29,918	59,896	20,300	110,114	103,196	\$11,914	\$91,282	\$18,832	20.63%
Rate 3	27,833.0	229,688	\$140	\$2.3130	\$0.95	32,156	64,377	26,441	122,975	112,380	\$5,496	\$106,884	\$16,091	15.05%



**Table 6**  
**BC Gas**  
**Summary of Trailing Rates Versus Incremental Capacity and Gas Supply Costs**

**Proposed Rates**

		Summer			Winter		
		Trailing Rate Per Tariff \$/GJ	Increm. Cost \$/GJ	Trailing Rate as % of Cost	Trailing Rate Per Tariff \$/GJ	Increm. Cost \$/GJ	Trailing Rate as % of Cost
<b>Lower Mainland</b>							
Residential	1	\$3.785	\$3.319	114.05%	\$4.979	\$5.614	88.68%
Small Commercial	2	\$3.702	\$3.527	104.96%	\$4.669	\$5.970	78.21%
Large Commercial	3	\$3.312	\$3.027	109.41%	\$4.231	\$5.267	80.34%
Seasonal	4	\$1.686	\$1.226	137.56%	\$6.232	\$6.567	94.90%
General Firm Service	5	\$2.532	\$1.913	132.35%	\$3.062	\$3.560	86.02%
NGV	6	\$3.663	\$1.488	246.09%	\$3.663	\$2.810	130.37%
Interr. Sales Service	7	\$1.870	\$0.700	267.14%	\$2.120	\$1.080	196.30%
Large Interr Transport	22	\$0.340	ERR	ERR	\$0.670	\$0.000	
Firm Transport Service	25	\$0.520	\$0.000		\$1.050	\$0.778	135.05%
Interr Transport Service	27	\$0.520	ERR	ERR	\$0.770	\$0.000	
<b>Inland</b>							
Residential	1	\$3.598	\$3.262	110.29%	\$4.792	\$5.4720	87.57%
Small Commercial	2	\$3.502	\$3.466	101.03%	\$4.469	\$5.7724	77.42%
Large Commercial	3	\$3.144	\$2.977	105.60%	\$4.063	\$5.0800	79.98%
Seasonal	4	\$1.635	\$1.214	134.64%	\$5.858	\$6.5672	89.20%
General Firm Service	5	\$2.400	\$1.887	127.19%	\$2.930	\$3.4365	85.26%
NGV	6	\$3.597	\$1.472	244.44%	\$3.597	\$2.7767	129.54%
Interr. Sales Service	7	\$2.370	ERR	ERR	\$2.620	\$1.0800	242.59%
Large Interr Transport	22	\$0.340	\$0.000		\$0.670	\$0.6013	111.42%
Firm Transport Service	25	\$0.520	\$0.000		\$1.050	\$0.7732	135.79%
<b>Columbia</b>							
Residential	1	\$3.627	\$3.293	110.14%	\$4.821	\$5.546	86.93%
Small Commercial	2	\$3.531	\$3.499	100.90%	\$4.498	\$5.844	76.97%
Large Commercial	3	\$3.169	\$3.005	105.47%	\$4.088	\$5.141	79.52%
General Firm Service	5	\$2.416	\$1.901	127.08%	\$2.946	\$3.416	86.23%
NGV	6	\$3.608	\$1.481	243.66%	\$3.608	\$2.686	134.33%
Large Firm Transport	22	\$0.340	\$0.000		\$0.670	\$0.797	84.07%
Firm Transport Service	25	\$0.520	\$0.000		\$1.050	\$1.929	54.45%

**Table 7**  
**BC Gas**  
**Analysis of Seasonal Rates**  
**Summary of Incremental Rates Versus Incremental Capacity and Gas Supply Cost**  
**Winter**

**Proposed Rates**

Proposed Rates		Trailing Rate Per Tariff \$/GJ	Incram. Demand Cost		Winter Season LF (2) %	Applicable Days (3)	Winter Applicable Units GJ	BC Gas Incram. Cost \$/GJ	Incram. Supply Cost			Total Incram Cos \$/GJ	Rate as % of Cost \$/GJ
			BC Gas Only						Peak Capacity(4) \$/GJ	Seasonal Capacity(4) \$/GJ	Commod(5) \$/GJ		
			Demand \$/GJ (1)	Commodity \$/GJ (1)									
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(g)+(h)+(i) +(j)	(l) (a)/(l)
Lower Mainland		Rate					(d)*(e)	(b)/(f) + (c)					
Residential	1	\$4.979	\$87.00	\$0.000	48.4%	151	73.1	\$1.190	\$0.7252	\$2.6187	\$1.0800	\$5.614	88.68%
Small Commercial	2	\$4.669	\$87.00	\$0.000	45.0%	151	67.9	\$1.282	\$0.7808	\$2.8271	\$1.0800	\$5.970	78.21%
Large Commercial	3	\$4.231	\$87.00	\$0.000	49.9%	151	75.3	\$1.155	\$0.7039	\$2.3273	\$1.0800	\$5.267	80.34%
Seasonal	4	\$6.232	\$87.00	\$0.000	10.5%	151	15.9	\$5.487	\$0.0000	\$0.0000	\$1.0800	\$6.567	94.90%
General Firm Service	5	\$3.062	\$87.00	\$0.000	73.2%	151	110.5	\$0.787	\$0.4796	\$1.2130	\$1.0800	\$3.560	86.02%
NGV	6	\$3.663	\$87.00	\$0.000	98.5%	151	148.7	\$0.585	\$0.3563	\$0.7885	\$1.0800	\$2.810	130.37%
Interr. Sales Service	7	\$2.120	\$0.00	\$0.000 NA		151	0.0	\$0.000	\$0.0000	\$0.0000	\$1.0800	\$1.080	196.30%
Large Interr Transport	22	\$0.670	\$0.00	\$0.000 NA		151	0.0	\$0.000	\$0.0000	\$0.0000	\$0.0000	\$0.000	ERR
Firm Transport Service	25	\$1.050	\$87.00	\$0.000	74.1%	151	111.9	\$0.778	\$0.0000	\$0.0000	\$0.0000	\$0.778	135.05%
Interr Transport Service	27	\$0.770	\$0.00	\$0.000 NA		151	0.0	\$0.000	\$0.0000	\$0.0000	\$0.0000	\$0.000	ERR
Inland													
Residential	1	\$4.792	\$87.00	\$0.000	50.7%	151	76.5	\$1.137	\$0.6926	\$2.5624	\$1.0800	\$5.472	87.57%
Small Commercial	2	\$4.469	\$87.00	\$0.000	48.1%	151	72.7	\$1.197	\$0.7291	\$2.7664	\$1.0800	\$5.772	77.42%
Large Commercial	3	\$4.063	\$87.00	\$0.000	53.8%	151	81.3	\$1.071	\$0.6522	\$2.2773	\$1.0800	\$5.080	79.98%
Seasonal	4	\$5.858	\$87.00	\$0.000	10.5%	151	15.9	\$5.487	\$0.0000	\$0.0000	\$1.0800	\$6.567	89.20%
General Firm Service	5	\$2.930	\$87.00	\$0.000	79.3%	151	119.7	\$0.727	\$0.4427	\$1.1870	\$1.0800	\$3.436	85.26%
NGV	6	\$3.597	\$87.00	\$0.000	100.2%	151	151.3	\$0.575	\$0.3502	\$0.7715	\$1.0800	\$2.777	129.54%
Interr. Sales Service	7	\$2.620	\$0.00	\$0.000 NA		151	0.0	\$0.000	\$0.0000	\$0.0000	\$1.0800	\$1.080	242.59%
Large Firm Transport	22	\$0.670	\$87.00	\$0.000	95.8%	151	144.7	\$0.601	\$0.0000	\$0.0000	\$0.0000	\$0.601	111.42%
Firm Transport Service	25	\$1.050	\$87.00	\$0.000	74.5%	151	112.5	\$0.773	\$0.0000	\$0.0000	\$0.0000	\$0.773	135.79%
Columbia													
Residential	1	\$4.821	\$87.00	\$0.000	49.52%	151	74.8	\$1.164	\$0.7089	\$2.5931	\$1.0800	\$5.546	86.93%
Small Commercial	2	\$4.498	\$87.00	\$0.000	47.19%	151	71.3	\$1.221	\$0.7437	\$2.7995	\$1.0800	\$5.844	76.97%
Large Commercial	3	\$4.088	\$87.00	\$0.000	52.79%	151	79.7	\$1.091	\$0.6649	\$2.3045	\$1.0800	\$5.141	79.52%
General Firm Service	5	\$2.946	\$87.00	\$0.000	81.68%	151	123.3	\$0.705	\$0.4297	\$1.2012	\$1.0800	\$3.416	86.23%
NGV	6	\$3.608	\$87.00	\$0.000	112.37%	151	169.7	\$0.513	\$0.3124	\$0.7808	\$1.0800	\$2.686	134.33%
Large Firm Transport	22	\$0.670	\$87.00	\$0.000	72.29%	151	109.2	\$0.797	\$0.0000	\$0.0000	\$0.0000	\$0.797	84.07%
Firm Transport Service	25	\$1.050	\$87.00	\$0.000	29.88%	151	45.1	\$1.929	\$0.0000	\$0.0000	\$0.0000	\$1.929	54.45%

