

BRITISH COLUMBIA UTILITIES COMMISSION		
EXHIBIT		1
DAY	ENTERED BY	DATE
1	BC GAS	Dec 3/91

BC GAS INC.
RATE DESIGN APPLICATION
PHASE A
PURSUANT TO
BRITISH COLUMBIA UTILITIES COMMISSION
ORDER NO. G-92-91
DATED OCTOBER 1, 1991

BC GAS INC.
RATE DESIGN APPLICATION
PHASE A

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EXECUTIVE SUMMARY

Since the 1950's the Inland and Lower Mainland Divisions of BC Gas have purchased natural gas from Westcoast Energy Inc. under long term gas purchase contracts. Westcoast has given notice, as provided in the long term contracts, that the contracts are to terminate October 31, 1991. In response to the cessation of purchases from Westcoast BC Gas has entered into 21 gas purchase contracts with producers and aggregators. These contracts will supply the base load requirements of the residential and commercial customers of the Lower Mainland and Inland Divisions of BC Gas. These new contractual arrangements result from governmental policies implementing deregulation of the natural gas industry.

Deregulation of the natural gas industry extends beyond the manner in which BC Gas obtains its gas supply. Deregulation has provided industrial consumers of gas with the option to purchase their natural gas requirements from producers, brokers and aggregators. In this Application BC Gas is seeking to respond to the deregulated environment by introducing new tariff schedules for the sale and transportation of natural gas to large volume industrial consumers.

The deregulated environment has introduced significant changes to the business of distributing natural gas in British Columbia. Natural gas distribution utilities in British Columbia now operate

in three separate businesses. The first business is that of providing gas service to the core market customers in accordance with the Core Market Policy of British Columbia. In providing gas service to the core market customers a natural gas distribution utility provides a monopoly service with respect to the supply of natural gas and facilities.

The second business in which a natural gas distribution utility now operates is that of providing transportation service for non-core market customers. In this business a utility also supplies a monopoly service, being the physical facilities of the utility. BC Gas endorses the concept that, in providing transportation service, the tariffs of BC Gas should not favour gas purchased from the utility over gas purchased directly from a producer or aggregator. Nor should the tariffs favour gas purchased from a producer or aggregator over gas purchased from the utility.

The third business in which a gas distribution utility is engaged is the sale of off-peak gas supplies, and the use of facilities owned by or under contract to the utility during off-peak periods, for the benefit of the core market customers. In the sale of off-peak gas supplies the utility is operating in a competitive market. The traditional regulatory concepts are not applicable. In this Application BC Gas takes the position that since it is operating in a competitive market, the basis upon which BC Gas sells gas in that

market should be similar to the basis upon which others in the market place operate. BC Gas seeks to negotiate the price at which it sells gas and seeks to have prices remain confidential. Producers and aggregators operate with negotiated and confidential prices. The same rules should apply to BC Gas.

Gas Cost Allocation Methodology

In order to achieve efficiencies in gas purchases and to optimize load balancing, BC Gas operates gas supply and demand management of the Lower Mainland and Inland Divisions as an integrated operating system. The costs of gas supply should be considered common costs of the two divisions and in the proposed methodology the costs are allocated in a similar manner to common customer classes. In this integrated approach, the East Kootenay Link and storage and LNG facilities formerly considered for the benefit of the customers of one division are now considered for the benefit of customers of both divisions. The proposed methodology recognizes that the tolls of Westcoast are lower for the Inland Division than for the Lower Mainland Division.

BC Gas must ensure that it has gas supply available to meet the peak day demands of its core market customers. BC Gas must arrange gas supply which, when combined with storage, LNG and other peak shaving measures, will provide gas supply on the coldest day of the

year. BC Gas must also ensure that it has capacity available on the facilities of Westcoast Energy Inc. to carry the gas supply required for the peak day. A large proportion of the gas supply costs incurred by BC Gas are fixed demand charges. In its proposed methodology the fixed charges are allocated to the firm customers in the Inland and Lower Mainland Divisions. Since the firm customers create the peak demand on the system they should, in first instance, be responsible for the fixed costs associated with meeting that peak demand.

In the proposed methodology the commodity costs associated with gas supply are allocated on a volumetric basis, with the firm customers (who are allocated the fixed costs) receiving maximum use of the lower commodity priced gas available from the long term supply.

BC Gas is proposing that it be able to negotiate prices for the sale of off-peak gas supply to industrial customers. "Profit" derived from the sale of gas to industrial customers will go to the benefit of those customers who are allocated the fixed charges in the first instance.

The tables under Tab 3 of this filing makes use of "proxy" costs. The costs set out in the tables are illustrative and are not the actual gas purchase costs to be experienced by BC Gas during the

1991 - 1992 contract year. Illustrative numbers have been used to ensure confidentiality of the prices in gas purchase contracts.

Tariff Schedules

BC Gas is proposing new Tariff Schedules 10 and 13 for the sale of natural gas and a new Tariff Schedule 22 for the transportation of natural gas. BC Gas also proposes to withdraw a number of Inland Division tariff schedules which are effectively replaced by the new tariff schedules.

The proposed Schedules 10 and 13 provide for the sale of natural gas by BC Gas to large volume industrial customers. Schedule 10 relates to the sale of interruptible gas while Schedule 13 relates to the sale of peaking and backstopping gas to those customers.

BC Gas proposes that under Tariff Schedules 10 and 13 it be allowed to negotiate the price at which it sells natural gas to large volume industrial customers in both the Lower Mainland and Inland Divisions. It is also proposed that the prices in those contracts be confidential. In selling gas to the industrial market BC Gas is in competition with producers, brokers and aggregators. The prices at which those parties sell natural gas are negotiated and are confidential. In order to maximize the benefit to those customers which are being allocated the demand costs, BC Gas should be able

to negotiate with industrial customers to sell gas at prices which reflect prevailing market conditions.

Schedules 10 and 13 introduce the concept of gas being sold by BC Gas at the interconnection point between the Westcoast facilities and the facilities of BC Gas. Gas sold by BC Gas would then move across the BC Gas system pursuant to the new transportation Schedule 22. This will ensure equality between the treatment accorded gas sold by the utility and gas sold by a producer, broker or aggregator.

Schedule 22 is to be applicable for both gas sold by BC Gas at the interconnection point and gas sold to industrial customers by producers, brokers and aggregators. Schedule 22 introduces new balancing provisions during the winter months. Transportation service customers should keep their supply and consumption in balance so as not to make use of the core market gas supply. A demand surcharge has been introduced in an attempt to limit the circumstances when interruptible customers fail to curtail their consumption of natural gas when called upon to do so. The new Schedule 22 removes the reserves test previously found in Schedule 22 and in partial substitution for that removal introduces a charge if a transportation service customer fails to deliver gas as required.

Columbia Division

BC Gas proposes to withdraw the Tariff Supplement under which the Inland Division sells gas to the Columbia Division. Pursuant to that Tariff Supplement the Inland Division has achieved a gain on the sale of natural gas to the Columbia Division. It is proposed that gas flowing from the Westcoast system to the Columbia Division be considered as being purchased at cost by the Columbia Division.

Incentive Mechanism

BC Gas proposes to negotiate gas prices with large industrial customers. Questions have been raised regarding the effort that BC Gas might take to maximize the price at which the gas is sold. BC Gas proposes that an incentive be introduced to provide assurance to the core market customers and the Commission that persons negotiating on behalf of BC Gas will attempt to achieve the maximum benefit. BC Gas proposes that it receive as non-utility income 10 per cent of the difference between the price at which gas is sold under negotiated contracts and the cost of that gas. BC Gas is prepared to consider other mechanisms which provide an incentive if they are fair, easy to administer, and not subject to periodic debate.

Deferral Accounts

In the Application a number of deferral accounts are proposed. Amongst the deferral accounts are deferral accounts to record the difference between the price at which natural gas is sold under negotiated contracts and the cost of that gas. Amounts recorded in that deferral account would ultimately go to the benefit of the customers who are paying the fixed costs associated with the supply of gas. Another deferral account proposed by BC Gas would record variances between estimated and actual amounts for compensation received by BC Gas for the use by producers of Westcoast capacity associated with the long term gas supply and the reduction in gas purchase costs if high load factor is achieved under certain of the long term gas purchase contracts.

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DAVID M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

October 15, 1991

British Columbia Utilities Commission
Sixth Floor, 900 Howe Street
Vancouver, B.C.
V6Z 2N3

Attention: Mr. R.J. Pellatt
Commission Secretary

Dear Sirs:

Re: Updated Application

By letter dated August 8, 1991 BC Gas sought approval of a methodology for flowing through gas costs. By Commission Order G-92-91 the Commission ordered that the methodology for gas cost allocations be considered at a public hearing and ordered that BC Gas file its updated Application by October 15, 1991.

Pursuant to Order G-92-91 BC Gas hereby files its updated Application. In this Application BC Gas seeks approval of:

- A. The methodology for allocating gas costs to customers as described in Tab 3 of this filing;
- B. A deferral account to be established into which long term gas purchase negotiating costs be charged, with amortization of those costs over the weighted average contract years of the new gas supply;
- C. Tariff Schedules 10 and 13 for the Lower Mainland and Inland Divisions, with accompanying Sales Agreement;
- D. Tariff Schedule 22 for the Lower Mainland and Inland Divisions, with accompanying Transportation Agreement;
- E. Withdrawal of the Inland Division General Terms and Conditions Applicable to Transportation Service effective November 1, 1992, and the introduction of General Terms and Conditions Applicable to Large Industrial Transportation Service for the Lower

Mainland and Inland Divisions effective November 1, 1992;

- F. Withdrawal, effective November 1, 1992, of the Inland Division General Terms and Conditions Applicable to Industrial Gas Sales-Schedules 10 to 13;
- G. Withdrawal, effective November 1, 1992, of the Inland Division Tariff Schedules 10, 11, 12, 13, 16, 19, 20, 21 and 22 and withdrawal of the applicable Sales and Transportation Agreements;
- H. Withdrawal, effective November 1, 1991, of Inland Division Tariff Supplement No. 6;
- I. Continuation of the deferral account established by item 7 of Commission Order G-92-91 until a decision is rendered in Phase B of the rate design hearing of BC Gas;
- J. Continuation of the deferral account established by item 8 of Commission Order G-92-91 until a decision is rendered in Phase B of the rate design hearing of BC Gas;
- K. Implementation of adjustments to the rates of industrial customers in the Lower Mainland and Inland Divisions resulting from this Application as of November 1, 1992;
- L. Application costs and hearing costs associated with the August 8, 1991 Applications and this updated Application be taken into account in the rate changes resulting from this Application and be amortized over a period of three years;
- M. A deferral account to be established effective November 1, 1991 to record: (a) the revenue to BC Gas if a supplier should make use of Westcoast capacity for which BC Gas is paying, (b) the gas cost savings from volume incentive adjustments, and (c) gas inventory charges if BC Gas is required to pay such charges [(a) and (b) only to the extent that they are beyond that already reflected in the calculation of the 1991 - 1992 gas costs];
- N. An incentive mechanism whereby BC Gas would receive a portion of the difference between the negotiated

price at which gas is sold pursuant to Tariff Schedules 10 and 13 and the cost of that gas; and

- O. A deferral account to be established, effective November 1, 1992, to record the difference between the revenue (less the incentive to BC Gas) received from sales of gas at negotiated prices pursuant to Rate Schedules 10 and 13 and the cost of that gas.

Set out below are descriptions of the above items:

A. Methodology For Allocating Gas Costs

The methodology is described in detail under Tab 3 of this filing.

B. Deferral Account

A description of the deferral account for long term gas purchase negotiating costs, and amortization of those costs, is found at page 9 of Tab 3.

C. Tariff Schedules 10 and 13

BC Gas seeks to introduce new schedules for the sale of natural gas to large volume industrial customers in the Lower Mainland and Inland Divisions. The tariffs are found under Tabs 6 and 7 and the Sales Agreement under Tab 8. Explanations of the reasons for the introduction of the new tariff schedules are found under Tabs 4 and 5. Schedule 10 provides for the sale of interruptible gas to large volume customers and Schedule 13 provides for the sale of peaking and backstopping gas to these customers.

The new Sales Schedules, along with the new Schedule 22 Transportation Schedule, should be considered as part of an integrated package which accompanies the flowthrough methodology. The flowthrough methodology proposes to allocate to the core market customers the demand costs associated with providing gas supply to that market. The new Sales Schedules will allow BC Gas to negotiate a price for the sale of natural gas to large volume industrial customers. It is intended that the price at which natural gas is sold to large volume industrial customers will be a price which reflects the market value of the gas being supplied to those industrial customers. The difference between the market price at which the gas is

sold, and the commodity price at which BC Gas can buy gas as part of its supply for the core market, should be maximized to provide benefits to the core market. BC Gas does not propose, in this Application, to introduce negotiated prices for firm industrial load.

D. Tariff Schedule 22

Schedule 22 is found under Tab 10, an explanation of the reasons for the introduction of a new Schedule 22 is found under Tab 9. The Transportation Agreement accompanying Schedule 22 is under Tab 11.

Tariff Schedules 10 and 13 provide for BC Gas to sell gas at the interconnection point of the BC Gas system with the pipeline of Westcoast. The new transportation tariff will permit gas sold by the utility to be moved across the system of BC Gas. The new Schedule 22 will also remove certain differences between the treatment which was accorded to gas sold by the utility and that sold to industrial customers by other suppliers. Schedule 22 also introduces new balancing provisions. These provisions are required because of developments in the natural gas industry and also to ensure that transportation service customers are not receiving benefits from the core market gas supply for which they are not paying.

**E. General Terms and Conditions Applicable to
Large Industrial Transportation Service**

The wording of the Inland Division General Terms and Conditions Applicable to Transportation Service are inconsistent with the new tariff Schedules 10, 13 and 22. Similar provisions were not in existence in the Lower Mainland Division tariffs. It is proposed that new General Terms and Conditions be introduced.

**F. Withdrawal of Inland Division General
Terms and Conditions for Sales**

The General Terms and Conditions for Sales are incorporated as part of the new General Terms and Conditions Applicable to Transportation Service.

G. Withdrawal of Inland Division Tariff Schedules

Tariff Schedules 10, 11, 12, 13, 16, 19, 20, 21 and 22, and the applicable Sales and Transportation Agreements are effectively being replaced by the proposed new tariff schedules. The old tariff schedules should be withdrawn effective November 1, 1992. Sales and transportation service will continue under the old tariff schedules during the contract year from November 1, 1991 to November 1, 1992.

H. Withdrawal of Inland Division Tariff Supplement No. 6

Tariff Supplement No. 6 relates to the sales of natural gas from Inland Natural Gas Co. Ltd. to Columbia Natural Gas Limited. Under the Tariff Supplement the Inland Division sold gas to the Columbia Division at a market price. The Inland Division realized a gain on the sale of such natural gas. Columbia Natural Gas Limited no longer exists as a separate legal entity. It is proposed that gas which moves from the Westcoast system to the Columbia Division be considered as a gas purchase, at cost, by the Columbia Division. Under the proposal the Inland Division would cease to realize a gain on the gas flowing to the Columbia Division.