(1) From incremental cost study

(2) Based on annual average peak day load factors shown in BC Gas' Supply Cost Flow Through Application and 1996 Forecasted Sales/Transportation, except that Sched. 4 LF is imputed.

(3) November 1 through March 31

(4) Incremental gas supply demand charges (incl. UAF) spread over sales @ winter season load factor

(5) Incremental gas supply commodity cost plus company use gas

**Table 7 (Cont.)**  
**BC Gas**  
**Analysis of Trailing Rates vs. Incremental Capacity and Gas Supply Cost**  
**Summer**

**Proposed Rates**

Proposed Rates		Trailing Rate Per Tariff \$/GJ	Incr. Demand Cost		Peak Day LF (2) %	Applicable Days (3)	Applicable Units GJ	Incr. Cost \$/GJ	Incr. Supply Cost			Total Incr Cost \$/GJ	Rate as % of Cost \$/GJ
			BC Gas Only						Peak Capacity(4) \$/GJ	Cost of Gas Dem(4) \$/GJ	Cost of Gas Commod(5) \$/GJ		
			Demand \$/GJ (1)	Commodity \$/GJ (1)									
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
		(d)*(e) (b)/(f) + (c) (g)+(h)+(i)+(j) (a)/(l)											
Lower Mainland		Rate											
Residential	1	\$3.785	\$0.00	\$0.000	17.2%	214	36.8	\$0.000	\$0.000	\$2.6187	\$0.700	\$3.319	114.05%
Small Commercial	2	\$3.702	\$0.00	\$0.000	15.9%	214	33.9	\$0.000	\$0.000	\$2.8271	\$0.700	\$3.527	104.96%
Large Commercial	3	\$3.312	\$0.00	\$0.000	22.6%	214	48.4	\$0.000	\$0.000	\$2.3273	\$0.700	\$3.027	109.41%
Seasonal	4	\$1.686	\$0.00	\$0.000	100.0%	214	214.0	\$0.000	\$0.000	\$0.5257	\$0.700	\$1.226	137.56%
General Firm Service	5	\$2.532	\$0.00	\$0.000	59.2%	214	126.7	\$0.000	\$0.000	\$1.2130	\$0.700	\$1.913	132.35%
NGV	6	\$3.663	\$0.00	\$0.000	101.1%	214	216.3	\$0.000	\$0.000	\$0.7885	\$0.700	\$1.488	246.09%
Interr. Sales Service	7	\$1.870	\$0.00	\$0.000	100.0%	214	214.0	\$0.000	\$0.000	\$0.0000	\$0.700	\$0.700	267.14%
Large Interr Transport	22	\$0.340	\$0.00	\$0.000	NA	214	0.0	ERR	\$0.000	\$0.0000	\$0.000	ERR	ERR
Firm Transport Service	25	\$0.520	\$0.00	\$0.000	61.6%	214	131.7	\$0.000	\$0.000	\$0.0000	\$0.000	\$0.000	ERR
Interr Transport Service	27	\$0.520	\$0.00	\$0.000	NA	214	0.0	ERR	\$0.000	\$0.0000	\$0.000	ERR	ERR
Inland													
Residential	1	\$3.598	\$0.00	\$0.00	15.6%	214	33.4	\$0.000	\$0.000	\$2.5624	\$0.700	\$3.262	110.29%
Small Commercial	2	\$3.502	\$0.00	\$0.00	13.6%	214	29.1	\$0.000	\$0.000	\$2.7664	\$0.700	\$3.466	101.03%
Large Commercial	3	\$3.144	\$0.00	\$0.00	19.8%	214	42.4	\$0.000	\$0.000	\$2.2773	\$0.700	\$2.977	105.60%
Seasonal	4	\$1.635	\$0.00	\$0.00	255.8%	214	547.5	\$0.000	\$0.000	\$0.5144	\$0.700	\$1.214	134.64%
General Firm Service	5	\$2.400	\$0.00	\$0.00	54.9%	214	117.5	\$0.000	\$0.000	\$1.1870	\$0.700	\$1.887	127.19%
NGV	6	\$3.597	\$0.00	\$0.00	99.8%	214	213.7	\$0.000	\$0.000	\$0.7715	\$0.700	\$1.472	244.44%
Interr. Sales Service	7	\$2.370	\$0.00	\$0.00	NA	214	0.0	ERR	\$0.000	\$0.0000	\$0.700	ERR	ERR
Large Interr Transport	22	\$0.340	\$0.00	\$0.00	80.7%	214	172.8	\$0.000	\$0.000	\$0.0000	\$0.000	\$0.000	ERR
Firm Transport Service	25	\$0.520	\$0.00	\$0.00	48.0%	214	102.7	\$0.000	\$0.000	\$0.0000	\$0.000	\$0.000	ERR
Columbia													
Residential	1	\$3.627	\$0.00	\$0.00	16.4%	214	35.1	\$0.000	\$0.000	\$2.5931	\$0.700	\$3.293	110.14%
Small Commercial	2	\$3.531	\$0.00	\$0.00	14.3%	214	30.5	\$0.000	\$0.000	\$2.7995	\$0.700	\$3.499	100.90%
Large Commercial	3	\$3.169	\$0.00	\$0.00	20.5%	214	44.0	\$0.000	\$0.000	\$2.3045	\$0.700	\$3.005	105.47%
General Firm Service	5	\$2.416	\$0.00	\$0.00	53.2%	214	113.9	\$0.000	\$0.000	\$1.2012	\$0.700	\$1.901	127.08%
NGV	6	\$3.608	\$0.00	\$0.00	91.3%	214	195.3	\$0.000	\$0.000	\$0.7808	\$0.700	\$1.481	243.66%
Large Firm Transport	22	\$0.340	\$0.00	\$0.00	49.0%	214	104.8	\$0.000	\$0.000	\$0.0000	\$0.000	\$0.000	ERR
Firm Transport Service	25	\$0.520	\$0.00	\$0.00	31.6%	214	67.6	\$0.000	\$0.000	\$0.0000	\$0.000	\$0.000	ERR

- (1) Sum of Delivery Charge and Gas Cost Recovery Charge  
(2) From incremental cost study  
(2) Based on annual average peak day load factors shown in BC Gas' Supply Cost Flow Through Application and 1996 Forecasted Sales/Transportation, except that Sched. 4 LF is imputed.  
(3) April 1 through October 31  
(4) Incremental gas supply demand charges spread sales @ summer season load factor  
(5) Incremental gas supply commodity cost plus company use gas

**BC GAS UTILITY LTD.**  
**WRITTEN EVIDENCE OF**  
**P.D. LLOYD**

1       **Q.**    Mr. Lloyd, what is your present position with BC Gas?