I. Deferral Account

By Order G-92-91 the Commission accepted the request by BC Gas to establish a deferral account to capture the difference in margin which may occur if an interruptible sales customer in the Lower Mainland Division switches to interruptible transportation service. BC Gas proposes that the deferral account continue until a decision is rendered in Phase B of the rate design hearing of BC Gas. BC Gas further proposes that the disposition of the amount recorded in the deferral account be considered in Phase B.

During October, 1991 the Lower Mainland Division of BC Gas will receive interruptible revenue credits from Westcoast of approximately \$53,000. BC Gas proposes to record the amount received in October as a credit to the deferral account. The interruptible revenue credits received from Westcoast during November and December, 1991 have been taken into account in the calculation of the gas costs effective November 1, 1991. The interruptible revenue credits will cease effective December 31, 1991.

J. Deferral Account

By Order G-92-91 the Commission ordered BC Gas to establish a deferral account to capture the difference between the actual cost of gas effective November 1, 1991 and the amounts collected in rates. BC Gas seeks to have that deferral account continue until Phase B of the rate design hearing of BC Gas. It is difficult to estimate in advance the actual amounts to be recorded in that account and it would be difficult to flowthrough the amounts in that account during the balance of the gas year commencing November 1, 1991. It is proposed that the disposition of the amount in that account be dealt with in Phase B of the rate design hearing of BC Gas.

K. Adjustment to Rates of Industrial
Customers as of November 1, 1992

BC Gas proposes that:

- (a) The gas prices for interruptible sales to the Inland Division non-captive large volume customers be fixed, for the November 1, 1991 to November 1, 1992 contract year, at the November 1, 1991 level, subject only to Westcoast toll increases;
- (b) The gas contracting fee for interruptible gas sales to the Inland Division non-captive large volume customers as of November 1, 1991 be maintained for the contract year from November 1, 1991 to November 1, 1992;
- (c) The gas prices for interruptible sales to the Inland Division captive large volume customers be fixed, for the November 1, 1991 to November 1, 1992 contract year, at the November 1, 1991 level, subject to revisions arising from the revenue requirement application to be filed by BC Gas and Westcoast toll increases; and
- (d) The gas prices for interruptible sales to the Lower Mainland Division Schedule 2501 and 2502 customers be fixed, for the November 1, 1991 to November 1, 1992 contract year, at the November 1, 1991 level, subject only to revisions arising from the revenue requirement application to be filed by BC Gas and Westcoast Toll increases.

The industrial customers who have entered into gas purchase contracts for the gas contract year commencing November 1, 1991 should pay the November 1, 1991 rate for the complete contract year, subject only to revisions due to Westcoast toll changes or changes resulting from the revenue requirement application of BC Gas.

L. Application and Hearing Costs

BC Gas proposes that the application and hearing costs associated with the August 8, 1991 Applications and this updated Application be taken into account in the rate changes resulting from this Application and that the hearing costs be amortized over a period of 3 years. The 3 year period is considered as a reasonable approximation of the period of time over which the allocations and rate design issues should continue in place without further revision.

M. Deferral Account

The gas supply arrangements into which BC Gas has entered contain provisions which encourage the purchase of gas at a high load factor and encourage efficient use of the Westcoast system. Certain of the gas purchase contracts contain a Volume Incentive Adjustment by which BC Gas is relieved from producer demand charges if a high load factor is achieved in the annual purchases under that gas purchase contract. BC Gas has entered into Cost of Service Agreements with the producers and aggregators supplying gas to BC Gas. Under the Cost of Service Agreements the producer or aggregator will compensate BC Gas if the producer or supplier makes use, during off-peak periods, of the Westcoast capacity serving the gas purchase contract with that supplier. In the tables under Tab 3 of this filing BC Gas has estimated that it will achieve benefits of \$1,500,000 from those two sources. Those benefits are credited to the firm customers in the methodology. The actual benefits will vary from the estimate. BC Gas proposes that the variations from the estimate be recorded in a deferral account. BC Gas proposes that gas inventory charges which BC Gas may have to pay if the purchases under a particular gas purchase contract are at a low load factor also be recorded in the deferral account.

N. Incentive Mechanism

During discussions prior to the filing of this updated Application questions have been raised regarding the efforts

that BC Gas might take to maximize the benefit that the core market customers would receive as a result of BC Gas negotiating gas prices with industrial customers. BC Gas proposes that an incentive be introduced to provide assurance to the core market customers and the Commission that the persons negotiating on BC Gas will attempt to achieve the maximum benefit. BC Gas proposes that BC Gas receive as non-utility income 10 per cent of the difference between the price at which gas is sold under negotiated contracts and the cost of that gas. It is recognized that such an incentive will provide a potential benefit to BC Gas but not a potential risk. However, establishing a base expectation from which a risk or benefit might be measured is subjective and will potentially lead to dispute. The 10 per cent mechanism which BC Gas proposes is simple and provides an incentive to BC Gas, while providing 90 per cent of the benefit to the core market customers. BC Gas is prepared to consider other incentive mechanisms which are fair, easy to administer, and are not subject to periodic debate.

O. Deferral Account

BC Gas proposes that the new Schedules 10 and 13 become effective November 1, 1992. It is proposed that a deferral account be established to record the differences between the negotiated price, less the incentive to BC Gas, and the cost of gas sold pursuant to that negotiated price. The amounts recorded in that deferral account would flow to the firm customers who are being allocated the demand costs associated with the supply of gas to the firm market.

Yours very truly,

BC GAS INC.

Per:

A handwritten signature in dark ink, appearing to read 'Masuhara', is written over the 'Per:' line.

David M. Masuhara

BC GAS INC.
METHODOLOGY FOR THE ALLOCATION OF
GAS PURCHASE COSTS
OF THE LOWER MAINLAND AND INLAND DIVISIONS

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BC GAS INC.

METHODOLOGY FOR THE ALLOCATION OF
GAS PURCHASE COSTS
OF THE LOWER MAINLAND AND INLAND DIVISIONS

1. GENERAL

- a) On October 31, 1991, the long-term gas purchase agreements between Westcoast Energy Inc. (WEI) and the Lower Mainland and Inland Divisions of BC Gas Inc. expire. As a significant step in completing the movement to a fully deregulated gas market, BC Gas has replaced the former gas supply arrangements - one supplier, gas transported under WEI's Canadian sales tolls - with 21 negotiated firm gas supply agreements and WEI service tolls for gathering, processing and transportation.
- b) The gas supply agreement between WEI and the Fort Nelson Division does not expire until October 1, 1996. Similarly, the gas supply arrangements of the Columbia Division with its suppliers for gas from the Deep Basin Area of B.C. and from Alberta, transported by NOVA and Alberta Natural, remain unchanged as to the method in which the gas is purchased. As a result, while BC Gas Inc. will apply for flowing through in customers' rates the gas purchase cost changes effective November 1, 1991 for the Fort Nelson and Columbia Divisions, the gas cost allocation methodology set out below applies only to the Lower Mainland and Inland Divisions. | c

2. ALLOCATION METHODOLOGY OF NOVEMBER 1, 1991
GAS PURCHASE COSTS

a) General Approach

- i) In order to affect efficiencies in gas purchases and to optimize load balancing, BC Gas now operates gas supply and demand management of the Lower Mainland and Inland Divisions as one integrated operating system. As a consequence, all costs must be considered common costs of the two Divisions and should be allocated in a similar manner to common customer classes.

- ii) Under this integrated approach, peak shaving facilities formerly considered for the benefit of customers of a Division, e.g. underground storage/LNG plant - Lower Mainland, East Kootenay Link - Inland, are now considered for the benefit of customers of both Divisions.
- iii) Except for WEI demand tolls, the above methodology | C
is consistently applied to all gas purchase costs. WEI's demand-distance tolls, as determined by the National Energy Board for the two Divisions, are recognized as specific cost differences of the Divisions. | o
- iv) Overall, the new November 1, 1991 gas supply costs are allocated to customers of the two Divisions based on forecast volumes for the November, 1991 | C
to October 30, 1992 period. | o

b) Commodity Cost of Gas

i) Long-Term Supply

Presently, BC Gas is paying producers for the commodity cost of gas a negotiated price on a "streamed" basis, i.e. a different price for various targeted market segments such as residential/small commercial, large industrial/interruptible, etc.

Under the new gas supply agreements, BC Gas will be paying producers a demand and a commodity price on the basis of 70% for commodity and 30% for demand costs. The negotiated contract prices vary slightly by contract.

ii) Storage Gas

BC Gas will continue to follow its previous practice of charging gas going into storage at the commodity cost of gas plus pipeline commodity tolls and storage injection fees.

Following generally accepted North American practice, it will continue to withdraw gas from storage at the weighted average monthly cost.

iii) Peaking Gas

To augment the long-term supply, BC Gas is entering into peaking supply arrangements with a variety of producers. The commodity cost component will be allocated volumetrically. | C

Under the exclusive WEI/Inland Division gas purchase agreement, the Company was unable to purchase peaking gas from other sources and, as a consequence, had entered into an agreement with Alberta and Southern (A&S) whereby it would borrow gas from A&S during the winter and return it during the summer with gas supplied by WEI. Effective November 1, 1991, BC Gas will purchase this peaking gas from A&S. | C

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iv) Commodity Cost of Gas Allocation

Commodity gas costs are allocated in the following manner:

✓ Firm customers receive their maximum use of low priced gas from the long-term supply.

Peaking volumes and volumes supplied from storage are then assigned to interruptible Schedules 10, 2501, Burrard Thermal Swing Gas and to purchases for the Columbia Division on the basis of their November to March volumes. On average, 40% of those winter volumes will be supplied pro-rata from the various peaking and storage sources.

Except for Burrard Thermal interruptible and Inland Division special interruptible (Rate 12) contract volumes, all remaining peaking and storage volumes are allocated volumetrically to all other Rate Schedules.

All other remaining gas purchase volumes, including gas unaccounted for, are from long-term supply at long-term supply prices.

Volumes to be purchased by BC Gas for Squamish Gas Co. Ltd. are not part of the purchase volumes of this application. It is assumed that Squamish volumes will be required from long-term and peaking sources in addition to and in similar proportions to residential and commercial requirements of the Lower Mainland/Inland Divisions.

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c) Commodity Tolls and Fees

i) WEI Tolls - Long-Term Contracts

WEI present commodity tolls, as approved by the National Energy Board, are applied to the volumes, as determined above (Item 2(b)(iv)).

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ii) Peaking Contracts

Costs are at the approved National Energy Board commodity tolls.

iii) From Storage

Volumes are priced out at the applicable storage/withdrawal fees.

d) Fixed Costs

i) General

All demand costs, whether WEI demand tolls, producer demand charges or fixed peaking/storage tolls and charges, are allocated in the manner set out below.

ii) Allocation of Core Market vs. Non-Core Market

The core market has been assigned long-term and short-term gas purchase and Westcoast costs using a demand allocation based on coincident peak loads for each market sector. The sum of the coincident peak loads is equal to the total gas send out for the core market during the forecast peak day of a design year. The coincident peak loads are allocated to each core market class by dividing forecast sales volume by the respective load factor for that class.

Where applicable, other industrial/interruptible markets are assigned demand costs for short-term supply. Also, formerly, Lower Mainland Interruptible Schedules 2501 and 2502 had been assigned long-term supply demand costs (\$0.41/GJ). Since BC Gas does not nominate any long-term demand for those interruptible customers, that cost has been removed from the interruptible rates and allocated to all other firm customers. For purposes of calculating rate changes as a result

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of the new gas purchase costs effective November 1, 1991, the Company has also removed the \$0.41/GJ from the reference price for Schedules 2501/2502. The effect of both changes is that the matter can now be dealt with in Phase B of the Rate Design Application in conjunction with the overall rate to be collected under Schedule 2501 (cost of gas and cost of service).

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iii) Core Market Load Factors

- Residential/Commercial

Load factors for residential, small and large commercial customers have been determined by regression analysis from October, 1989 to June 1990 billing statistics, confirmed against core market gas send out data.

- Small Industrial

Initially, load factors for the Inland and Lower Mainland small industrial groups have been separately calculated using the information available in each Division. The Lower Mainland load factor has been determined by regression analysis using billing statistics. The Inland load factor has been determined by regression analysis based upon daily metered consumption of the small industrial customers. The small industrial class is then assigned a weighted average load factor.

- NGV Fuel

The forecast of 1992 consumption is based on increasing consumption in relation to the number of vehicles on natural gas. A 100% load factor is estimated for gas cost distribution.

- Seasonal Rates

Gas cost assignment is based on a nominal 150% load factor for the Seasonal market.

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A summary of the load factor determination is set out in the attached Table A.

iv) Demand Costs

WEI demand costs are based on the 1991 tolls approved by the National Energy Board for gathering, processing, transportation, etc., applied to a Lower Mainland demand of $11,900 \times 10^3 \text{ m}^3$ and an Inland demand of $2,553 \times 10^3 \text{ m}^3$.

Producer demand charges are based on the same total nomination of $14,453 \times 10^3 \text{ m}^3$.

Peaking demand costs and fixed storage fees and costs are based on the contracts applicable to the various services.

The total Lower Mainland/Inland long-term, peaking and storage contract peak day supply is $26,061.3 \times 10^3 \text{ m}^3$, net of a deduction for the $56.7 \times 10^3 \text{ m}^3$ PCEC/Squamish Gas peak day demand nomination.

v) Volume Incentive Adjustments

The gas purchase arrangements into which BC Gas has entered and which have been approved by Commission Order E-4-91 include provisions that:

- (a) provide revenue to BC Gas from a supplier should the supplier make use of Westcoast capacity for which BC Gas is paying;
- (b) in some arrangements provide relief from producer demand charges if a prescribed load factor in the annual purchases under a gas purchase contract is attained; and
- (c) provide for BC Gas to pay a gas inventory charge if a prescribed load factor in the annual purchases under a gas purchase contract is not attained.

BC Gas believes that the benefits and costs associated with those provisions should be received or borne by the firm customers of BC Gas. BC Gas expects that there will be a benefit achieved under those provisions, and the customers which have been assigned responsibility for the demand charges should receive the benefits.

The Company estimates that the volume incentive adjustments and compensation from gas suppliers for use of WEI capacity of \$1.5 million in the 1991/1992 contract year and has included this credit in the flow-through calculations in Table B, Pages 3 and 3.1. As set out in this Application, any differences from the forecast credit will be credited or charged to a deferral account.

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e) Summary of Cost Allocation

For purposes of demonstrating the effect of the proposed methodology, as discussed above, an example calculation is set out on Pages 1 to 3.1 of the attached Table B.

In the example, total and allocated new gas purchase costs are set out on Lines 6 to 25 of Table B, Pages 1 and 1.1, and supporting detail Pages 2 to 3.1.

3. RATE CHANGES AS A RESULT OF NOVEMBER 1, 1991
GAS PURCHASE COST CHANGES

- a) BC Gas proposes to flow through in customers' rates the change in the costs, as detailed above, from those costs which the Lower Mainland and Inland Divisions would have incurred while regulated under Order-in-Council No. 953/89, i.e. 1991/ 1992 volumes priced out at pre-November 1, 1991 contract costs, including deferrals as set out in Order-in-Council No. 953/89 (the "Reference Price"). | C
- b) The unit costs per gigajoule of the Reference Price are set out in Lines 26 to 33 of Table B, Pages 1 and 1.1, attached.
- c) Increases or decreases per gigajoule, before other rate changes related to November 1, 1991 gas purchase cost changes, Item 4, below, are shown on Table B, Page 1, Line 46 for Lower Mainland Schedules 2101, 2102, 2207, 2208 and 2209. Customers of these Schedules have, at present, one common schedule of rates and are distinct only by the their volumes consumed in a two month period. While an attempt has been made to divide the group into major sub-schedules (Col. 2 to 5), for purposes of the gas cost flow-through, it is proposed that the rates be changed based on the average shown in Line 46. For all other Lower Mainland customers, the rate changes of the example calculation are shown on Line 38 of that page. | C

Similarly, rate changes of the example calculation for the Inland Division, before Item 4 changes, are shown on Line 40 of Tables B, Page 1.1.

4. OTHER CHANGES RELATED TO
NOVEMBER 1, 1991 GAS PURCHASE COST CHANGES

Item 3, above, sets forth the proposed changes as a result of gas purchase cost changes, as shown in the example in Table B, Pages 1 and 1.1. In addition, BC Gas proposes the following related changes:

a) NGV Fuel Rate Reduction
(Table B, Page 1, Col. 6 and Page 1.1, Col. 7)

Under the proposed allocation of gas costs, NGV Fuel rates would receive a reduction in the Lower Mainland and Inland Divisions respectively.

Since NGV Fuel is at present rates competitively priced in the market place, BC Gas proposes not to change the NGV fuel rates, but to allocate the gas cost savings of each Division to the other core market rates on the basis of their respective sales volumes. See Table E, Page 1, Line 35 and Page 2, Line 32.

b) Loss of Inland Division Margin
on Sales to Columbia Division
(Table C)

To date, the Inland Division has sold to the Columbia Division each year certain volumes under rates set out in Sheet No. 6.5 of Inland Division Tariff Supplement No. 6. This contract originated during the period when the two Divisions were separate legal entities, Inland Natural Gas Co. Ltd. and Columbia Natural Gas Limited.

Inland has made these sales at prices competitive with gas available through facilities located in the Province of Alberta. The Inland Division sales price became the cost of gas for the Columbia Division. As shown in Table C, the sales to Columbia include a margin of \$0.673 per gigajoule.

As set out in the Application, BC Gas proposes to cancel the Inland Division Tariff Supplement No. 6 and make available to the Columbia Division the gas supply of the Lower Mainland/Inland Divisions at cost for 500 TJ, the maximum available volume for the 1991/1992 contract year to be supplied in conjunction with other existing gas purchase agreements of the Columbia Division.

C

C

C

C

As a consequence, BC Gas proposes to flow through the loss of the present inter-divisional margin to the Inland Division core market on the basis of their respective sales volumes. See Table E, Page 2, Line 30.

c) Deferred Long-Term Gas Purchase
Negotiating Costs - 1989 to 1991
(Table D)

In its efforts to obtain the most favourable results for its customers in the move towards a fully deregulated gas market, BC Gas has incurred certain costs for outside services, costs which it would not have had to incur had the efforts not been undertaken. From 1989, when negotiations for the new gas supply commenced, to November 1, 1991, these costs are projected to amount to \$825,300.

BC Gas proposes:

- i) to charge the costs to a deferral account;
- ii) to amortize the deferred costs over a period of 11.5 years, the lesser of the simple average and the weighted average contract years for the new gas supply; and
- iii) concurrently with Commission approval for the commencement of the amortization recover the amortization costs in rates as part of the rate changes related to the new gas purchase costs.

As shown in Table D, this adds \$0.0004 per gigajoule to all rates of the Lower Mainland/Inland Divisions. See also Table E, Page 1, Line 34 and Page 2, Line 31.

d) Schedule 2501 and Schedule 10/12 Rates
(Table E, Page 1, Col. 9 and Page 2, Col. 10)

As set out in the Application, BC Gas does not propose to change the rates of Schedules 2501 and 10 as a result of the gas cost changes.

Customers under Schedule 2501 will have signed up for this Schedule by October 31, 1991 at existing rates. As a consequence, it is proposed to defer any gas cost changes hereunder, to be dealt with in conjunction with Order-in-Council 953/89 and BCUC Order G-92-91 deferrals in Phase B of the Rate Design Hearing.

Similarly, Schedule 10 customers will have signed up by October 31, 1991 for service under existing rates. It is proposed that any cost of gas changes resulting from the new gas purchase agreements be part of the Company's revenue requirement application to be filed on November 20, 1991. N

5. ILLUSTRATIVE EXAMPLE C

Tables B and E demonstrate by way of an example calculation the effect on customers' rates of the flow-through methodology, as proposed under Items 2 to 4, above.

The information set out in Tables B and E is illustrative only and does not depict the actual effect on customer rates which will result from the methodology described in this material.

For example, Table B uses a commodity cost of gas from long-term supply of \$0.93/GJ. This cost is not the actual average commodity cost under the long-term contracts BC Gas will experience in 1991/1992. Similarly, the commodity costs for storage and peaking supplies and the producer demand costs are illustrative only. BC Gas considers the actual costs to be confidential. C

The illustrative Tables B to E are preceded by a brief summary, indicating changes made from the material filed on August 8, 1991, as amended on August 28, 1991. N

6. SUMMARY OF CHANGES IN THE ILLUSTRATIVE EXAMPLE CALCULATION FILED ON AUGUST 8, 1991, AS AMENDED ON AUGUST 28, 1991

In the preceding pages, changes in the wording of the gas cost flow-through methodology filed on August 8, 1991 and August 15, 1991 are indicated by "C" for changed wording, and "N" for new paragraph.

Changes in the illustrative example, set out in Tables A to E, are summarized briefly below. N

1. Gas purchase volumes in the August filing were based on forecast sales for the 1992 calendar year. The new Tables include forecast gas purchase volumes for the November 1, 1991 to October 31, 1992 gas contract year.
2. The sales volume forecast incorporates the following changes:

- An additional agreement with Burrard Thermal has been incorporated with forecast sales volumes of 3500 TJ.
 - Gas purchases of 500 TJ for the Columbia Division have been added.
 - Squamish Gas Co. Ltd. will obtain $56.7 \times 10^3 \text{ m}^3$ of demand from the same sources as Lower Mainland/Inland. Demand charges of \$474,000 have been subtracted from fixed costs of the Lower Mainland/Inland Divisions, to be allocated to Squamish.
 - The revised sales forecast assumes all Rate 2502 sales customers have moved back to Rate 2501 due to increased gas supply availability effective November 1, 1991.
3. Long term gas supply for the Lower Mainland has been increased from $11,895 \times 10^3 \text{ m}^3$ to $11,900 \times 10^3 \text{ m}^3$.
 4. The initial load factors in Table A, derived by regression analysis, have remained unchanged. The adjusted load factors are slightly lower because of different sales volumes and a different peak day demand nomination.
 5. The load factor assigned to Seasonal customers has been changed from 100% to 150%.
 6. Rates 10, 2501, purchases for Columbia and Burrard swing sales are assigned peaking and storage volumes from all sources based on 40% of winter volumes (see Table B, Page 2, Cols. 9 and 11, Page 2.1, Cols. 10 and 11). Formerly these rate classes were not assigned peaking and storage volumes except for Rate 10 which had been assigned short term peaking costs only for 40% of winter volumes.
 7. The A & S costs have been revised to reflect new contractual arrangements.
 8. Lower Mainland reference prices have increased by \$1.6 million as a result of correcting the peaking costs which were assigned to the Inland Division. Inland reference prices have decreased by a similar amount, less approximately \$0.5 million which is currently credited to deferral accounts. These adjustments correct an error which was noted when responses to information requests related to the August 1991 filing were prepared.

N

9. The long-term supply costs previously assigned to Lower Mainland Division Schedules 2501/2502 has been removed from those Schedules in the allocations of the new gas purchase costs and in the Reference Price - see Tab 3, Page 4, Paragraph (d) (ii). N

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LOAD FACTORS INCLUDED IN
GAS COST FLOW-THROUGH APPLICATION

TABLE A

1. Development of weighted average load factors

	Purchase Vols. (Sales + UAF) (TJ) -----	Initial Load Factors -----	Adjusted Load Factors -----
A. Residential			
Lower Mainland	50,707.9	30.30%	
Inland	13,675.4	31.80%	
	-----	-----	
Total	64,383.3	30.62%	31.37%
B. Small Commercial (2.1)			
Lower Mainland	26,195.5	29.20%	
Inland	7,585.1	30.60%	
	-----	-----	
Total	33,780.6	29.51%	30.24%
C. Large Commercial (2.2)			
Lower Mainland	9,989.5	35.70%	
Inland	1,905.7	35.40%	
	-----	-----	
Total	11,895.2	35.65%	36.51%
D. Industrial			
Lower Mainland	3,419.5	54.20%	
Inland	631.1	47.40%	
	-----	-----	
Total	4,050.6	53.14%	54.43%

2. Initial Load Factor Ratios as a Percentage of the Residential Load Factor.

A. Small Commercial (Rate 2.1)	29.51% / 30.62% =	96.4%
B. Large Commercial (Rate 2.2)	35.65% / 30.62% =	116.4%
C. Industrial	53.14% / 30.62% =	173.5%

3. The Adjusted Load Factors are the Initial Load Factors, the load factors derived from the regression analysis, revised to the level which matches the firm gas supply availability.

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BC GAS INC. - LOWER MAINLAND DIVISION
LOWER MAINLAND/INLAND DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
EXAMPLE CALCULATION (Revised Oct. 15, 1991)
(\$000)

TABLE B
PAGE 1

Line No.	Particulars	Residential 2101/2102	Commercial		Med. Ind. Rate 2209	NGV Rate 2206 & VRA	Seasonal 2601/2602	Subtotal	Interruptible		Burrard Thermal		Total Sales
			Small	Large					Rate 2501	Rate 2502	Firm / Special	Interrupt.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1 SUMMARY													
2													
3 Sales Volume (TJ)	48,588.1	26,195.5	9,571.9	3,276.6	914.4	237.9	88,784.4	20,923.5	0.0	3,883.5	20,000.0	133,591.4	
4													
5													
6 Gas Purchase Costs (\$000)													
7 Commodity Costs	\$47,338.9	\$25,522.0	\$9,325.8	\$3,192.3	\$890.9	\$231.8	\$86,501.7	\$20,696.2	\$0.0	\$4,023.9	\$18,600.0	\$129,821.8	
8 Commodity Tolls and Fees	1,718.4	926.5	338.5	115.9	32.3	8.3	3,139.9	748.7	0.0	145.1	502.5	4,536.2	
9 Fixed Costs	95,880.4	53,622.3	16,227.0	3,726.4	566.1	98.5	170,120.7	0.0	0.0	1,542.3	0.0	171,663.1	
10													
11 Total Commodity & Demand	\$144,937.7	\$80,070.8	\$25,891.3	\$7,034.6	\$1,489.3	\$338.6	\$259,762.3	\$21,444.9	\$0.0	\$5,711.3	\$19,102.5	\$306,021.1	
12													
13 Unit Costs (\$/GJ)													
14 Commodity Costs	\$0.9743	\$0.9743	\$0.9743	\$0.9743	\$0.9743	\$0.9744	\$0.9743	\$0.9891	\$1.0939	\$1.0362	\$0.9300	\$0.9718	
15 Commodity Tolls and Fees	0.0354	0.0354	0.0354	0.0354	0.0353	0.0349	0.0354	0.0358	0.0358	0.0374	0.0251	0.0340	
16 Fixed Costs	1.9733	2.0470	1.6953	1.1373	0.6191	0.4141	1.9161	0.0000	0.0000	0.3971	0.0000	1.2850	
17													
18 Commodity & Demand / GJ	\$2.9830	\$3.0567	\$2.7050	\$2.1470	\$1.6287	\$1.4234	\$2.9258	\$1.0249	\$1.1297	\$1.4707	\$0.9551	\$2.2908	
19													
20													
21													
22 REFERENCE PRICE (1991 contract costs, incl. deferrals, per 1992 GJ sold)													
23													
24													
25 Unit Costs (\$/GJ)													
26 Commodity Costs	\$1.7793	\$1.7647	\$1.5662	\$1.5367	\$1.0998	\$1.5763		\$1.1043	\$1.2472	\$1.0362	\$0.9300		
27 Commodity Tolls and Fees	0.0517	0.0518	0.0490	0.0517	0.0491	0.0332		0.0321	0.0321	0.0373	0.0367		
28 Fixed Costs	1.0315	1.0314	1.0314	1.0314	0.8612	0.4842		0.0000	0.0000	0.3557	0.0000		
29													
30 Total	\$2.8625	\$2.8479	\$2.6466	\$2.6198	\$2.0101	\$2.0937		\$1.1364	\$1.2793	\$1.4292	\$0.9667		
31													
32													
33													
34 Increase (Decrease) per GJ	\$0.1205	\$0.2088	\$0.0584	(\$0.4728)	(\$0.3814)	(\$0.6703)		(\$0.1115)	(\$0.1496)	\$0.0415	(\$0.0116)		
35													
36													
37													
38 Total Increase (Decrease)	\$5,854.2	\$5,470.4	\$558.9	(\$1,549.1)	(\$348.7)	(\$159.5)		(\$2,333.0)	\$0.0	\$161.1	(\$232.0)	\$7,422.3	
39													
40													
41													
42													
43													
44													
45													
46 Increase (Decrease) per GJ				\$0.1179									
47													
48 Total Increase (Decrease)				\$10,334.4									

TABLE B
PAGE 1

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BC GAS INC. - INLAND DIVISION
LOWER MAINLAND/INLAND DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
EXAMPLE CALCULATION (Revised Oct. 15, 1991)
(\$000)