2  
3       **A.**    I am the Executive Vice President, Customer Operations,  
4               a position I have held since the spring of 1995.

5  
6       **Q.**    Please describe your background and qualifications.

7  
8       **A.**    I was born and raised in northern B.C. I graduated from  
9               the University of Victoria in Mathematics and Economics.  
10              I subsequently graduated from York University with Joint  
11              LLB/MBA degrees in 1979. I have worked for the utility  
12              since 1980 in the areas of law, corporate development,  
13              regulation, gas supply, and resource planning. In 1994  
14              I was Executive Vice President, Finance and  
15              Administration. In my current position I am responsible  
16              for all whose activities that touch the customer being  
17              Customer Services, Distribution Services, Technical  
18              Services, and Management Information & Administration  
19              Systems.

20  
21       **Q.**    Have you served in other industry related positions?

22  
23       **A.**    Yes, I am presently a Director on the Board of the  
24               Canadian Gas Association.

25  
26       **Q.**    Mr. Lloyd, have you previously testified before this  
27               Commission?

28  
29       **A.**    Yes, numerous times since 1992.

30  
31       **Q.**    What is the purpose of your appearance in this matter?

32  
33       **A.**    I will appear as a policy witness on the matters set out

1 in the application.

2

3 Q. Does this conclude your testimony?

4

5 A. Yes.

**BC GAS UTILITY LTD.**  
**WRITTEN EVIDENCE OF**  
**DAVID M. MASUHARA**

1       **Q.**    Mr. Masuhara, what is your present position with BC Gas?

2  
3       **A.**    I am Vice President, Legal and Regulatory Affairs and  
4               Secretary. At BC Gas I am the executive responsible for  
5               legal, regulatory and environmental affairs. Also, I am  
6               responsible for the corporate secretarial function.

7  
8       **Q.**    Please describe your background and qualifications.

9  
10      **A.**    I was born and raised in Vancouver. I received a  
11             Bachelor of Commerce degree from the University of  
12             British Columbia in 1979, and a Bachelor of Laws degree  
13             from the University of British Columbia in 1982.

14  
15            I am a member of various legal and gas industry  
16            associations.

17  
18      **Q.**    Have you previously testified before any regulatory  
19             authorities?

20  
21      **A.**    Yes, I have testified before this Commission and the  
22             National Energy Board. As well, I have appeared as  
23             counsel before various tribunals.

24  
25      **Q.**    What is the purpose of your appearance?

26  
27      **A.**    The purpose of my appearance is to be a policy witness  
28             for the Company.

29  
30      **Q.**    Please describe the genesis of this application?

1     **A.**    In 1993 BC Gas filed its Phase B Rate Design Application.  
2            That application was the first to deal with the rates of  
3            BC Gas as they relate to the Company's cost of service  
4            margin. The hearing respecting the Phase B Rate Design  
5            Application took place in the summer of 1993 and the  
6            Commission's Phase B Rate Design Decision is dated  
7            October 25, 1993. Rates reflecting the Commission's  
8            Decision were implemented for industrial customers on  
9            November 1, 1993 and for other customers on January 1,  
10           1994.

11  
12           Rate design requires periodic review. This is  
13           particularly so at the present time when the natural gas  
14           industry is poising itself to meet increasing competition  
15           and when restructuring and deregulation of the electric  
16           industry is occurring across North America. BC Gas  
17           continued to review rate design issues following the  
18           Commission's Phase B Decision. BC Gas also became aware  
19           of the views of some industrial customers that further  
20           rate restructuring should take place.

21  
22           In July 1995 BC Gas filed a Revenue Requirement  
23           Application. The Company's revenue requirements for 1996  
24           and 1997 were the subject of settlement negotiations with  
25           intervenors and Commission staff. As part of that  
26           settlement process BC Gas agreed to file this rate design  
27           application. The Company agreed to conduct a review of  
28           its rate structures and also a review of revenue to cost  
29           ratios to determine whether a redesign of rates was  
30           warranted.

31  
32     **Q.**    Does the rate structure proposed in this Application  
33           generally follow the rate structure approved by the  
34           Commission in its Phase B Rate Design Decision?

1       A.    Yes. We have continued with the consolidated approach to  
2            rates that was approved by the Commission in 1993. In  
3            the 1993 rate design proceedings there was examination of  
4            the costs in the three Divisions, or service areas, of  
5            BC Gas that represented the service areas of the  
6            companies (other than Fort Nelson Gas Limited) which had  
7            amalgamated to form BC Gas.

8  
9            It should be noted that from an operational perspective  
10           distinctions between the service areas of the former  
11           companies are no longer applicable. As was discussed in  
12           the workshops relating to the Revenue Requirement  
13           Application of the Company filed in 1995, BC Gas has  
14           restructured its organization into business units which  
15           do not operate by the geographic regions bound by the  
16           former corporate boundaries. We believe that a  
17           consolidated approach to cost of service is appropriate  
18           as it better reflects the manner in which the company  
19           operates.

20  
21       Q.    What was examined in the studies undertaken for this  
22            application?

23  
24       A.    Similar to the Company's approach in the Phase B  
25            Application, we examined whether the current customer  
26            rates recovered embedded cost. As well, the relationship  
27            between current rates and long run incremental costs were  
28            examined. The relative position of natural gas vis-a-vis  
29            other energy forms was also considered.

30  
31       Q.    Please comment on the finding of those studies?

32  
33       A.    The findings were similar to those in the studies  
34            undertaken for the 1993 Phase B Application. The  
35            embedded cost of service studies (particularly the  
36            coincident peak method) indicate that the residential



1 class has revenue to cost ratios less than unity and that  
2 several industrial classes have revenue to cost ratios  
3 higher than unity.  
4

5 The studies were not viewed as being definitive, as in  
6 virtually all rate design reviews, judgment was  
7 exercised; as clearly there exists no precise standards  
8 to apply. This Application represents a balancing of  
9 many interests; including but not limited to: fairness,  
10 economic efficiency, stability, customer impacts, and  
11 recovery of the Company's revenue requirement.  
12

13 Q. The Application seeks to reallocate revenues from certain  
14 industrial rates to residential rates. What was  
15 considered in preparing this proposal?  
16

17 A. We examined the structure of our rates and sought to  
18 align them with costs as reasonably as possible. Rate  
19 re-balancing typically leads to an increase in cost  
20 allocations from one group of customers to another, and  
21 therefore the Company was also sensitive to limiting  
22 impacts from a shift in costs.  
23

24 The Company recognized that a significant reduction was  
25 indicated for certain industrial classes. Consistent  
26 with the revenue neutral nature of rate design a  
27 commensurate shift to the residential class was  
28 indicated. The approach taken by the Company to arrive  
29 at a fair balance was to consider rate impacts in  
30 addition to revenue to cost ratios. An iterative process  
31 was undertaken which resulted in approximately a 3%  
32 increase in the delivered cost of gas to the residential  
33 class. This was considered reasonable in the  
34 circumstances.