TABLE B
PAGE 1.1

Line No.	Particulars	Residential Rate 1	Commercial Rate 2.1	Commercial Rate 2.2	Industrial Rate 5.1	Industrial Rate 5.2	NGV Fuel & VRA	Seasonal Rate 4	Subtotal	Large Industrial Sales	Columbia	Total Sales	Total Sales LM & ING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	SUMMARY												
2													
3	Sales Volume (TJ)	13,668.6	7,581.3	1,904.7	630.8	0.0	181.0	186.1	24,152.5	2,991.9	500.0	27,644.4	161,235.8
4													
5													
6	Gas Purchase Costs (\$000)												
7	Commodity Costs	\$12,768.9	\$7,082.3	\$1,779.4	\$589.3	\$0.0	\$169.1	\$173.9	\$22,562.9	\$2,984.6	\$524.2	\$26,071.7	\$155,893.5
8	Commodity Tolls and Fees	297.4	164.9	41.4	13.7	0.0	3.8	3.9	525.1	79.4	15.1	619.7	5,155.9
9	Fixed Costs	23,771.5	13,677.3	2,845.6	632.4	0.0	98.9	67.6	41,093.3	0.0	0.0	41,093.3	212,756.5
10													
11	Total Commodity & Demand	36,837.8	20,924.5	4,666.4	1,235.4	0.0	271.8	245.4	64,181.3	3,064.0	539.3	67,784.7	373,805.9
12	Franchise Fees	957.8	592.2	132.1	26.4	0.0	0.0	5.2	1,713.6	94.7	0.0	1,808.3	1,808.3
13													
14	Total Cost of Gas	\$37,795.6	\$21,516.7	\$4,798.5	\$1,261.8	\$0.0	\$271.8	\$250.6	\$65,894.9	\$3,158.7	\$539.3	\$69,593.0	\$375,614.2
15													
16													
17	Unit Costs (\$/GJ)												
18	Commodity Costs	\$0.9342	\$0.9342	\$0.9342	\$0.9342	\$0.0000	\$0.9343	\$0.9344	\$0.9342	\$0.9976	\$1.0484	\$0.9431	\$0.9669
19	Commodity Tolls and Fees	0.0218	0.0218	0.0217	0.0217	0.0000	0.0210	0.0210	0.0217	0.0265	0.0302	0.0224	0.0320
20	Fixed Costs	1.7391	1.8041	1.4940	1.0025	0.0000	0.5464	0.3632	1.7014	0.0000	0.0000	1.4865	1.3194
21													
22	Commodity & Demand / GJ	2.6951	2.7601	2.4499	1.9584	0.0000	1.5017	1.3186	2.6573	1.0241	1.0786	2.4520	2.3183
23	Franchise Fees	0.0701	0.0781	0.0693	0.0419	0.0000	0.0000	0.0278	0.0710	0.0316	0.0000	0.0654	0.0112
24													
25	Cost of Gas / GJ (1992)	\$2.7652	\$2.8382	\$2.5192	\$2.0003	\$0.0000	\$1.5017	\$1.3464	\$2.7283	\$1.0557	\$1.0786	\$2.5174	\$2.3295
26													
27													
28	REFERENCE PRICE (1991 contract costs, incl. deferrals, per 1992 GJ sold)												
29													
30	Existing Commodity & Demand	\$2.6166	\$2.6168	\$2.3777	\$2.2411	\$1.9403	\$1.5297	\$1.2857		\$1.2409	\$1.0529		
31	Existing Franchise Fees	0.0677	0.0743	0.0675	0.0410	0.0410	0.0467	0.0235		0.0383	0.0000		
32													
33	Cost of Gas / GJ	\$2.6843	\$2.6911	\$2.4452	\$2.2821	\$1.9813	\$1.5764	\$1.3092		\$1.2792	\$1.0529		
34													
35													
36	Increase (Decrease) per GJ over Existing												
37	Commodity & Demand	\$0.0785	\$0.1433	\$0.0722	(\$0.2827)		(\$0.0280)	\$0.0329		(\$0.2168)	\$0.0257		
38	Franchise Fees	0.0024	0.0038	0.0018	0.0009		(0.0467)	0.0043		(0.0067)	0.0000		
39													
40	Cost of Gas / GJ	\$0.0809	\$0.1471	\$0.0740	(\$0.2818)		(\$0.0747)	\$0.0372		(\$0.2235)	\$0.0257		
41													
42													
43	Total Increase (Decrease) over Existing												
44	Commodity & Demand	\$1,073.4	\$1,086.2	\$137.6	(\$178.3)		(\$5.1)	\$6.1		(\$648.6)	\$12.8	\$1,484.1	\$8,906.4
45	Franchise Fees	32.8	28.8	3.4	0.6		(8.5)	0.8		(20.0)	0.0	37.9	37.9
46													
47	Total Cost of Gas	\$1,106.2	\$1,115.0	\$141.0	(\$177.7)		(\$13.6)	\$6.9		(\$668.6)	\$12.8	\$1,522.0	\$8,944.3

TABLE B
PAGE 1.1

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BC GAS INC. - LOWER MAINLAND DIVISION
LOWER MAINLAND/INLAND DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
EXAMPLE CALCULATION (Revised Oct. 15, 1991)
(\$000)

TABLE 8
PAGE 2

line No.	Particulars	Residential 2101/2102	Commercial		Med. Ind. Rate 2209	NGV Rate 2206 & VRA	Seasonal 2601/2602	Subtotal	Interruptible		Burrard Thermal		Total Sales
			Small	Large					Rate 2501	Rate 2502	Firm / Special	Interrupt.	
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	VOLUME ALLOCATIONS - TJ												
2													
3	Long Term Supply \$0.9300 / GJ	47,975.0	25,864.9	9,451.0	3,235.2	902.8	234.9	87,663.8	17,381.9	0.0	2,483.5	20,000.0	127,529.2
4	From Storage												
5	Aitken Creek \$1.1100 / GJ	257.3	138.6	50.7	17.3	4.8	1.3	470.0	1,484.9	0.0	587.0	0.0	2,541.9
6	LNG \$1.1100 / GJ	42.8	23.1	8.5	2.9	0.8	0.2	78.3	248.1	0.0	98.1	0.0	424.5
7	Jackson Prairie \$1.1100 / GJ	29.6	16.1	5.9	2.0	0.6	0.1	54.3	171.6	0.0	67.8	0.0	293.7
8													
9	Peaking \$1.3500 / GJ	269.1	145.1	53.0	18.2	5.1	1.3	491.8	1,554.3	0.0	614.4	0.0	2,660.5
10	Peaking - A & S \$1.5000 / GJ	14.3	7.7	2.8	1.0	0.3	0.1	26.2	82.7	0.0	32.7	0.0	141.6
11													
12	SALES VOLUMES - TJ	48,588.1	26,195.5	9,571.9	3,276.6	914.4	237.9	88,784.4	20,923.5	0.0	3,883.5	20,000.0	133,591.4
13	UAF Volume \$0.9300 / GJ												
14	(1% of Burrard, 4.36% of Firm)	2,119.8	1,142.8	417.6	142.9	39.9	10.4	3,873.4	209.2	0.0	0.0	0.0	4,082.6
15													
16	PURCHASE VOLUMES - TJ	50,707.9	27,338.3	9,989.5	3,419.5	954.3	248.3	92,657.8	21,132.7	0.0	3,883.5	20,000.0	137,674.0
17													
18													
19	TOTAL COMMODITY COST (\$000)	\$47,338.9	\$25,522.0	\$9,325.8	\$3,192.3	\$890.9	\$231.8	\$86,501.7	\$20,696.2	\$0.0	\$4,023.9	\$18,600.0	\$129,821.8
20	less Rate 2502 Peaking Credit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21													
22		47,338.9	25,522.0	9,325.8	3,192.3	890.9	231.8	86,501.7	20,696.2	0.0	4,023.9	18,600.0	129,821.8
23													
24	COMMODITY COST PER GJ (\$/GJ)												
25	Before Rate 2502 Peaking Credit	\$0.9743	\$0.9743	\$0.9743	\$0.9743	\$0.9743	\$0.9744	\$0.9743	\$0.9891	\$0.0000	\$1.0362	\$0.9300	\$0.9718
26	After Rate 2502 Peaking Credit	0.9743	0.9743	0.9743	0.9743	0.9743	0.9744	0.9743	0.9891	0.0000	1.0362	0.9300	0.9718
27													
28													
29	COMMODITY TOLLS & FEES (\$000)												
30													
31	WEI Tolls - Long Term Contracts	\$1,691.6	\$912.0	\$333.2	\$114.1	\$31.8	\$8.3	\$3,091.0	\$594.0	\$0.0	\$83.9	\$502.5	\$4,271.3
32													
33	Peaking (line 9)												
34	WEI Tolls - Short Term Contracts	9.8	5.3	1.9	0.7	0.2	0.0	17.9	56.6	0.0	22.4	0.0	96.9
35													
36	From Storage												
37	Aitken (line 5)												
38	Inj./Withdr Fee \$0.0229 / GJ x 1	5.9	3.2	1.2	0.4	0.1	0.0	10.8	33.9	0.0	13.4	0.0	58.1
39													
40	Jackson Prairie (line 7)												
41	Combined Fee \$0.3739 / GJ x 1	11.1	6.0	2.2	0.7	0.2	0.0	20.2	64.2	0.0	25.4	0.0	109.8
42													
43	TOTAL COMMODITY TOLLS & FEES (\$000)	\$1,718.4	\$926.5	\$338.5	\$115.9	\$32.3	\$8.3	\$3,139.9	\$748.7	\$0.0	\$145.1	\$502.5	\$4,536.2
44													
45													
46	COMMODITY TOLLS & FEES PER GJ SOLD	\$0.0354	\$0.0354	\$0.0354	\$0.0354	\$0.0353	\$0.0349	\$0.0354	\$0.0358	\$0.0000	\$0.0374	\$0.0251	\$0.0340

TABLE 8
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BC GAS INC. - INLAND DIVISION
LOWER MAINLAND/INLAND DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
EXAMPLE CALCULATION (Revised Oct. 15, 1991)
(\$000)

TABLE B
PAGE 2.1

line no.	Particulars	Residential Rate 1	Commercial		Industrial		NGV Fuel & VRA	Seasonal Rate 4	Subtotal	Large Industrial Sales	Columbia	Total Sales	Total Sales LM & ING
			Rate 2.1	Rate 2.2	Rate 5.1	Rate 5.2							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	VOLUME ALLOCATIONS - TJ												
2													
3	Long Term Supply \$0.9300 / GJ	13,496.1	7,485.7	1,880.5	622.8	0.0	178.6	183.7	23,847.4	2,310.2	299.9	26,457.5	153,986.7
4	From Storage												
5	Aitken Creek \$1.1100 / GJ	72.3	40.1	10.1	3.3	0.0	1.0	1.0	127.8	285.8	83.9	497.5	3,039.3
6	LNG \$1.1100 / GJ	12.1	6.7	1.7	0.6	0.0	0.2	0.2	21.5	47.8	14.0	83.3	507.8
7	Jackson Prairie \$1.1100 / GJ	8.4	4.6	1.2	0.4	0.0	0.1	0.1	14.8	33.0	9.7	57.5	351.3
8													
9	Peaking \$1.35 / GJ	75.7	42.0	10.6	3.5	0.0	1.0	1.0	133.8	299.2	87.8	520.8	3,181.3
10	Peaking - A & S \$1.50 / GJ	4.0	2.2	0.6	0.2	0.0	0.1	0.1	7.2	15.9	4.7	27.8	169.2
11													
12	SALES VOLUMES - TJ	13,668.6	7,581.3	1,904.7	630.8	0.0	181.0	186.1	24,152.5	2,991.9	500.0	27,644.4	161,235.8
13	UAF Volume \$0.9300 / GJ												
14	@ 0.050%	6.8	3.8	1.0	0.3	0.0	0.1	0.1	12.1	1.5	0.3	13.9	4,096.5
15													
16	PURCHASE VOLUMES - TJ	13,675.4	7,585.1	1,905.7	631.1	0.0	181.1	186.2	24,164.6	2,993.4	500.3	27,658.3	165,332.3
17													
18													
19	TOTAL COMMODITY COST (\$000)	\$12,768.9	\$7,082.3	\$1,779.4	\$589.3	\$0.0	\$169.1	\$173.9	\$22,562.9	\$2,984.6	\$524.2	\$26,071.7	\$155,893.5
20	less Rate 2502 Peaking Credit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21													
22		12,768.9	7,082.3	1,779.4	589.3	0.0	169.1	173.9	22,562.9	2,984.6	524.2	26,071.7	155,893.5
23													
24	COMMODITY COST PER GJ (\$/GJ)												
25	Before Rate 2502 Peaking Credit	\$0.9342	\$0.9342	\$0.9342	\$0.9342	\$0.0000	\$0.9343	\$0.9344	\$0.9342	\$0.9976	\$1.0484	\$0.9431	\$0.9669
26	After Rate 2502 Peaking Credit	0.9342	0.9342	0.9342	0.9342	0.0000	0.9343	0.9344	0.9342	0.9976	1.0484	0.9431	0.9669
27													
28													
29	COMMODITY TOLLS & FEES (\$000)												
30													
31	WEI Tolls - Long Term Contracts	\$289.8	\$160.8	\$40.4	\$13.4	\$0.0	\$3.8	\$3.9	\$512.1	\$49.7	\$6.4	\$568.3	\$4,839.6
32													
33	Peaking (line 9)												
34	WEI Tolls - Short Term Contracts	2.8	1.5	0.4	0.1	0.0	0.0	0.0	4.8	10.9	3.2	18.9	115.9
35													
36	From Storage												
37	Aitken (line 5)												
38	Inj./Withdr Fee \$0.0229 / GJ x 1	1.7	0.9	0.2	0.1	0.0	0.0	0.0	2.9	6.5	1.9	11.3	69.4
39													
40	Jackson Prairie (line 7)												
41	Combined Fee \$0.3739 / GJ x 1	3.1	1.7	0.4	0.1	0.0	0.0	0.0	5.3	12.3	3.6	21.2	131.0
42													
43	TOTAL COMMODITY TOLLS & FEES (\$000)	\$297.4	\$164.9	\$41.4	\$13.7	\$0.0	\$3.8	\$3.9	\$525.1	\$79.4	\$15.1	\$619.7	\$5,155.9
44													
45													
46	COMMODITY TOLLS & FEES PER GJ SOLD	\$0.0218	\$0.0218	\$0.0217	\$0.0217	\$0.0000	\$0.0210	\$0.0210	\$0.0217	\$0.0265	\$0.0302	\$0.0224	\$0.0320

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BC GAS INC. - LOWER MAINLAND DIVISION
 LOWER MAINLAND/INLAND DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
 EXAMPLE CALCULATION (Revised Oct. 15, 1991)
 (\$000)