1 The desire to limit impacts is why certain classes remain  
2 outside the +/- 10% revenue to cost zone of  
3 reasonableness often referred to by regulators. In this  
4 Application the Company has tried to strike a balance  
5 and, given the significant reduction to certain  
6 industrial classes, we believe that it is not unfair for  
7 some customer classes to have revenue to cost ratios  
8 above 110% in the present circumstances.

9  
10 Q. Does BC Gas expect any other events which will effect the  
11 overall costs paid by residential customers?

12  
13 A. BC Gas anticipates a reduction in gas commodity costs for  
14 1997. Although this is independent from rate design, it  
15 may serve to mitigate the impact of the re-allocation of  
16 costs to the residential customer class.

17  
18 Q. The Application contains a proposal to increase the Basic  
19 Charge for the residential and commercial customers  
20 (Rates 1, 2 and 3). Why is the Company making this  
21 proposal?

22  
23 A. We reviewed cost allocation within classes as well as the  
24 cost recovery from each class of customer. The increase  
25 in the Basic Charges for Rate 1 and 2 customers is an  
26 attempt to achieve a more equitable recovery of costs  
27 from customers by more closely aligning revenues with the  
28 largely fixed nature of the Company's costs. The  
29 increase in the Basic Charge for Rate 3 customers also  
30 arises from potential customer movements between Rates 2  
31 and 3. The increases to the Basic Charges are discussed  
32 in greater detail in one material under Tab 4 of Volume  
33 1.

34  
35 Q. How was the LRIC study used in developing the proposed  
36 rates?

1       A.    The LRIC study indicates that the current seasonal rate  
2            differentials for Rate 1, 2, and 3 does not require  
3            change. In addition, the LRIC was used in conjunction  
4            with the FDC to establish the proposed changes to the  
5            basic charges for Rate 1 and 2.

6  
7       Q.    What is the proposed effective date for the rate and  
8            tariff changes contained in this Application?

9  
10      A.    The proposed effective date for the industrial terms and  
11            conditions is November 1, 1996 and an effective date of  
12            January 1, 1997 for all other proposed rates and tariffs.

13  
14      Q.    Are you concerned about effects that are not forecast in  
15            this Application?

16  
17      A.    Yes, we have a concern respecting the possibility of  
18            customers shifting between rate classes as a result of  
19            the proposed changes. To the extent this occurs and  
20            affects the revenue neutrality of this Application, a  
21            deferral account is requested.

22  
23      Q.    In the settlement of the Revenue Requirement Application  
24            filed in 1995, the revenue requirement increase  
25            applicable to non-core customers for 1996 was deferred by  
26            50%. What is the position of BC Gas respecting that  
27            deferral?

28  
29      A.    The relevant passage is found in Section 11 of the Terms  
30            of Settlement which states:

31  
32               50% of the non-core revenue requirement gross  
33               margin increase for 1996 will be deferred (see  
34               Appendix B, page 1-01-02, line 32). BC Gas  
35               will establish an account to record this  
36               deferral and the disposition of the deferred

1 amount will be determined in the rate design  
2 hearing of BC Gas which is to occur in 1996.  
3 The deferral of 50% of the non-core revenue  
4 requirement gross margin increase and the  
5 establishment of the deferral account shall  
6 not be considered as a pre-judgment of the  
7 results of the rate design hearing and is  
8 without prejudice to positions that may be  
9 advanced at the rate design hearing by any of  
10 the parties to the negotiations.  
11

12 It is the position of BC Gas that the deferred amount  
13 should be recovered from the non-core customer group over  
14 one year commencing January 1, 1997. If the Commission  
15 agrees a rider on industrial rates will be added to the  
16 rates set out in this Application.  
17

18 Q. What process does the Company recommend for this  
19 Application?  
20

21 A. It is the view of BC Gas that efforts to increase the  
22 knowledge level of interested parties in an application  
23 has yielded considerable benefits when compared to the  
24 traditional adversarial mode. To this end BC Gas seeks  
25 the Commission's assistance to formalize a process for  
26 pre-hearing conferences, workshops and negotiation  
27 sessions with the objective of providing interested  
28 parties with greater understanding of this Application,  
29 identifying issues, and reaching resolution if possible,  
30 prior to a formal hearing before the Commission.  
31

32 Q. Does this conclude your written evidence?  
33

34 A. Yes.

**BC GAS UTILITY LTD.**  
**WRITTEN EVIDENCE OF**  
**DIETZ D. KELLMANN**

1     **Q.**    Please identify yourself and your title at BC Gas.

2  
3     **A.**    My name is Dietz Kellmann. I am Manager, Rate Design.

4  
5     **Q.**    Please state your academic and business experience.

6  
7     **A.**    I am a graduate of the University of Western Ontario with  
8            Bachelors and Masters degrees in Economics. I joined BC  
9            Gas in July 1991 as Rate Design Supervisor. Prior to  
10           joining BC Gas, I was employed by the National Energy  
11           Board in Ottawa in its Economic Analysis Group from March  
12           1989 to July 1991.

13  
14    **Q.**    Please describe your professional affiliations.

15  
16    **A.**    I am a member of the Association of Professional  
17           Economists of British Columbia and the Pacific Coast Gas  
18           Association.

19  
20    **Q.**    Have you appeared as a witness before any regulatory  
21           authorities?

22  
23    **A.**    Yes, I have testified before the British Columbia  
24           Utilities Commission and the National Energy Board.

25  
26    **Q.**    What is the purpose of your testimony?

27  
28    **A.**    I will discuss how BC Gas has implemented its rate design  
29           objectives and discuss the processes involved in arriving  
30           at the rate design changes proposed in this application.

1 Q. What studies have been prepared in support of BC Gas'  
2 rate proposals?

3  
4 A. BC Gas has prepared an FDC study, an LRIC study, a  
5 competitive fuel study, detailed revenue models and a  
6 survey of gas rates charged in other jurisdictions. The  
7 results of these studies are included in this  
8 application.

9  
10 Q. What objectives did BC Gas have in preparing its rate  
11 design proposals?

12  
13 A. The major objectives were to establish rates that are  
14 consistent with the principles of fairness, economic  
15 efficiency, stability, customer acceptance, ease of  
16 understandability and administration, and recover the  
17 Company's revenue requirement. In addition, the rate  
18 proposals seek to establish rates that better ensure the  
19 long run viability of the utility in an increasingly  
20 competitive energy market by more closely aligning rates  
21 with costs.

22  
23 Q. Is BC Gas proposing any changes to the General Terms and  
24 Conditions?

25  
26 A. Yes, BC Gas has outlined a number of changes it is  
27 proposing to the General Terms and Conditions that seek  
28 to clarify or amend the terms and conditions under which  
29 service is provided in Volume 1 Tab 3B.

30  
31 Q. Does this complete your evidence?

32  
33 A. Yes it does.

**BC GAS UTILITY LTD.**  
**WRITTEN EVIDENCE OF**  
**JOHN C. ("JACK") TOUHEY**

1     **Q.**    Please identify yourself and your title at BC Gas.