TABLE B
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Line No.	Particulars	Residential 2101/2102	Commercial		Med. Ind. Rate 2209	NGV Rate 2206 & VRA	Seasonal 2601/2602	Subtotal	Interruptible		Burrard Thermal		Total Sales
			Small	Large					Rate 2501	Rate 2502	Firm / Special	Interrupt.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	ALLOCATION BASIS												
2	Purchase Volumes (p. 2, l. 16)	50,707.9	27,338.3	9,989.5	3,419.5	954.3	248.3	92,657.8	21,132.7	0.0	3,883.5	20,000.0	137,674.0
3													
4	Load Factors	31.37%	30.24%	36.51%	54.43%	100.00%	150.00%		N/A	N/A	100.00%	N/A	
5	Heat Content 38.56 MJ/M ³												
6													
7	Total Demand Requirement (10 ³ M3)	11,485.3	6,423.3	1,943.8	446.4	67.8	11.8	20,378.4	0.0	0.0	328.3	0.0	20,706.7
8													
9	FIXED COSTS												
10	WEI Demand Charges												
11	Demand Tolls to Savona on total ING & LM												
12	demand- 14,453 @ \$588.749 /10 ³ m3)												
13	(less IT Credit \$13.409 /10 ³ m3)	\$44,351.5	\$24,804.2	\$7,506.2	\$1,723.8	\$261.8	\$45.6	\$78,693.1	\$0.0	\$0.0	\$195.4	\$0.0	\$78,888.5
14	\$/GJ equivalent	0.9128	0.9469	0.7842	0.5261	0.2863	0.1917	0.8863	0.0000	0.0000	0.0503	0.0000	0.5905
15													
16	Incremental Demand Tolls to Huntington												
17	LM only- 11,900 @ \$98.450 /10 ³ m3)												
18	(less incr.IT Cr. \$1.820 /10 ³ m3)	7,737.1	4,327.1	1,309.4	300.7	45.7	7.9	13,727.9	0.0	0.0	\$32.8	0.0	13,760.8
19	\$/GJ equivalent	0.1592	0.1652	0.1368	0.0918	0.0500	0.0332	0.1546	0.0000	0.0000	0.0084	0.0000	0.1030
20													
21	Producer Demand Charges (ING & LM)												
22	(\$467.00 /10 ³ m3)	35,999.7	20,133.3	6,092.7	1,399.2	212.5	37.0	63,874.4	0.0	0.0	\$158.6	0.0	64,033.0
23	\$/GJ equivalent	0.7409	0.7686	0.6365	0.4270	0.2324	0.1555	0.7194	0.0000	0.0000	0.0408	0.0000	0.4793
24													
25													
26	Volume Incentive Adjustments	(668.0)	(373.7)	(113.1)	(26.0)	(3.9)	(0.7)	(1,185.4)	0.0	0.0	0.0	0.0	(1,185.4)
27	\$/GJ equivalent	(0.0137)	(0.0143)	(0.0118)	(0.0079)	(0.0043)	(0.0029)	(0.0134)	0.0000	0.0000	0.0000	0.0000	(0.0089)
28													
29	WEI Service, Nova / ANG Demand Tolls - Peaking												
30	(net of Service Interrupt. Credit)	3,912.0	2,187.9	662.1	152.0	23.1	4.0	6,941.1	0.0	0.0	0.0	0.0	6,941.1
31	\$/GJ equivalent	0.0805	0.0835	0.0692	0.0464	0.0253	0.0168	0.0782	0.0000	0.0000	0.0000	0.0000	0.0520
32													
33	Other Fixed Costs - Peaking	1,912.3	1,069.5	323.6	74.3	11.3	2.0	3,393.0	0.0	0.0	1,155.5	0.0	4,548.5
34	\$/GJ equivalent	0.0394	0.0408	0.0338	0.0227	0.0124	0.0084	0.0382	0.0000	0.0000	0.2975	0.0000	0.0340
35													
36	Jackson Prairie Storage	1,296.8	725.2	219.5	50.4	7.7	1.3	2,300.9	0.0	0.0	0.0	0.0	2,300.9
37	\$/GJ equivalent	0.0267	0.0277	0.0229	0.0154	0.0084	0.0055	0.0259	0.0000	0.0000	0.0000	0.0000	0.0172
38													
39	Aitken Storage	1,339.0	748.8	226.6	52.0	7.9	1.4	2,375.7	0.0	0.0	0.0	0.0	2,375.7
40	\$/GJ equivalent	0.0276	0.0286	0.0237	0.0159	0.0086	0.0059	0.0268	0.0000	0.0000	0.0000	0.0000	0.0178
41													
42													
43	TOTAL FIXED COSTS	\$95,880.4	\$53,622.3	\$16,227.0	\$3,726.4	\$566.1	\$98.5	\$170,120.7	\$0.0	\$0.0	\$1,542.3	\$0.0	\$171,663.1
44	\$/GJ Equivalent	1.9733	2.0470	1.6953	1.1373	0.6191	0.4141	1.9161	0.0000	0.0000	0.3971	0.0000	1.2850

TABLE B
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BC GAS INC. - INLAND DIVISION
LOWER MAINLAND/INLAND DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
EXAMPLE CALCULATION (Revised Oct. 15, 1991)
(\$000)

TABLE B
PAGE 3.1

Line No.	Particulars	Residential Rate 1	Commercial Rate 2.1	Commercial Rate 2.2	Industrial Rate 5.1	Industrial Rate 5.2	HGV Fuel & VRA	Seasonal Rate 4	Subtotal	Large Industrial Sales	Columbia	Total Sales	Total Sales LM & ING
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	ALLOCATION BASIS												
2	Purchase Volumes (p. 2, l. 16)	13,675.4	7,585.1	1,905.7	631.1	0.0	181.1	186.2	24,164.6	2,993.4	500.3	27,658.3	165,332.3
3													
4	Load Factors	31.37%	30.24%	36.51%	54.43%	65.00%	100.00%	150.00%		N/A	N/A		
5	Heat Content	38.56 MJ/M ³											
6													
7	Total Demand Requirement (10 ³ M3)	3,097.5	1,782.2	370.8	82.4	0.0	12.9	8.8	5,354.6	0.0	0.0	5,354.6	26,061.3
8													
9	FIXED COSTS												
10	WEI Demand Charges												
11	Demand Tolls to Savona on total ING & LM												
12	demand- 14,453 @ \$588.749												
13	(less IT Credit \$13.409 /10 ³ m3)	\$11,961.3	\$6,882.1	\$1,431.9	\$318.2	\$0.0	\$49.8	\$34.0	\$20,677.3	\$0.0	\$0.0	\$20,677.3	\$99,565.7
14	\$/GJ equivalent	0.8751	0.9078	0.7518	0.5044	0.0000	0.2751	0.1827	0.8561	0.0000	0.0000	0.7480	0.6175
15													
16	Incremental Demand Tolls to Huntington												
17	LM only- 11,900 @ \$98.450 /10 ³ m3												
18	(less incr.IT Cr. \$1.820 /10 ³ m3)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13,760.8
19	\$/GJ equivalent	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0853
20													
21	Producer Demand Charges (ING & LM)												
22	(\$467.00 /10 ³ m3)	9,708.9	5,586.2	1,162.2	258.3	0.0	40.4	27.6	16,783.6	0.0	0.0	16,783.6	80,816.6
23	\$/GJ equivalent	0.7103	0.7368	0.6102	0.4095	0.0000	0.2232	0.1483	0.6949	0.0000	0.0000	0.6071	0.5012
24													
25	Volume Incentive Adjustments	(180.2)	(103.7)	(21.6)	(4.8)	0.0	(0.8)	(0.5)	(311.6)	0.0	0.0	(311.6)	(1,497.0)
26	\$/GJ equivalent	(0.0132)	(0.0137)	(0.0113)	(0.0076)	0.0000	(0.0044)	(0.0027)	(0.0129)	0.0000	0.0000	(0.0113)	(0.0093)
27													
28	WEI Service, Nova / ANG Demand Tolls - Peaking												
29	(net of Service Interrupt. Credit)	1,055.0	607.0	126.3	28.1	0.0	4.4	3.0	1,823.8	0.0	0.0	1,823.8	8,765.0
30	\$/GJ equivalent	0.0772	0.0801	0.0663	0.0445	0.0000	0.0243	0.0161	0.0755	0.0000	0.0000	0.0660	0.0544
31													
32	Other Fixed Costs - Peaking	515.7	296.7	61.7	13.7	0.0	2.1	1.5	891.4	0.0	0.0	891.4	5,440.0
33	\$/GJ equivalent	0.0377	0.0391	0.0324	0.0217	0.0000	0.0116	0.0081	0.0369	0.0000	0.0000	0.0322	0.0337
34													
35	Jackson Prairie Storage	349.7	201.2	41.9	9.3	0.0	1.5	1.0	604.6	0.0	0.0	604.6	2,905.4
36	\$/GJ equivalent	0.0256	0.0265	0.0220	0.0147	0.0000	0.0083	0.0054	0.0250	0.0000	0.0000	0.0219	0.0180
37													
38	Aitken Storage	361.1	207.8	43.2	9.6	0.0	1.5	1.0	624.2	0.0	0.0	624.2	3,000.0
39	\$/GJ equivalent	0.0264	0.0274	0.0227	0.0152	0.0000	0.0083	0.0054	0.0258	0.0000	0.0000	0.0226	0.0186
40													
41													
42													
43	TOTAL FIXED COSTS	\$23,771.5	\$13,677.3	\$2,845.6	\$632.4	\$0.0	\$98.9	\$67.6	\$41,093.3	\$0.0	\$0.0	\$41,093.3	\$212,756.5
44	\$/GJ Equivalent	1.7391	1.8041	1.4940	1.0025	0.0000	0.5464	0.3632	1.7014	0.0000	0.0000	1.4865	1.3194

BC GAS INC.
INLAND DIVISION MARGIN
ON SALES TO COLUMBIA DIVISION

TABLE C

Sales to Columbia
under Inland Tariff Supplement No. 6

<u>TJ</u>	<u>Rate</u> <u>\$/GJ (1)</u>	<u>Revenue</u>
466.6	\$1.742	\$812,817
16.3	1.629	26,553
<u>17.1</u>	<u>1.391</u>	<u>23,786</u>
500.0	\$1.726	863,156

Cost of Gas at
Pre-November 1, 1991
Prices (Table B, Page 1.1,
Col. 11., Line 30)

Commodity Cost of Gas	1.030
WEI Commodity Toll	0.022
Unaccounted For	<u>0.001</u>
	<u>1.053</u>

Margin Loss	<u>500.0</u>	\$0.673	\$ 336,500
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Add - Gas Cost Increase			<u>13,000</u>
			<u>\$ 349,500</u>

- (1) Lesser of Tariff Supplement 6 rates
and competitive commodity prices from
Alberta facilities.

BC GAS INC.
 DEFERRED LONG-TERM GAS PURCHASE
 NEGOTIATING COSTS - 1989 TO 1991

TABLE D

Gas Purchase Negotiating Costs

Reservoir Engineering/Testing - McDaniel & Associates	\$ 60,981
Legal	
- R.C. Muir, Calgary	435,819
- Russell & DuMoulin, Vancouver	115,221
Other Consultants	10,119
Incidental travel expenses of BC Gas employees	<u>75,498</u>
Costs as at June 30, 1991	697,638
Estimated costs to Oct. 31, 1991	<u>127,650</u>
	<u>\$825,288</u>

Rate Change

$$\begin{array}{rcl}
 & \$825,288 & \\
 \hline
 11.5 \text{ years} \times 161,236,000 \text{ GJ} & = & \$0.000445 \\
 & = & \underline{\underline{\$0.0004/\text{GJ}}}
 \end{array}$$

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BC GAS INC. - LOWER MAINLAND DIVISION
 DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
 EXAMPLE CALCULATION (Revised Oct. 15, 1991)
 (\$000)

TABLE E
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Line No.	Particulars	Residential 2101/2102	Commercial		Med. Ind. Rate 2209	NGV Rate 2206 & VRA	Seasonal 2601/2602	Subtotal	Interruptible		Burrard Thermal		Total Sales
			Small	Large					Rate 2501	Rate 2502	Firm / Special	Interrupt.	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(12)	(13)	(14)
1													
2													
3	SALES VOLUME (TJ)	48,588.1	26,195.5	9,571.9	3,276.6	914.4	237.9	88,784.4	20,923.5	0.0	3,883.5	20,000.0	133,591.4
4													
5													
6													
7			Firm Sales				Seasonal		Interruptible		Burrard Thermal		
8			2101, 2102, 2207				2601, 2602		Rate 2501 Rate 2502		Firm Interrupt.		
9			2208, 2209										
10													
11			87,632.1			914.4	237.9	88,784.4	20,923.5	0.0	3,883.5	20,000.0	133,591.4
12													
13													
14	COST CHANGE - \$/GJ												
15													
16	Cost of Gas and Tolls Changes												
17	from Costs in Present Rates (Table B)		\$0.1179			(\$0.3814)	(\$0.6703)		(\$0.1115)	(\$0.1496)	\$0.0415	(\$0.0116)	
18													
19	Company Use / Fuel Cost Change		(0.0001)			(0.0001)	(0.0001)		(0.0001)	(0.0001)	(0.0001)	(0.0001)	
20	Deferred Negotiating Costs												
21	(Item 4(c))		0.0004			0.0004	0.0004		0.0004	0.0004	0.0004	0.0004	
22	NGV Cost Savings allocated to												
23	other firm volumes (Item 4(a))		(0.0040)			0.3811	(0.0040)		0.0000	0.0000	0.0000	0.0000	
24													
25													
26	Total		\$0.1142			\$0.0000	(\$0.6740)		(\$0.1112)	(\$0.1493)	\$0.0418	(\$0.0113)	
27													
28													
29	TOTAL RATE INCREASE (DECREASE)												
30													
31	Cost of Gas and Tolls (Table B)		\$10,331.8			(\$348.7)	(\$159.5)	\$9,823.6			\$161.1	(\$232.0)	\$9,752.7
32													
33	Fuel Cost / Company Use		(8.8)			(0.1)	0.0	(8.9)			(0.4)	(2.0)	(11.3)
34	Deferred Negotiating Costs (Item 4(c))		35.1			0.4	0.1	35.6			1.6	8.0	45.2
35	NGV Savings (Item 4(a))		(347.8)			348.4	(0.9)	(0.3)			0.0	0.0	0.0
36													
37													
38	Total		\$10,010.3			\$0.0	(\$160.3)	\$9,850.0			\$162.3	(\$226.0)	\$9,786.6
39													
40													
41													
42	RATE CHANGE - \$/GJ		\$0.114			\$0.000	(\$0.674)				\$0.042	(\$0.011)	
43													
44													
45	Line 11 x Line 43		\$9,990.1			\$0.0	(\$160.3)	\$9,829.8			\$163.1	(\$220.0)	\$9,772.9

TABLE E
 PAGE 1

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4.1

BC GAS INC. - INLAND DIVISION
LOWER MAINLAND/INLAND DIVISIONS NOV. 1, 1991 COST OF GAS FLOW-THROUGH METHODOLOGY
EXAMPLE CALCULATION (Revised Oct. 15, 1991)
(\$000)

TABLE E
PAGE 2

Line No.	Particulars	Residential Rate 1	Commercial		Industrial		NGV Fuel & VRA	Seasonal Rate 4	Subtotal	Large Industrial Sales	Columbia	Total Sales	Total Sales LM & ING
			Rate 2.1	Rate 2.2	Rate 5.1	Rate 5.2							
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1													
2													
3	SALES VOLUME (TJ)	13,668.6	7,581.3	1,904.7	630.8	0.0	181.0	186.1	24,152.5	2,991.9	500.0	27,644.4	161,235.8
4													
5	COST CHANGE - \$/GJ												
6													
7	Cost of Gas and Tolls Changes												
8	from Costs in Present Rates	\$0.0785	\$0.1433	\$0.0722	(\$0.2827)		(\$0.0280)	\$0.0329		(\$0.2168)	\$0.0257		
9	Franchise Fee Change	0.0024	0.0038	0.0018	0.0009		(0.0467)	0.0043		(0.0067)	0.0000		
10													
11	Total (Table B)	0.0809	0.1471	0.0740	(0.2818)		(0.0747)	0.0372		(0.2235)	0.0257		
12	Company Use / Fuel Cost Change	(0.0076)	(0.0076)	(0.0076)	(0.0076)		(0.0076)	(0.0076)		(0.0076)	0.0000		
13	Loss of Margin on Sales to												
14	Columbia (Item 4(b))	0.0145	0.0145	0.0145	0.0144		0.0144	0.0145		0.0000	(0.0261)		
15	Deferred Negotiating Costs												
16	(Item 4(c))	0.0004	0.0004	0.0004	0.0004		0.0004	0.0004		0.0004	0.0004		
17	NGV Cost Savings allocated to												
18	other firm volumes (Item 4(a))	(0.0005)	(0.0005)	(0.0005)	(0.0005)		0.0675	(0.0005)		0.0000	0.0000		
19													
20	Total	\$0.0877	\$0.1539	\$0.0808	(\$0.2751)		\$0.0000	\$0.0440		(\$0.2307)	(\$0.0000)		
21													
22													
23	TOTAL RATE INCREASE (DECREASE)												
24													
25	Cost of Gas and Tolls (Table B)	\$1,073.4	\$1,086.2	\$137.6	(\$178.3)	\$0.0	(\$5.1)	\$6.1	\$2,119.9		\$12.8	\$2,132.7	\$11,885.4
26	Franchise Fees (Table B)	32.8	28.8	3.4	0.6	0.0	(8.5)	0.8	57.9		0.0	57.9	57.9
27	Fuel Cost / Company Use	(103.9)	(57.6)	(14.5)	(4.8)	0.0	(1.4)	(1.4)	(183.6)		0.0	(183.6)	(194.9)
28	Columbia Margin Loss (Item 4(b))	197.8	109.7	27.6	9.1	0.0	2.6	2.7	349.5		(13.0)	336.5	336.5
29	Deferred Negot. Costs (Item 4(c))	5.5	3.0	0.8	0.3	0.0	0.1	0.1	9.8		0.2	10.0	55.2
30	NGV Savings (Item 4(a))	(7.0)	(3.9)	(1.0)	(0.3)	0.0	12.3	(0.1)	(0.0)		0.0	(0.0)	(0.0)
31													
32													
33	Total	\$1,198.6	\$1,166.2	\$153.9	(\$173.4)	\$0.0	\$0.0	\$8.2	\$2,353.5		\$0.0	\$2,353.5	\$12,140.1
34													
35													
36													
37	RATE CHANGE - \$/GJ	\$0.088	\$0.154	\$0.081	(\$0.275)		\$0.000	\$0.044			\$0.000		
38													
39													
40													
41	Line 3 X Line 37	\$1,202.8	\$1,167.5	\$154.3	(\$173.5)	\$0.0	\$0.0	\$8.2	\$2,359.3		\$0.0	\$2,359.3	\$12,132.2

TABLE E
PAGE 2

BC Gas Inc.
1066 West Hastings Street
Vancouver, British Columbia
Canada V6E 3G3

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

DAVID M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

October 16, 1991

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

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

Re: Lower Mainland: Updated Application to file BC Gas Sales Tariffs Schedule 10 and Schedule 13, and corresponding BC Gas Sales Agreement, applicable to Lower Mainland Division Large Volume Sales customers

BC Gas Inc. hereby applies pursuant to British Columbia Utilities Commission Order G-92-91 to file updated BC Gas Sales Tariffs Schedule 10 and 13, and the corresponding BC Gas Sales Agreement applicable to Lower Mainland Large Volume Sales customers to become effective November 1, 1992. | C

Our Application hereunder represents the initial step in the development of an integrated BC Gas Tariff designed for utilization throughout the BC Gas service area. The proposed Tariffs will apply initially to Inland and Lower Mainland Division customers (subject to a separate Application for Inland service area, also enclosed). This filing integrates, for large volume accounts, the divisional services applied for September 12, 1990, which consisted of our current Schedule 10 service for Inland, and Schedule 2502 service for the Lower Mainland Division. | C

Schedule 10 was initially introduced to permit Inland Division to replace gas formerly sold as Authorized Overrun and acquired from BCPC/Canwest. The new sales service enabled BC Gas to purchase replacement gas supplies in addition to using core market valley gas for interruptible sales to industrial customers. Since its inception on January 1, 1990, the sales tariff has been strongly endorsed by the utility's large volume customers. In the first year of its availability Schedule 10 attracted all but one Inland large industrial to purchase their interruptible supplies from the utility. For the contract year, ending November 1, 1991, all of Inland's large industrials accepted the utility's Schedule 10 sales option to meet their interruptible gas requirements. | C

REASONS FOR APPLICATION

BC Gas finds it necessary to apply for a new large volume sales tariff as a result of changes in the natural gas market since the filing of September 12, 1990. Circumstances which have contributed to our application consist of: | C

a) Change in BC Gas supply agreements, effective November 1, 1991

On November 1, 1991 the utility's Westcoast sales contract will be replaced by 21 separately negotiated purchase contracts with producers and marketers. These long term contracts call for payment to producers on a demand and commodity basis, rather than the historic segmented pricing agreed to for each market sector. In effect, the producer demand charges replace the traditional take or pay obligations carried in the Westcoast sales agreement.

market sector. In effect, the producer demand charges replace the traditional take or pay obligations carried in the Westcoast sales agreement.

Commensurate with the deregulation of gas contracting, large volume industrial customers now have numerous supply and pricing options in the "direct" market which ensure their ability to access gas at competitive rates. BC Gas will be in a similar position effective November 1, 1991 and has negotiated agreements with producers which reflect the requirements of its sales customers and accordingly ensure its core market gas supply attracts competitive prices. The proposed sales tariff is designed to maintain the utility's overall load factor and to recover a flexible revenue contribution based upon the market value of the utility's gas supply and surplus Westcoast capacity as made available from time to time to the utility's interruptible customers. This contribution may be considered as offsets against the fixed costs associated with producer demand and pipeline transportation costs incurred to meet our core market needs, and would effectively replace the existing \$0.41/GJ margin contribution embedded in the utility's existing sales tariffs.

| C

| C

On the basis of this updated Application, November 1, 1992 will mark yet another major step by the utility and its large volume Lower Mainland customers in moving toward a fully deregulated natural gas market. While the transportation and distribution functions within the province will continue to be fully regulated in the traditional manner, BC Gas and the "direct" market will hereinafter be on an equal footing with respect to the acquisition and sale of gas to the utility's large volume customers.

| C

b) Need for flexible prices

It is in the core market's interest for BC Gas to continue the supply of gas to large volume interruptible customers providing them with a host of different supply options. Each Lower Mainland Division large volume customer is differentiated by volume, and their unique load characteristics and set of gas supply alternatives. In order to obtain a reasonable contribution to the core market for the use of its gas supply, the utility will find it necessary to evaluate each large volume customer independently in order to assess appropriate price(s).

The proposed tariff schedules will provide large volume customers with a menu of supply options comparable with those available in the "direct" market. The flexible pricing of Schedules 10 and 13 will enable the utility to set prices and offer service options matching those available in a competitive market for large volume sales.

| C

This proposal is consistent with the Commission's statements on negotiable rates. This concept was endorsed in the Report and Recommendations to the Lieutenant Governor in Council in October 1987, where the Commissioner Vern Millard endorsed the negotiability of rates. More recently, in the February 27, 1991 Pacific Northern Gas decision the Commission accepted the concept of negotiable rates and value of service.

BC Gas requests that in accordance with Section 2.1 of the Commission's Rules with respect to energy supply contracts which indicates prices for contracts with a term of less than two years need not be supplied (under Section 85.3 (4) of the Utility Commission Act), permitting "direct" market suppliers to keep their price confidential on short term arrangements, that BC Gas be granted similar confidentiality on its short term sales.

the Utility Commission Act), permitting "direct" market suppliers to keep their price confidential on short term arrangements, that BC Gas be granted similar confidentiality on its short term sales.

c) Need for confidential prices

In the present industry environment where costs, prices and customer specific contract terms are typically kept confidential from third parties (whether marketers, producers or other customers), it is essential that the utility have similar opportunity to keep its prices confidential. Any information such as the above that is made public by the utility but not required of the "direct" market, provides undue advantage to third parties and places the utility and its core market at a disadvantage in obtaining fair market value for its sales to "non-core" customers. Without the benefit of confidentiality, marketers and producers will be well positioned to take advantage of any information by undercutting the utility's published pricing and terms. This would be detrimental to the utility and its core customers, as the utility would be unable to respond on the same basis. In addition, if prices were not kept confidential, each customer would, whether justified or not, seek to obtain the lowest price and best terms offered the most worthy customer. This would necessitate a vigorous defense of each proposal and would ultimately require the utility to return to fixed pricing and terms of sale. Without doubt, this would not serve the best interests of the core market.

BC Gas also requests that on longer term sales contracts to the non-core market the sales prices of BC Gas be kept confidential to the same extent as other suppliers of gas.

We would again note that this application for confidentiality would only apply to the gas price and not to the transportation/utility rate. This latter component would remain public and equally applicable to all eligible customers.

IMPACTS ON LARGE VOLUME CUSTOMERS, AND THE CORE MARKET

| C

a) Impact on Large Volume Customers

Schedule 10 has been designed to expand the range of competitive supply options for large volume customers. Schedule 10 includes sale of Level 1 firm gas, which is firm only in the winter months; and Level 2 interruptible gas.

| C

Schedule 10 will be instrumental in retaining Lower Mainland large volume customers on sales gas by continuing to provide competitive options. This schedule represents a step toward meeting the pricing and service needs of customers.

With sales under Schedules 10 and 13 taking place at the Interconnection Point with BC Gas' Pipeline Supplier, customers purchasing from the utility will now receive the same benefits from the proposed unbundling of gas sales and transportation functions as they would by way of the "direct" market.

b) Benefits to the Core Market

The utility's core market is expected to benefit from the new Schedules 10 and 13 in a number of ways:

| C

1) Load Factor Maintenance & Enhancement

Increased sales to the industrial market will enable BC Gas to maintain higher load factors on its long term purchase contracts. This will assist the utility in maintaining a competitive position in its core market gas acquisition efforts and avail itself of additional gas cost savings for core customers contained in certain gas supply contracts in its new portfolio

2) Additional Peak Shaving

The new schedule will permit BC Gas to retain its existing curtailment rights as available under the transportation service provided across the BC Gas system, yet also enables BC Gas to negotiate for additional curtailments where such may be mutually beneficial to both the customer and the utility.

3) More Efficient Domestic Gas Market

A more deregulated system for utility sales to its large volume customers will have the incidental effect of creating a more efficient domestic gas market. This will in turn lead to more active competition within the domestic market resulting in greater benefits for all consumers.

| C

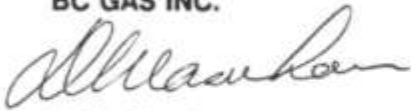
4) Net financial benefits

Short term (1 - 2 year) utility sales to large volume customers will result in contributing additional financial benefits to the core market. The continued sale of surplus core market gas to large volume interruptible customers at market prices will make contributions to BC Gas' revenue requirements which will effectively continue to minimize the core market's overall cost of gas.

| C

Yours truly,

BC GAS INC.



D. M. Masuhara
Vice President
Legal and Regulatory Affairs

BC Gas Inc.

1066 West Hastings Street
Vancouver, British Columbia
Canada V6E 3G3

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

DAVID M. MASUHARA

VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

October 16, 1991

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

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

Re: Inland: Updated Application to file BC Gas Sales Tariffs Schedule 10 and Schedule 13, and corresponding BC Gas Sales Agreement, applicable to Inland Division Large Volume Sales customers

BC Gas Inc. hereby applies pursuant to British Columbia Utilities Commission Order G-92-91 to file updated BC Gas Sales Tariff Schedule 10 and 13, and the corresponding BC Gas Sales Agreement applicable to Inland Division Large Volume Sales customers, to become effective November 1, 1992. Accordingly, BC Gas also applies to withdraw existing Inland Division Schedules 10, 11, 12 and 13, the respective Sales Agreements related thereto, and the General Terms and Conditions Applicable to Large Volume Sales for Inland Division.

C

Our Application hereunder represents an initial step in the development of an integrated BC Gas Sales Tariff designed for utilization throughout our service area. The proposed Tariff Schedules will apply initially to Inland and Lower Mainland Division customers (subject to a separate Application for the Lower Mainland service area, also enclosed). This filing integrates, for large volume accounts, the divisional services applied for September 12, 1990, which consisted of our current Schedule 10 service for Inland, and Schedule 2502 service for the Lower Mainland Division.

Schedule 10 was initially introduced to permit Inland Division to replace gas formerly sold as Authorized Overrun and acquired from BCPC/Canwest. The new sales service permitted BC Gas to purchase replacement gas supplies in addition to using core market valley gas for interruptible sales to industrial customers. Since its inception January 1, 1990 the sales tariff has been strongly endorsed by the utility's large volume customers. In its first year of availability, Schedule 10 attracted all but one large industrial to purchase interruptible supplies from the utility. For the current year, all large industrials have accepted the utility sales option for their interruptible gas requirements.

C

REASONS FOR APPLICATION

BC Gas finds it necessary to apply for a new large volume sales tariff as a result of changes in the natural gas market since the filing of September 12, 1990. Circumstances which have contributed to our application consist of:

C

a) Change in BC Gas supply agreements, effective November 1, 1991

On November 1, 1991 the utility's Westcoast sales contract will be replaced by 21 separately negotiated purchase contracts with producers and marketers. These long term contracts call for payment to producers on a demand and commodity basis, rather than the historic segmented pricing agreed to for each market sector. In effect, the producer demand charges replace the traditional take or pay obligations carried in the Westcoast sales agreement.

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Commensurate with the deregulation of gas contracting, large volume industrial customers now have numerous supply and pricing options in the "direct" market which ensure their ability to access gas at competitive rates. BC Gas will be in a similar position effective November 1, 1991 and has negotiated agreements with producers which reflect the requirements of its sales customers and accordingly ensure its core market gas supply attracts competitive prices. The proposed sales tariff is designed to maintain the utility's overall load factor and to recover a flexible revenue contribution based upon the market value of the utility's gas supply and surplus Westcoast capacity as made available from time to time to the utility's interruptible customers. This contribution may be considered as offsets against the fixed costs associated with producer demand and pipeline transportation costs incurred to meet our core market needs.

C

On the basis of this updated Application, November 1, 1992 will mark yet another major step by the utility and its large volume Lower Mainland customers in moving toward a fully deregulated natural gas market. While the transportation and distribution functions within the province will continue to be fully regulated in the traditional manner, BC Gas and the "direct" market will hereinafter be on an equal footing with respect to the acquisition and sale of gas to the utility's large volume customers.

C

b) Need for flexible prices

It is in the core market's interest for BC Gas to continue the supply of gas to large volume interruptible customers providing them with a host of different supply options. Each Inland Division large volume customer is differentiated by volume, and their unique load characteristics and set of gas supply alternatives. In order to obtain a reasonable contribution to the core market for the use of its gas supply, the utility will find it necessary to evaluate each large volume customer independently in order to assess appropriate price(s).

C

The proposed tariff schedules will provide large volume customers with a menu of supply options comparable with those available in the "direct" market. The flexible pricing of Schedules 10 and 13 will enable the utility to set prices and offer service options matching those available in a competitive market for large volume sales.

C

C

This proposal is consistent with the Commission's statements on negotiable rates. This concept was endorsed in the Report and Recommendations to the Lieutenant Governor in Council in October 1987, where the Commissioner Vern Millard endorsed the negotiability of rates. More recently, in the February 27, 1991 Pacific Northern Gas decision the Commission accepted the concept of negotiable rates and value of service.

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BC Gas requests that in accordance with Section 2.1 of the Commission's Rules with respect to energy supply contracts which indicates prices for contracts with a term of less than two years need not be supplied (under Section 85.3 (4) of the Utility Commission Act), permitting "direct" market suppliers to keep their price confidential on short term arrangements, that BC Gas be granted similar confidentiality on its short term sales.

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In the present industry environment where costs, prices and customer specific contract terms are typically kept confidential from third parties (whether marketers, producers or other customers), it is essential that the utility have similar opportunity to keep its prices confidential. Any information such as the above that is made public by the utility but not required of the "direct" market, provides undue advantage to third parties and places the utility and its core market at a disadvantage in obtaining fair market value for its sales to "non-core" customers. Without the benefit of confidentiality, marketers and producers will be well positioned to take advantage of any information by undercutting the utility's published pricing and terms. This would be detrimental to the utility and its core customers, as the utility would be unable to respond on the same basis. In addition, if prices were not kept confidential, each customer would, whether justified or not, seek to obtain the lowest price and best terms offered the most worthy customer. This would necessitate a vigorous defense of each proposal and would ultimately require the utility to return to fixed pricing and terms of sale. Without doubt, this would not serve the best interests of the core market.