2

3     **A.**    My name is John C. ("Jack") Touhey and I am the Business  
4            Leader, Sales and Marketing for the Distribution Services  
5            group. I have held this position since October 1995. I  
6            am responsible for all the sales and marketing activities  
7            associated with the Company's gas distribution facilities  
8            from the interconnect point with the transmission  
9            companies up to, but not including, customer metering  
10           equipment.

11

12    **Q.**    Please state your academic and business experience.

13

14    **A.**    I am a graduate of Simon Fraser University with a  
15            Bachelor of Arts degree, Commerce and Economics. I  
16            joined Inland Natural Gas in 1980 and worked as a Branch  
17            Manager in Prince George and Kamloops until 1986. I then  
18            became a Marketing Supervisor for Inland's Natural Gas  
19            for Vehicles program until 1987 when I left to join  
20            International Forest Products Ltd. (Interfor) in  
21            Vancouver. At Interfor I held a number of production and  
22            sales positions at various sawmills in the Lower  
23            Mainland. I joined BC Gas in 1990 as Manager, Natural  
24            Gas for Vehicles and held that position until 1993 when  
25            I became a Special Projects Manager for the Executive  
26            Vice President, Operations. In 1994, I became the  
27            Assistant to the President and held that position until  
28            my current assignment.

29

30    **Q.**    Have you appeared as a witness before any regulatory  
31            authorities?

- 1     **A.**    Yes, I have appeared before the British Columbia  
2            Utilities Commission on a number of occasions.  
3
- 4     **Q.**    What is the purpose of your testimony?  
5
- 6     **A.**    I will speak to the proposed rate structures and levels  
7            for residential, small and large commercial, and seasonal  
8            customers. As well, I will speak to proposed Service  
9            Line Cost Allowance.  
10
- 11    **Q.**    Does this complete your evidence?  
12
- 13    **A.**    Yes it does.



**BC GAS UTILITY LTD.**  
**WRITTEN EVIDENCE OF**  
**H. L. DINTER**

1     **Q.**   Please identify yourself and your title at BC Gas.

2  
3     **A.**   My name is Henry Dinter. I am Manager, Transportation &  
4           Industrial Services, and have held that position,  
5           formerly titled Manager, Industrial Services, since first  
6           joining BC Gas in October 1989.

7  
8     **Q.**   Please state your academic, professional and business  
9           experience.

10  
11    **A.**   I am a graduate of Simon Fraser University with a degree  
12           in Business Administration. I am a member of various gas  
13           associations in both Canada and the United States. Prior  
14           to my employment with BC Gas, I held a number of  
15           procurement and contracting positions, the last being  
16           with Weldwood of Canada Ltd. from 1986 - 1989 as its  
17           Administrator, Energy and Raw Materials. In that  
18           capacity, I handled all negotiations and administration  
19           for the purchase of the company's natural gas, petroleum  
20           and chemical requirements.

21  
22    **Q.**   Have you appeared before as a witness?

23  
24    **A.**   I have testified before the Public Utilities Board of  
25           Alberta during my employ with Weldwood of Canada, and  
26           subsequently before the British Columbia Utilities  
27           Commission on behalf of BC Gas with respect to Revenue  
28           Requirement and Rate Design applications of the Company.

29  
30    **Q.**   What are your principal responsibilities as Manager,  
31           Transportation and Industrial Services.  
32

1     **A.**    I am responsible for developing, implementing and  
2            managing the Company's regulated services as they relate  
3            to large volume industrial commodity sales and  
4            transportation services in B.C. As well, I direct all  
5            activities related to commodity sales, exchanges,  
6            capacity utilization and gas transportation scheduling  
7            functions associated with the Company's off-system and  
8            gas supply operational activities.

9  
10    **Q.**    What parts of the Application have you been involved  
11            with?

12  
13    **A.**    Although I have participated in discussions relating to  
14            most of the Application, I have been directly responsible  
15            for the development of that part of the Application which  
16            affects:

17  
18            a)    Industrial Rate Schedules and Charges.

19            b)    Terms & Conditions of Transportation Service.

20  
21            This material is under Tab 5 of Volume 1.

22  
23    **Q.**    Does this complete your written evidence?

24  
25    **A.**    Yes.

26

**BC GAS UTILITY LTD.**

**WRITTEN EVIDENCE OF**

**MICHAEL PRETTO**

1     **Q.**    Please state your name, employer and business address.

2  
3     **A.**    My name is Michael Pretto. I am employed as a Project  
4            Director for Barakat & Chamberlin, Inc. My business  
5            address is 1800 Harrison Street, 18th Floor, Oakland,  
6            California 94612.

7  
8     **Q.**    Please describe your educational background and  
9            experience in the utility industry.

10  
11    **A.**    I have a Bachelors of Science degree in Business  
12            Administration from the University of California,  
13            Berkeley, and a Master of Public Administration degree  
14            from California State University, Hayward.

15  
16            From 1967 to 1987, I was employed by the Pacific Gas &  
17            Electric Company in a variety of positions, including  
18            Rate Engineer, Director of Revenue and Energy Analysis,  
19            Director of Planning and Forecasting, and Director of  
20            OII/OIR Implementation Project. In these positions, I  
21            was involved in gas and electric rate design and revenue  
22            analysis, fuel supply forecasting and economics, and gas  
23            industry restructuring. While at PG&E, I testified on  
24            numerous occasions before the California Public Utilities  
25            Commission on these issues. I also appeared before the  
26            Federal Energy Regulatory Commission for PG&E in cases  
27            involving recovery of fuel and purchased power costs in  
28            wholesale electric rates and implementation of the  
29            incremental pricing provisions of the Natural Gas Policy  
30            Act.

1 Since 1987, I have been employed by Barakat & Chamberlin,  
2 Inc., a management and economic consulting firm with  
3 clients throughout the United States and Canada. My work  
4 has involved providing analytical and expert witness  
5 assistance to clients in the natural gas, electric, solid  
6 waste, and valuation areas. Canadian assignments have  
7 included assisting Simplot Canada Ltd. and Northland  
8 Power with development of bypass avoidance gas  
9 transportation rates, the British Columbia Utilities  
10 Commission with analysis of the Pacific Northern Gas  
11 (PNG) 1991 rate design application, PNG with development  
12 of its 1995 rate design application, and Westcoast Energy  
13 with the proper ratemaking treatment of revenues from  
14 sulphur sales from a processing plant in Alberta. I have  
15 appeared before the Ontario Energy Board, the Manitoba  
16 Public Utilities Board, the Alberta Public Utilities  
17 Board and the British Columbia Utilities Commission.

18  
19 A resume and listing of my expert witness testimony is  
20 attached.

21  
22 Q. What is the purpose of your testimony in this attached.

23  
24 A. The purpose of my testimony in this proceeding is to  
25 sponsor the report prepared by Barakat & Chamberlin,  
26 Inc., entitled "Review of BC Gas Cost Allocation and Rate  
27 Proposals." This report is included in Volume 1 under  
28 Tab 7.

29  
30 Q. Does this complete your direct evidence?

31  
32 A. Yes, it does.

**MICHAEL PRETTO**  
**Project Director**

**EXPERIENCE**

**Project Director**  
**(1987 to present)**

**Barakat & Chamberlin, Inc.**

Maintains a detailed understanding of utility economics and regulation. Offers nearly three decades of experience in the electric and natural gas, solid waste, cable television, and water industries. Expertise includes cost-of-service, revenue requirements, cost allocation, rate design, valuation, and fuel supply economics.