BC Gas also requests that on longer term sales contracts to the non-core market the sales prices of BC Gas be kept confidential to the same extent as other suppliers of gas.

We would again note that this application for confidentiality would only apply to the gas price and not to the transportation/utility rate. This latter component would remain public and equally applicable to all eligible customers.

IMPACTS ON LARGE VOLUME CUSTOMERS, AND THE CORE MARKET

a) Impact on Large Volume Customers

Schedule 10 has been designed to continue to provide a range of competitive supply options for large volume customers. Schedule 10 includes sale of Level 1 firm gas, which is firm only in the winter months; and Level 2 interruptible gas.

C

Schedule 10 will be instrumental in retaining Inland large volume customers on sales gas at prices which properly reflect the competitive market for short term and interruptible supplies.

With sales under Schedules 10 and 13 taking place at the Interconnection Point with BC Gas' Pipeline Supplier, customers purchasing from the utility will now receive the same benefits from the proposed unbundling of gas sales and transportation functions as they would by way of the "direct" market.

b) Benefits to the Core Market

The utility's core market is expected to benefit from the new Schedules 10 and 13 in a number of ways:

C

1) Load Factor Maintenance & Enhancement

Increased sales to the industrial market will enable BC Gas to maintain higher load factors on its long term purchase contracts. This will assist the utility in maintaining a competitive position in its core market gas acquisition efforts and avail itself of additional gas cost savings for core customers contained in certain gas supply contracts in its new portfolio

C

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The new schedule will permit BC Gas to retain its existing curtailment rights as available under the transportation service provided across the BC Gas system, yet also enables BC Gas to negotiate for additional curtailments where such may be mutually beneficial to both the customer and the utility.

3) More Efficient Domestic Gas Market

A more deregulated system for utility sales to its large volume customers will have the incidental effect of creating a more efficient domestic gas market. This will in turn lead to more active competition within the domestic market resulting in greater benefits for all consumers.

C

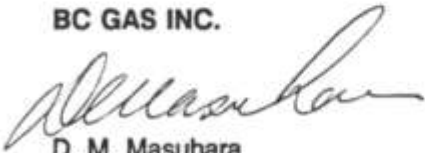
4) Net financial benefits

Short term (1 - 2 year) utility sales to large volume customers will result in contributing additional financial benefits to the core market. The continued sale of surplus core market gas to large volume interruptible customers at market prices will make contributions to BC Gas' revenue requirements which will effectively continue to minimize the core market's overall cost of gas.

C

Yours truly,

BC GAS INC.



D. M. Masuhara
Vice President
Legal and Regulatory Affairs

BC GAS INC.

SCHEDULE 10

LARGE VOLUME SALES

&

SALES AGREEMENT

FOR SCHEDULES 10 & 13

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

SCHEDULE 10
LARGE VOLUME SALES

APPLICABLE:

This Schedule applies to the sale of gas by BC Gas for the purpose of providing the entire interruptible gas requirements of the Buyer, and not for resale. Gas is sold hereunder at two levels of interruptibility as specified under the Special Provisions herein.

C

CONDITIONS OF SERVICE:

This Schedule is available in all territory served by BC Gas under the Tariff of which this Schedule is a part, PROVIDED THAT:

- (a) adequate gas volumes for such service are available prior to the execution of a sales agreement; and
- (b) Buyer has executed, or committed to execute, an agreement for gas sales under Schedule 10 (the "Sales Agreement"); and
- (c) Buyer has executed a Schedule 22 transportation agreement presently in effect with BC Gas (the "Transportation Agreement"); or
- (d) in the absence of the sale of gas to Buyer under this Schedule, Buyer, in BC Gas' opinion, would not otherwise consume the volume of gas to be sold hereunder or might reasonably be expected to contract with other Gas Suppliers for such gas.

C

C

Subject to availability, Level 1 gas may be contracted for the Contract Year commencing November 1, 1991 and ending November 1, 1992 and from year to year thereafter, unless cancelled with notice to Buyer.

Peaking and Backstopping Gas are supplied under Schedule 13 and are not available under this Schedule.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 10
LARGE VOLUME SALES

PRICE:

BC GAS DIVISION	<u>INLAND</u>	<u>L. MAINLAND</u>
-----------------	---------------	--------------------

Monthly Demand Charge per 10 ³ m ³ of MDSV Level 1	As per Appendix A of the Sales Agreement
--	--

Commodity Charge per gigajoule Level 1	As per Appendix A of the Sales Agreement
Level 2	As per Appendix A of the Sales Agreement

Unless otherwise specified in the Sales Agreement, Demand Charges are billable for a Twelve (12) month period, ending November 1. The Maximum Daily Sales Volume ("MDSV") shall be as specified in the Sales Agreement.

MINIMUM CHARGE:

Inland and Lower Mainland Divisions:	The minimum charge shall be the Monthly Demand Charge for Level 1 sales.
---	--

SPECIAL PROVISIONS:

Level 1 Sales

1. Level 1 sales hereunder shall be subject to interruption or curtailment at BC Gas' sole discretion. Notwithstanding the foregoing, between November 1 and March 31 such interruption or curtailment shall be restricted to periods when Company is required to interrupt Schedule 13 sales or is required to curtail service in accordance with operation of the Transportation Agreement.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 10
LARGE VOLUME SALES

2. This Schedule shall permit BC Gas to negotiate with Buyer for curtailment privileges in addition to those specified in the Transportation Agreement, and the terms of any such negotiated arrangement shall be included in Appendix A of the Sales Agreement.

C

Level 2 Sales

3. Level 2 sales hereunder shall be subject to interruption or curtailment at BC Gas' sole discretion.

Other Provisions

4. All sales hereunder shall take place at BC Gas' Interconnection Point with its Pipeline Supplier as specified in Appendix A of the Sales Agreement. Transportation on the BC Gas system shall be subject to the terms of the Transportation Agreement.

5. For gas sales under this Schedule, which shall be at BC Gas' sole discretion, Buyer shall purchase from BC Gas all gas which may be required by Buyer in excess of an agreed upon daily volume obtained directly from other Gas Suppliers for movement under a Transportation Agreement. The volume which may be obtained directly from other Gas Suppliers will normally be equal to Buyer's firm MDTV under Schedule 22, not less than $28.3 \times 10^3 \text{ m}^3$, except when it is in the interests of BC Gas and its core market to permit other daily contract volumes.

C

BCUC Approval

6. Service under this Schedule is subject to approval of the Sales Agreement by the British Columbia Utilities Commission.

General Terms & Conditions:

Unless otherwise stated in the Sales Agreement, service under this Schedule is subject to the General Terms & Conditions Applicable to Large Industrial Transportation Service.

C

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

BC GAS INC.

SCHEDULE 13

PEAKING AND BACKSTOPPING GAS SALES

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

SCHEDULE 13

PEAKING AND BACKSTOPPING GAS SALES

APPLICABLE:

This Schedule applies to the sale of gas by BC Gas for the purpose of providing the Peaking or Backstopping Gas requirements of Buyer, and not for resale.

CONDITIONS OF SERVICE:

This Schedule is available in all territory served by the BC Gas under the Tariff of which this Schedule is a part, PROVIDED THAT:

- (a) adequate gas volumes for such service are from time to time available; and
- (b) Buyer has executed, or committed to execute, an agreement for gas sales under Schedule 13 (the "Sales Agreement"); and
- (c) Buyer has executed a Schedule 22 transportation agreement presently in effect with BC Gas (the "Transportation Agreement"); or
- (d) In the absence of the sale of gas to Buyer under this Schedule, Buyer, in BC Gas' opinion, would not otherwise consume the volume of gas to be sold hereunder or might reasonably be expected to contract with other Gas Suppliers for such gas.

PRICES:

BC GAS DIVISION	<u>INLAND</u>	<u>LOWER MAINLAND</u>
For all gas nominated:		
Commodity Charge per gigajoule	\$2.464	Rate under Schedules 2101 and 2102 less \$0.78/GJ.

C

The above prices are subject to negotiation with BC Gas at its sole discretion. Any such negotiation will take into consideration, among other factors, Buyer's alternative fuel or direct purchase gas costs and BC Gas' cost of gas.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 13

PEAKING AND BACKSTOPPING GAS SALES

MINIMUM CHARGE:

Subject only to interruption or curtailment by BC Gas, Buyer shall pay for all gas nominated each day under this Schedule.

SPECIAL PROVISIONS:

1. For billing purposes, all gas sold hereunder shall be considered to have been taken by Buyer before gas supplied under any other sales or transportation arrangement, whether from BC Gas or other Gas Suppliers.
2. Gas supplies available hereunder shall be subject to interruption or curtailment at BC Gas' sole discretion.
3. Gas supplies available hereunder shall, at BC Gas' sole discretion, be made available on a priority basis in accordance with Buyer's commitment to purchase gas from BC Gas.
4. All sales hereunder shall take place at BC Gas' Interconnection Point with its Pipeline Supplier as specified in Appendix A of the Sales Agreement.

C

BCUC Approval

5. Service under this Schedule is subject to approval of the Sales Agreement by the British Columbia Utilities Commission.

General Terms and Conditions:

Unless otherwise stated in the Sales Agreement, Service under this Schedule is subject to the General Terms & Conditions Applicable to Large Industrial Transportation Service.

C

SALES AGREEMENT
FOR SCHEDULE 13:

Sales Agreement for Schedule 13 - see Sheet No. 10.05 and following pages.

C

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

BC GAS INC.

SALES AGREEMENT FOR SCHEDULES 10 & 13
(Large Volume Sales Services)

This Agreement dated this _____ day of _____, 19____, between BC Gas Inc., (hereinafter called "BC Gas"), and _____
_____ (hereinafter called "Buyer").

WITNESSETH:

WHEREAS BC Gas has gas supply available for Buyer; and

C

WHEREAS Buyer wishes to purchase gas from BC Gas for consumption at its _____
_____ located in or near _____, B.C.;

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

C

ARTICLE I

Gas Supply

- 1.1 Subject to the terms, conditions and limitations of this Agreement, Buyer agrees to purchase from BC Gas and BC Gas agrees to sell to Buyer the following Maximum Daily Sales Volume ("MDSV") when nominated by Buyer:

_____ () 10^3m^3 of Schedule 10 Level 1 gas ("Level 1").

- 1.2 When BC Gas has sufficient supplies of gas available, Buyer agrees to purchase from BC Gas and BC Gas agrees to sell to Buyer to the extent required:

- (a) additional volumes of interruptible gas under Schedule 10 ("Level 2"); or
- (b) interruptible gas under Schedule 13.

- 1.3 If applicable, Buyer will on any Day provide to BC Gas by way of sales nomination:

- (a) on or before Ten (10:00) a.m. Vancouver local time, or such other time as may be specified by BC Gas, the amount of gas requested under Schedule 10 for the following Day; and
- (b) on or before Eight (8:00) a.m. Pacific Standard Time, or such other time as may be specified by BC Gas, the amount of gas requested under Schedule 13 for that Day.

In the event Buyer does not provide BC Gas with a sales nomination by the times specified, the most recent nominations provided by Buyer for Schedule 10 or Schedule 13 respectively shall be deemed to be the Buyer's sales nominations.

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SCHEDULES 10 & 13

SALES AGREEMENT

- 1.4 On each Day during the term of this Agreement, Buyer agrees to limit its purchase or use of gas from other Gas Suppliers, for consumption at the location specified hereunder, to _____ () 10^3 m^3 or as otherwise agreed upon in Appendix A. | C

ARTICLE II

Rate Schedules

- 2.1 Buyer shall pay BC Gas for all gas supplied hereunder the prices set out in Appendix A of this Agreement. | C
- 2.2 All Federal and/or Provincial taxes, where payable on the sale of gas by BC Gas to Buyer under the terms of this Agreement, and Franchise Fees or other municipal taxes on gas consumed within a municipality pursuant to this Agreement, shall be borne by Buyer.
- 2.3 This Agreement is subject to the provisions of Schedules 10 and 13 and amendments thereto.

ARTICLE III

Confidentiality

- 3.1 Buyer and BC Gas agree that the prices set out in Appendix A of this Agreement are confidential and shall not be disclosed to any person other than a person who has a need to know the prices in Appendix A. Buyer and BC Gas recognize that it is required that this Agreement including Appendix A be filed with the British Columbia Utilities Commission. Buyer and BC Gas agree that each shall be liable to the other for any loss or damages that may be suffered as a result of the disclosure of the prices in Appendix A to persons other than those that need to know those prices.

ARTICLE IV

Term of Agreement

- 4.1 The initial term of this Agreement shall commence 8:00 a.m. Pacific Standard Time on the _____ day of _____, 19____, and shall continue in effect until 8:00 a.m. Pacific Standard Time November 1, 19____. Unless otherwise agreed upon, this Agreement shall continue from year to year thereafter unless cancelled by either BC Gas or Buyer upon six (6) months written notice prior to the end of the Contract Year then in effect. | C

SCHEDULES 10 & 13

SALES AGREEMENT

ARTICLE V

Title to Gas

- 5.1 BC Gas warrants generally the title to all gas delivered to Buyer hereunder and its right to sell the same, and warrants that such gas shall be free and clear of all liens and adverse claims.
- 5.2 Title to all gas delivered hereunder shall pass to Buyer at the Interconnection Point specified in Appendix A.

ARTICLE VI

Delivery Point

- 6.1 The gas shall be delivered by BC Gas to Buyer at the Interconnection Point specified in Appendix A.

C

ARTICLE VII

Sales Volumes

- 7.1 Gas quantities sold hereunder, if the resulting daily amount is positive, shall be determined by the measurement of the daily volume of gas delivered to Buyer under the transportation agreement in effect between BC Gas and Buyer (the "Transportation Agreement") less any daily volume of gas accepted by BC Gas for Buyer under the Transportation Agreement, from Gas Suppliers other than BC Gas (as permitted under article 1.4). Notwithstanding the foregoing, Schedule 13 gas quantities sold hereunder shall, on a daily basis be at least equal the sales nominations for Peaking Gas and Backstopping Gas pursuant to Schedule 13.

C

ARTICLE VIII

Statements and Payments

- 8.1 The parties agree that statements for the sale of gas by BC Gas to Buyer and payments therefor from Buyer to BC Gas shall conform with those which apply to Buyer, as Shipper, in the Transportation Agreement.

SCHEDULES 10 & 13

SALES AGREEMENT

ARTICLE IX

Force Majeure

- 9.1 Except for Buyer's obligation to make payments for gas sales hereunder, neither party hereto shall be liable for any failure to perform the terms of the Agreement when such failure is due to "force majeure" as hereinafter defined. The term "force majeure" shall mean 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 to BC Gas; which act of force majeure was not due to negligence of the party claiming force majeure. Further, force majeure shall also include a declaration of force majeure by a Pipeline Supplier to BC Gas which results in gas being unavailable for supply at the Interconnection Point. | C
- 9.2 However, such causes or contingencies affecting the performance of the Agreement by either party shall not relieve it of liability in the event of its concurring negligence or in the event of its failure (except in the case of strike or lockout) to use due diligence to remedy the situation and remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting the performance of this Agreement relieve either party from the obligation to make payments of amounts due hereunder, nor shall such causes or contingencies relieve either party of liability unless such party shall give notice and full particulars of the same in writing to the other party as soon as possible after the occurrence relied on.
- 9.3 Notwithstanding Article 9.1, a curtailment or shutdown in the operations of Buyer is not an event of force majeure hereunder and Buyer shall not receive relief by reason of force majeure if a curtailment or shutdown of the operations of Buyer occurs.