Recent projects include:

- Assisting an electric power cooperative to mitigate stranded investment exposure through transition planning and restructuring of pricing arrangements among its members.
- Analyzing gas industry restructuring issues for numerous clients.
- Reviewing electric and gas marginal and embedded cost-of-service studies and rate designs; presenting expert testimony on cost and rate design issues for various clients in the United States and Canada.
- Analyzing purchase agreements for natural gas supplies and transportation, and electric power; providing advice on contract terms and technical support during contract negotiations.
- Analyzing gas gathering costs, purchase gas costs, and gas cost allocation issues for industrial energy consumers.
- Forecasting natural gas avoided costs, UEG costs, and gas and electric rates for numerous natural gas marketers, independent power producers, and large energy consumers.
- Participating in valuation studies of utility natural gas facilities, utility streetlighting systems, and utility distribution systems for various purposes, including condemnation proceedings.
- Developing ratemaking methodologies for a major landfill company and a California solid-waste collection company.
- Providing technical advice on cost-of-service methodologies and the implications for rates for an association representing cable television companies during FCC hearings.

**Director of Planning and Forecasting**  
(1986 to 1987)

**Pacific Gas and Electric Company**  
**Fuels Policy Department**

Responsible for gas and oil price forecasts, power plant fuel and inventory economics, gas supply planning studies, presentation of fuels-related matters in CPUC rate cases, development and maintenance of related computer models. During 1987, also served as Director of OII/OIR Implementation Project, responsible for gas supply and price area, including expert witness testimony on ratemaking treatment of purchased gas costs.

**Director of Revenue and Energy Analysis**  
(1980 to 1986)

**Pacific Gas and Electric Company**  
**Revenue Requirements Department**

Responsible for gas and electric fuel cost filings, ratemaking treatment of fuel costs, analysis and design of cost recovery mechanisms, expert witness testimony on fuel costs and fuel purchase policies, forecasts of fuel costs and revenues. Supervised staff of 12 professionals.

**Rate Engineer**  
(1967 to 1980)

**Pacific Gas and Electric Company**  
**Rate Department**

Participated in gas, electric, and water rate design, revenue forecasting, rate cases, development of gas and electric fuel clauses, including expert witness testimony.

## **EDUCATION**

Master of Public Administration, California State University at Hayward  
B.S., Business Administration, University of California, Berkeley

## **PROFESSIONAL AFFILIATIONS**

San Leandro Planning Commission, 1979 to 1995.

## **EXPERT WITNESS AND LITIGATION SUPPORT PROJECTS**

### **Michael J. Pretto**

- 1995** Stanislaus County Superior Court, Grinstead et al. versus Pacific Gas and Electric. Declaration related to analysis of customer bills under alternative rate schedules in support of PG&E's Motion for Summary Judgment.
- 1995** British Columbia Utilities Commission. Testimony on natural gas rate design on behalf of Pacific Northern Gas Ltd. in its 1995 Rate Design Application.
- 1995** PG&E-Amerada Hess Arbitration Panel. Testimony on the fair market price of Northern California-source natural gas production on behalf of Pacific Gas and Electric Company.
- 1992** California Public Utilities Commission, Case 1.86-06-005. Testimony on long-run marginal cost issues affecting wholesale gas customers on behalf of the City of Long Beach.
- 1992** Alberta Public Utilities Board. Testimony on the appropriate treatment of revenue from the sale of sulphur from a gas processing plant on behalf of Westcoast Energy.
- 1991** California Public Utilities Commission, Case A91-03-039. Testimony on gas rate design on behalf of the City of Long Beach.
- 1991** Fresno County Superior Court. Provided testimony on the value of Pacific Gas and Electric Company's condemned streetlighting systems.
- 1990** California Public Utilities Commission, Case 89-07-031. Testimony on behalf of Sandyland Nursery regarding Southern California Gas Company's curtailment rules.
- 1990** California Public Utilities Commission, Application 90-13-018. Testimony on wholesale gas rate design on behalf of the City of Long Beach.
- 1989** Ontario Energy Board. Testimony on the appropriate bypass-competitive transportation rate for Northland Power.
- 1989** California Public Utilities Commission, Application 88-09-032. Testimony on industrial natural gas rate design on behalf of California Industrial Group in Annual Cost Allocation Proceeding for Pacific Gas and Electric Company.

- 1989      Manitoba Public Utilities Board. Testimony on the appropriate bypass-competitive transportation service rate for Simplot Canada Limited.
  
- 1989      California Public Utilities Commission. Application No. 89-04-021. Testimony regarding power plant gas rate design and throughput forecasts on behalf of Southern California Edison.
  
- 1989      California Public Utilities Commission, OII 88-11-032. Testimony regarding the appropriate cost to be assigned to PG&E's California gas-gathering system on behalf of Amerada Hess Corporation.
  
- 1988      California Public Utilities Commission, OII 87-03-036. Design of gas storage rates for Southern California Gas Company and Pacific Gas and Electric Company on behalf of Poco Petroleums, Ltd., and California Industrial Group.
  
- 1987      California Public Utilities Commission, OII 86-06-005 and OIR 86-06-006. Purchased gas cost and purchased gas cost allocation testimony in CPUC natural gas industry restructuring proceeding on behalf of PG&E.
  
- 1985      California Public Utilities Commission. Testimony on fossil fuel cost savings in the Diablo Canyon Nuclear Power Plant Rate Base Offset proceeding on behalf of PG&E.
  
- 1978-  
1984      California Public Utilities Commission. Numerous expert witness appearances in PG&E gas and electric rate case applications. Testimony related to gas and electric energy cost recovery, fuel purchase economics, tariff issues and natural gas rate design.
  
- 1976      California Public Utilities Commission. Testimony on fuel cost for PG&E's Steam Heat General Rate Case.
  
- 1975      Federal Power Commission Docket No. E-7777 and E-8928. Testimony regarding fuel cost adjustment tariff procedure for Pacific Gas and Electric Company.



**BC GAS UTILITY LTD.**  
**WRITTEN EVIDENCE OF**  
**IAN PHILIP WIGINGTON**

1     **Q.**   Please state your name and present position with BC Gas  
2           Inc.

3  
4     **A.**   My name is Ian Philip Wigington. I am currently a Senior  
5           Advisor in Resource Planning at BC Gas.

6  
7     **Q.**   How long have you held that position?

8  
9     **A.**   Since September 1993.

10  
11    **Q.**   Please outline your employment history.

12  
13    **A.**   From October 1986 until October 1990 I was employed by  
14           the B.C. Ministry of Energy, Mines and Petroleum  
15           Resources, initially as a Research Officer responsible  
16           for the provincial gas royalty revenue forecast, the  
17           provincial gas price forecast, and the provincial gas  
18           export forecast, and then as a Policy Analyst reviewing  
19           the implications of regulatory and market factors on the  
20           B.C. gas industry.

21  
22           After joining BC Gas in 1990, I was involved in the  
23           development of the 1992 Draft BC Gas Least Cost  
24           Integrated Resource Plan as well as developing the 1993  
25           BC Gas Long Run Incremental Cost estimates for the Phase  
26           "B" Rate Design Application. In July 1993 I joined the  
27           Integrated Resource and Demand Planning Department.

28  
29    **Q.**   Please review your academic qualifications.

30  
31    **A.**   I hold a Bachelor of Arts degree (1978) from the  
32           University of Calgary and a Master of Science degree

1 (1987) in Agricultural Economics from the University of  
2 British Columbia.

3  
4 Q. What are your current responsibilities at BC Gas?

5  
6 A. Reporting to the Executive Vice President, Customer  
7 Operations, I am involved in a variety of policy issues  
8 dealing with Integrated Resource Planning and costs  
9 studies to support the rate filing.

10  
11 Q. Have you previously testified before any regulatory  
12 bodies?

13  
14 A. Yes, before the B.C. Utilities Commission during the 1993  
15 Phase "B" Rate Design Application and during the 1994-95  
16 Revenue Requirement Application.

17  
18 Q. What is the purpose of your testimony?

19  
20 A. I am speaking to the development of the Long Run  
21 Incremental Cost Study found under Tab 1 of Volume 2.

22  
23 Q. Does this conclude your evidence?

24  
25 A. Yes.

**BC GAS UTILITY LTD.**

**WRITTEN EVIDENCE OF**

**DANA A. TOULSON**

1     **Q.**    Please state your name and business affiliation.

2

3     **A.**    My name is Dana A. Toulson. I am a principal with Barakat  
4            & Chamberlin, a consulting firm specializing in public  
5            utility economics.

6

7     **Q.**    Please describe your experience and educational  
8            background.

9

10    **A.**    I hold a Master of Arts degree in Economics from San  
11            Francisco State University and a Bachelors degree in  
12            Economics from Sonoma State University.

13

14            From 1977 to 1984, I worked for the California Public  
15            Utilities Commission as a financial analyst and rate  
16            economist. I was responsible for developing marginal  
17            cost studies for electric utilities, developing avoided  
18            cost forecasts, and evaluating proposed power plants. I  
19            also prepared cost of capital studies and testified on  
20            rate of return recommendations for energy and water  
21            utilities.

22

23            In 1984, I joined the consulting firm of Energy  
24            Management Associates. As senior consultant, and later  
25            as manager of the western regional office, I was  
26            responsible for evaluating the economic potential of new  
27            generation technologies and proposed transmission  
28            projects. I also assisted utilities in developing  
29            marginal energy costs using the firm's planning models.

30

31            I joined Barakat & Chamberlin in 1988 and currently serve  
32            as principal, directing much of the firm's pricing work.

1 My projects have included assisting gas and electric  
2 utilities develop marginal cost estimates, evaluating and  
3 preparing integrated resource plans, developing  
4 alternative rate options as well as evaluating and  
5 assisting utilities prepare cost of service studies.

6  
7 A resume outlining my experience and publications is  
8 attached.

9  
10 Q. Have you previously testified before the British Columbia  
11 Utilities Commission?

12  
13 A. Yes.

14  
15 Q. What is your involvement in this rate filing?

16  
17 A. I reviewed and assisted in the development of BC Gas'  
18 Long Run Incremental Cost (LRIC) study. The results of  
19 my review are summarized in the report entitled "Barakat  
20 & Chamberlin Review of BC Gas Cost Allocation and Rate  
21 Proposals."

22  
23 Q. Does this complete your direct evidence?

24  
25 A. Yes, it does.

**DANA A. TOULSON**  
**Principal**

**EXPERIENCE**

**Principal**  
(1990 to present)  
**Senior Consultant**  
(1988 to 1990)

**Barakat & Chamberlin, Inc.**

Provides economic consulting to electric utilities, regulatory commissions, and unregulated energy companies. Areas of expertise include strategic pricing, regulatory strategy, resource planning, marginal cost analysis, competitive assessments, and product development. Representative projects include:

- **Strategic pricing.** For a southeastern electric utility, developed and facilitated a process for developing new products and pricing options. Worked with segment teams to develop pricing strategies for industrial, government, and residential customers.
- **Competitive rate design practices.** Developed standby tariffs and time-of-use rates. For a northeastern utility, evaluated potential rate options for pulp and paper manufacturers. Prepared testimony on various pricing issues, including gas utility assertions that electric rates were promotional and not based on sound economics. For the Electric Power Research Institute, co-authored a textbook on competitive pricing methods.
- **Business planning.** Advised a northwestern utility on industry trends and plans to unbundle generation services. Assisted an electric utility in developing a comprehensive, long-term, retail business strategy. Assisted an independent power producer prepare and document a business plan.
- **Integrated resource planning.** Evaluated utility least-cost plans on behalf of regulatory agencies, utilities, and independent power producers. Assisted both gas and electric utilities develop marginal cost estimates.
- **Regulated filings and bid preparations.** Managed the preparation and filing of a mid-atlantic electric utility's 1992 and 1994 Least-Cost Plan and 1996 Status Report. Prepared supply-side resource bids for an independent power producer.
- **Competitive assessment.** Directed a 70-utility study of industrial electric tariffs in North America. Evaluated underlying cost structures, future costs, and existing rate incentives of competing utilities.
- **Transmission pricing.** For a commission, prepared written testimony on a utility's wholesale transmission tariff application. Assisted market broker develop generic transmission contract.

Also provided litigation support for energy service, cogeneration, electric utility, and cellular telephone companies. Conducted due-diligence investigations, market assessments, and feasibility studies for independent power companies.

**Manager of Consulting**  
(1984 - 1986)

**Energy Management Associates, Inc.**

**Senior Consultant**  
(1984 - 1986)

Managed EMA's western branch office of six energy professionals; responsible for cost control, hiring, staff assignments and training, preparing proposals, and acting as project manager on major consulting engagements. Served as project manager and principal author of EMA's economic evaluation of the proposed California-Oregon Transmission Project for the Transmission Agency of Northern California. Analyzed the energy benefits of the proposed SMUD-Sierra Intertie Project.

As senior consultant, served as project manager for an Electric Power Research Institute study evaluating the economic potential of pumped storage and compressed air energy storage systems for over 30 electric utilities. Developed a generation planning manual. Advised utilities on generation planning and marginal cost methods. Forecasted future reliability levels for the Inland Power Pool. Analyzed regulatory response to excess capacity issues.

**Senior Economist**  
(1982 - 1984)

**California Public Utilities Commission**

**Rate of Return Analyst**  
(1980 - 1982)

**Research Analyst-Finance**  
(1977 - 1979)

As senior economist, prepared marginal cost studies for electric utility rate cases and testified on conclusions and recommendations. Responsible for developing energy and capacity payments for cogenerators and small power producers and for evaluating the economics of proposed power plants.

As rate of return analyst, prepared cost of capital and cash flow studies of utilities, testified on rate-of-return recommendations, prepared cross-examination questions for company financial witnesses, and provided in-house expertise on a variety of financial issues.

As research analyst, analyzed the financial impacts of utility construction programs, refund plans, and alternative ratemaking proposals. Verified financial planning model and modified it to conform with California regulations.

## EDUCATION AND MEMBERSHIPS

M.A. Economics, San Francisco State University

B.A. Economics, Sonoma State University

Member: Association of Energy Services Professionals (AESP). Currently Vice Chair of the AESP Pricing Topic Committee.

## PUBLICATIONS

*Winning Retail Strategies: Beyond Innovative Rate Design.* With M. Mauldin, Palo Alto, California: Electric Power Research Institute, EPRI TR-1055226, July 1995.

"Thinking Strategically About Electricity Pricing." *Proceedings of the 1994 Innovative Electricity Pricing Conference.* With F. Sioshansi (EPRI). Palo Alto, California: Electric Power Research Institute, EPRI TR-103629, February 1994.

*Thinking Strategically About Electricity Pricing.* Palo Alto, California: Electric Power Research Institute, EPRI TR-101575, December 1992.

"Gas Wars: Using the Least-Cost Planning Process for Competitive Advantage." *Proceedings of the 5th National DSM Conference.* With J. Chamberlin. Boston, Mass.: July 1991.

*TAG<sup>TM</sup> Technical Assessment Guide*, Vol. 4, rev. ed., *Fundamentals and Methods: End Use.* With P. Herman, J. Chamberlin, and E. Weaver. Palo Alto, California: Electric Power Research Institute, January 1991.

"Can Independent Producers Meet Future Generation Needs?" *Strategic Planning and Energy Management*, vol. 8 no. 3, Winter 1988/1989, pp. 4-53.

*Evaluation of the Economic Benefits of the California-Oregon Transmission Project.* With V. MacLaren-Wray, J. Steury, and S. Lee. Transmission Agency of Northern California. November 1986.

*A Methodology for Generation Planning.* Report for a confidential client. December 1984.

*Workbook for Evaluation of Compressed Air Energy Storage on Utility Systems.* With S. Lee. Palo Alto, California: Electric Power Research Institute, EPRI RP1084-7, October 1984.

## PRESENTATIONS

"Divide and Conquer: Designing Targeted Products and Services." Institute for International Research Conference on Competitive Pricing and Segmentation Strategies for Utilities. Chicago, Illinois, November 1995.

"Competitive Pricing: What Can We Learn from Private Industry?" ADSMP (now AESP) Annual Meeting, Orlando, Florida, December 5, 1994.

"Pricing Energy Services in a Competitive Market." ACEEE 1994 Summer Study on Energy Efficiency in Buildings, with J. Chamberlin. Pacific Grove, California, August, 1994.

"DSM: Who Should Pay the Bill?" Electric Power Research Institute, Sixth National DSM Conference, with J. Locher. Miami Beach, Florida, March 1993.

"Selling Services Instead of kWh - A New Utility Mission." California Municipal Rates Group, San Pedro, California: February 1993.

"DSM Cost Allocation: Who Gets Their Just Desserts?" NARUC, Fourth National Conference on Integrated Resource Planning, with T. Fry. Burlington, Vermont, September 1992.

"Preparing the Bid." Competitive Bidding for Power Contracts Conference, Infocast, San Francisco, California, October 1991 and July 1992.

"Integrating Competition into Least-Cost Planning." NARUC, Third National Conference on Integrated Utility Planning, with J. Chamberlin. Santa Fe, N. Mex., April 1991.

"Competition and Electricity," NARUC meeting, San Diego, California, July 1988.

"Can Independent Producers Meet Future Generation Needs?" Electric Utility Consultants Conference on Utility Finance and Investment, Englewood, Colorado, July 1988.

## **WORKSHOPS AND COURSES**

"Pricing in the 1990's: Meeting Challenges and Creating Opportunities in a Competitive Environment." Sponsored by the Electric Power Research Institute, given twice a year at various locations since 1993.

"Developing Pricing Strategies." Workshop at the Retail Wheeling Summit, New Orleans, Louisiana, December 1994.

"Integrated Resource Planning: Today's Practices and Tomorrow's Issues." Sponsored by the Electric Power Research Institute, given at various locations from 1992 to 1993.

"Principles of Rate Design." British Columbia Utilities Commission course, Vancouver, British Columbia, June 1990.



**BC GAS UTILITY LTD.**  
**WRITTEN EVIDENCE OF**  
**EDWARD A. MOORE**

1     **Q.**   Please state your name, address, and occupation.

2  
3     **A.**   Edward A. Moore, 1111 West Georgia, Vancouver, B.C., V6E  
4           4M4. I am the supervisor for Cost of Service Studies in  
5           the Regulatory Affairs group of BC Gas.

6  
7     **Q.**   Please identify your experience in regard to this  
8           testimony.

9  
10    **A.**   I have been with BC Gas and its predecessor company,  
11           Inland Natural Gas Co. Ltd., for fourteen years working  
12           in the Regulatory Affairs group. During this time, I  
13           have had experience in the preparation of revenue  
14           requirement applications, annual reports for the British  
15           Columbia Utilities Commission and special project  
16           analyses for other departments at BC Gas. I provided  
17           assistance in the preparation of the 1983 fully  
18           distributed cost of service study for Inland Natural Gas.  
19           I participated in the development and programming of the  
20           bypass models during the Inland rate design hearing in  
21           1987. I participated in the preparation of the 1992 Test  
22           Year Revenue Requirement Application and had primary  
23           responsibility for the development of the revenue  
24           requirement computer model. With the assistance of  
25           Daniel Reed of Reed Associates Inc., a consultant to the  
26           Company, I prepared the Company's cost of service studies  
27           for the Phase B Rate Design Application in 1993. I also  
28           appeared as a witness for BC Gas before this Commission  
29           in the Phase B Rate Design Hearing.

1 I have a Bachelor of Commerce with a major in  
2 Transportation and Utilities from the University of  
3 British Columbia. I am a member in good standing of the  
4 Certified General Accountants Associations of British  
5 Columbia and Canada. I attended two rate design  
6 seminars, one by Barakat and Chamberlin, sponsored by the  
7 BCUC, and one by the Management Exchange, sponsored by  
8 Public Utilities Reports, Inc.

9  
10 Q. Please explain your participation in the preparation of  
11 the Test Year 1996 fully distributed cost of service  
12 study.

13  
14 A. The fully distributed cost of service (FDC) study has  
15 been prepared based on the 1996 Test Year results  
16 approved by Commission Order No. G-99-95 dated November  
17 27, 1995. The study has been reviewed by Michael Pretto  
18 of Barakat & Chamberlin, Inc., who will also be  
19 presenting evidence in this proceeding.

20  
21 Summaries of the study are contained in Volume 2, Tab 2.  
22 In general, I am available to answer questions relating  
23 to the process involved in preparing the fully  
24 distributed cost study.

25  
26 Q. Does this conclude your evidence?

27  
28 A. Yes.

BC GAS UTILITY LTD.  
WRITTEN EVIDENCE OF  
JOHN GILLIES

1 Q. Please state your name and position with BC Gas.  
2

3 A. My name is John Gillies. I am an Economist in the Legal  
4 and Regulatory Affairs Department of BC Gas Utility.  
5

6 Q. Please describe your educational background and  
7 employment experience.  
8

9 A. I received a Bachelor of Arts degree with a major in  
10 economics from Simon Fraser University in 1977. I  
11 entered the Graduate program in economics at Simon Fraser  
12 University in 1978 and eventually earned a Masters Degree  
13 in Economics from Carleton University in 1986. From  
14 November 1979 to May 1982, I was a Research Analyst with  
15 the B.C. Ministry of Finance. Later, I was employed by  
16 the National Energy Board as an Energy Supply Economist  
17 from June 1983 to September 1988. I joined BC Gas as a  
18 Regulatory Analyst in September 1990 and have held my  
19 present position as a Senior Economist since January  
20 1994.  
21

22 Q. What are your responsibilities in your current position?  
23

24 A. My major responsibilities include forecasting natural gas  
25 and other energy demand as well as providing economic  
26 analysis and data in support of a variety of projects and  
27 regulatory applications undertaken by the company.  
28

29 Q. Have you testified before a regulatory board or  
30 commission on previous occasions?  
31

1     **A.**    I testified before the British Columbia Utilities  
2            Commission on behalf of the BC Gas Utility Ltd. 1994/95  
3            Revenue Requirement Application, Phase 3, in June 1994.  
4

5     **Q.**    What is the purpose of your testimony?  
6

7     **A.**    I had the responsibility of preparing the competitive  
8            energy price survey data and energy market trends  
9            analysis that are found at Tab 3 of Volume 2. I will  
10           answer questions relating to the contents of those  
11           studies.  
12

13    **Q.**    Does that conclude your direct evidence?  
14

15    **A.**    Yes.