ARTICLE X

Arbitration

- 10.1 If at any time a dispute or difference arises between the parties concerning this Agreement, then every such dispute or difference shall be referred to a single arbitrator appointed by the parties hereunder, if they can agree on one, or, in the event of failure of agreement, to one to be appointed under the provisions of the Commercial Arbitration Act of the Province of British Columbia, and the said arbitration shall be held under the provisions of that Statute.
- 10.2 Subsequent to receipt of written notice of any dispute given by either party, a period of Thirty (30) days shall be allowed for the parties to reach an agreement, but thereafter either party shall have the right to institute the appropriate proceedings to determine the dispute in question by way of arbitration provided herein.

SCHEDULES 10 & 13

SALES AGREEMENT

- 10.3 The award, determination or decision made under any arbitration held pursuant to the terms of this Agreement shall be final and binding upon the parties hereunder, save as otherwise provided in the Commercial Arbitration Act of the Province of British Columbia.

ARTICLE XI

Prior Termination

11.1 Act of Default

If Buyer fails at any time to perform any of the obligations imposed upon it under this Agreement, and does not, within thirty (30) days after BC Gas has given to it notice of such failure, commence to remedy with due diligence and thereafter continue to remedy the matter in which it is at fault, then BC Gas may, without liability therefor, discontinue the supply of gas to Buyer; but no such discontinuance shall relieve the Buyer from any obligation under this Agreement. BC Gas may resume the supply of gas under this Agreement after such failure has been fully remedied, or may, at its sole discretion, cancel the Agreement. Cancellation of the Agreement pursuant to these provisions shall not exclude the right of BC Gas to collect any amount due to it by Buyer for the term of this Agreement or exclude any rights either party may have before such termination.

11.2 Bankruptcy or Insolvency

If Buyer 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 Buyer seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas shall have the right, at its sole discretion, to terminate this Agreement by giving notice in writing to Buyer and thereupon BC Gas may cease further supply of gas to Buyer and the amount then outstanding for gas provided hereunder shall immediately be due and payable by Buyer. | C

ARTICLE XII

Miscellaneous

12.1 Headings

The headings in this Agreement are inserted for the purposes of convenient reference only and are not to be used to interpret the Agreement.

12.2 Records

Each party shall have the right to examine at reasonable times the books, records and charts of the other party to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Agreement.

SCHEDULES 10 & 13

SALES AGREEMENT

12.3 Non-Waiver

No failure by BC Gas or Buyer at any time, or from time to time, to enforce or require a strict observance or performance of any of the provisions of this Agreement shall constitute a waiver of such provisions or affect or impair such provisions or the right of either party at any time to enforce such provisions or to avail itself of any remedy it may have.

12.4 Successors and Assigns

This Agreement shall be binding on and enure to the benefit of the parties and their respective successors and assigns, provided, however, that this Agreement shall not be transferred or assigned by Buyer without prior written consent of BC Gas.

12.5 Law

This Agreement and the respective obligations for the parties under this Agreement are subject to all relevant laws and regulations and the relevant orders, rules and requirements of all authorities having jurisdiction. This Agreement shall be construed in accordance with the laws of British Columbia.

12.6 Industry Usage

The words, phrases or expressions which are not defined herein and which in the usage or custom of the business of the transportation, distribution or sale of gas have an accepted meaning shall have that meaning.

ARTICLE XIII

Notices

13.1 Any notice, request, statement or bill to be given to Buyer, except those specified below, shall be in writing and shall be considered as fully delivered when mailed, personally delivered or sent by facsimile, telecopier or telex to the address of Buyer.

13.2 Notices with respect to curtailment, interruption or restoration of deliveries of gas or with respect to force majeure shall be sufficient if given by BC Gas in writing by facsimile, telecopier, telex, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by Buyer as authorized to receive such notices.

SCHEDULES 10 & 13

SALES AGREEMENT

- 13.3 Unless otherwise designated by BC Gas or Buyer, the address for the receipt of notices under this Agreement shall be:

BC Gas: BC Gas Inc.
23rd Floor
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

| C

Attention: _____

Buyer:

IN WITNESS WHEREOF the parties hereto have executed this Agreement.

BC GAS INC.

BY: _____
(Signature)

(Title)

(Name - Please Print)

DATE: _____

BY: _____
(Signature)

(Title)

(Name - Please Print)

DATE: _____

SCHEDULES 10 & 13

SALES AGREEMENT

APPENDIX A

INTERCONNECTION POINT

The Interconnection Point means km-post ----- on the Westcoast pipeline system where the Westcoast pipeline system interconnects with the BC Gas pipeline system.

NEGOTIATED PROVISIONS

Buyer has/has not declined to take Schedule 10 sales. The terms of such sales are as follows: | C

BC GAS INC.

BY: _____
(Signature)

BY: _____
(Signature)

(Title)

(Title)

(Name - Please Print)

(Name - Please Print)

DATE: _____

DATE: _____

BC Gas Inc.
1066 West Hastings Street
Vancouver, British Columbia
Canada V6E 3G3

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

DAVID M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

October 15, 1991

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

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

Re: Inland/Lower Mainland: Application to file a BC Gas Transportation Tariff Schedule 22, corresponding Transportation Agreement, and General Terms and Conditions Applicable to Large Industrial Transportation Service for Inland and Lower Mainland Divisions

BC Gas Inc. hereby applies pursuant to Section 67 of the Utilities Commission Act to file a BC Gas Transportation Tariff Schedule 22, corresponding BC Gas Transportation Agreement and General Terms and Conditions Applicable to Large Industrial Transportation Service, all effective November 1, 1992. Accordingly, BC Gas also applies to withdraw existing Inland Division Schedules 16, 19, 20, 21 and 22, the respective Transportation Agreements related thereto, and the General Terms and Conditions Applicable to Transportation Service for Inland Division.

This Application represents further development of a BC Gas Tariff designed for utilization throughout the BC Gas service area. The proposed Tariff Schedule will apply initially to Inland and Lower Mainland Division customers. In conjunction with the revised Application for Schedule 10 and 13 Sales Tariffs this filing integrates, for large volume industrial users, divisional transportation services for both sales and transportation customers. By providing equal access of Schedule 22 to both sales and "direct" purchase customers, BC Gas has initiated a major step toward achieving a fully deregulated and competitive market for natural gas in B.C.

REASONS FOR APPLICATION

BC Gas finds it necessary to apply for a new Schedule 22 transportation tariff in order to recognize changes in the natural gas market effective November 1, 1991 and in order to achieve the benefits of the utility's Applications for associated Sales Tariffs 10 and 13.

The principal changes in Schedule 22, relative to the current Inland Schedule 22, are as outlined below:

Balancing

BC Gas proposes to offer monthly balancing during summer months (April through October) to all its large industrial transportation customers. Daily balancing will apply only during winter months (November through March) when the utility is subject to higher commodity costs, supply limitations, and when the value of the utility's core market gas supply is able to attract a significant contribution to fixed costs.

Demand Surcharge

With the availability of a curtailment buyout provision (former Schedule 20), Schedule 22 customers will now be able to make commercial arrangements to secure their minimum gas requirements in order to avoid exposure to UOR charges. A Demand Surcharge has been introduced in order to ensure nominations made by industrial customers are sufficient to avoid takes of UOR gas during critical weather conditions.

Failure to Deliver Surcharge

BC Gas has introduced a surcharge which will apply when a Shipper's gas supply, relied on by BC Gas for the core market (i.e. during 1/2 day curtailments), fails to be delivered to the Interconnection Point with its Pipeline Supplier. The Failure to Deliver Surcharge is set at the UOR Rate which a Shipper on Schedule 22 would incur in the event it exceeded a specified curtailment by more than 10%.

The Failure to Deliver Surcharge replaces the Reserves Tests, Consultants Reports and Statutory Declarations by Producers under current Schedule 22.

Level 1 Transportation

BC Gas has introduced a Level 1 transportation service which ranks in priority ahead of its historical interruptible service levels.

The higher quality interruptible service is provided on the basis that a Shipper arranges firm transportation on the Pipeline Supplier's system (e.g. Westcoast) and that the utility is able to have limited access to this gas during periods of curtailment.

Purchase Option

BC Gas is proposing to provide reasonable compensation for use of a Shipper's gas when accessed by BC Gas on a discretionary basis.

Return Period

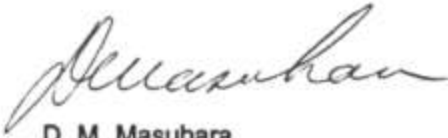
Under the Transportation Agreement, a Shipper may from time to time overnominate gas supply for its use. In addition, under the terms of Schedule 22, BC Gas may from time to time have access to a Shipper's gas during a period of curtailment.

BC Gas has proposed to shorten and limit the period it may retain such gas in an inventory account to 90 days.

We respectfully request consideration of this Application at your earliest convenience.

Yours truly,

BC GAS INC.

A handwritten signature in cursive script, appearing to read "Masuhara".

D. M. Masuhara
Vice President
Legal and Regulatory Affairs

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

APPLICABLE:

This Schedule applies to the transportation of gas, owned by a Shipper, on a firm and interruptible basis for use in approved equipment. Gas shall be transported from Company's Interconnection Point Company's Pipeline Supplier through Company's transmission and distribution system to one (1) Delivery Point through one (1) meter station, except as otherwise stated in the Transportation Agreement.

CONDITIONS OF SERVICE:

This Schedule is available in all territory served by Company under the Tariff of which this Schedule is a part, PROVIDED THAT:

- (a) adequate capacity exists in Company's transmission and distribution system;
- (b) Shipper has contracted for a supply of gas for delivery to the End User which has been approved by the BCUC and any other authorities having jurisdiction;
- (c) Shipper has executed, or caused the execution of for Shipper's benefit, a transportation contract with Company's Pipeline Supplier which, for firm service hereunder, provides for continuous firm delivery, for the twelve months of each Contract Year, of a volume at least equal to the firm MDTV; and which, for Level 1 service hereunder, provides continuous firm delivery, for the period November 1 to March 31 of each Contract Year, of an additional volume at least equal to the Level 1 interruptible MDTV; which volumes, if applicable, shall be specified in the Transportation Agreement hereunder. Continuous firm delivery on the Pipeline Supplier's system shall be required from the Receipt Point to the Interconnection Point, with volumes adjusted for heat content;
- (d) Shipper, if transporting gas to an Inland Division End-User, has executed a Transportation Agreement with Company specifying a firm Maximum Day Transportation Volume ("firm MDTV") of not less than 28,300 cubic meters, which shall be expressed to the nearest One Hundred (100) cubic metres; or, otherwise is transporting gas on an interruptible basis only to End-User and has executed a Transportation Agreement with Company subject to a minimum charge as specified hereunder (the "Transportation Agreement");

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

- (e) If Shipper is not an end-user, the End-User shall be specified in Appendix A of the Transportation Agreement (the "End-User") and the term of the Transportation Agreement shall be identical to the term of the gas supply contract between Shipper and End-User, which shall not be for a period of less than a Contract Year;
- (f) If Shipper is not an end-user, Shipper has provided to Company in a form acceptable to Company prior to the commencement of service under this Schedule:
 - (i) an irrevocable authorization from Shipper's End-User permitting Company access to End-User's property; appropriate easements and right-of-ways on the End-User's property to lay, construct and operate the pipeline and measurement facilities deemed necessary by Company to provide gas service; and
 - (ii) a declaration from Shipper's End-User agreeing to comply with all instructions, orders, directions and requests of Company which would be applicable to End-User if the End-User were a Shipper under a Transportation Agreement.

Unless this condition is waived in writing by Company, Company may, in its discretion and to its satisfaction, require that End-User have and continues to have an alternative fuel burning installation in good operating order with an adequate supply of fuel during the period in which the transportation of gas under the provision of this Schedule may be interrupted or curtailed in order that End-User can continue operations on occasions when the transportation of gas may be interrupted or curtailed. If End-User fails to comply with the foregoing requirements, Company may terminate the transportation of gas to Shipper under this Schedule.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

RATE:

BC GAS DIVISION:	<u>INLAND</u>	<u>L. MAINLAND</u>
Monthly Demand Charge per 10 ³ m ³ of firm MDTV per month	\$254.94 N/A	N/A N/A
Commodity Rate: per gigajoule		
Firm	\$0.0672	\$1.55
Interruptible		
Level 1	\$0.359	\$0.78
Level 2	\$0.359	\$0.78

MINIMUM CHARGE:

The Minimum Charge per month shall be as specified herein:

Inland Division: The minimum charge shall be the greater of \$7,214.80/month, or the Monthly Demand Charge times the firm MDTV.

Lower Mainland Division: The minimum charge shall be greater of \$24,200/month, for interruptible service, or such higher charge which may apply to firm service based upon a minimum monthly volume of 30,000 GJ.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

RATE FOR IMBALANCE QUANTITIES:

If the Company provides balancing services to Shipper under the Transportation Agreement, a rate for such balancing shall apply, in addition to other transportation rates hereunder, as herein specified:

INLAND

L. MAINLAND

Rate per gigajoule

(Rates to be filed upon receipt of Westcoast tolls relating to imbalance quantities, as approved by the National Energy Board or other regulatory authority.)

RATE FOR OPTIONAL FIRM CURTAILMENT BUYOUT:

If Shipper elects to buy out of the 5 day 1/2 firm curtailment provision available hereunder, which shall be subject to Company's determination that adequate capacity exists in its transmission and distribution system, the rate for such buyout shall be as specified herein:

INLAND

L. MAINLAND

Monthly Firm Buyout Surcharge
per 10³m³ of
firm MDTV

\$256.06

\$296.80

RATE FOR UNAUTHORIZED GAS USE ("UOR"):

Notwithstanding any other provisions of this Schedule or the Transportation Agreement, if a Shipper takes gas in excess of a volume specified by the Company, Shipper shall be required to pay Company for such gas the Peaking Gas price of Company's Schedule 13, the applicable Commodity Rate for transportation hereunder, plus the following rate for Unauthorized Gas use for that portion of the excess which falls between the indicated range expressed as a percentage of such specified volume (in the event the specified volume is zero (0), refer to the over 110% range below):

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

UOR Rate:

<u>Range</u>	<u>INLAND</u>	<u>L. MAINLAND</u>
100.0% to 102.5%	\$0.55/GJ	\$0.65/GJ
102.5% to 105%	\$5.50/GJ	\$6.50/GJ
105% to 110%	\$11.00/GJ	\$13.00/GJ
Over 110%	\$16.50/GJ	\$19.50/GJ

If on any two (2) Days in a Contract Year, Shipper has incurred a rate for Unauthorized Gas use in excess of 102.5% of a volume specified by Company, Shipper shall pay a Demand Surcharge. Such Surcharge shall be calculated and be payable, at the end of a Month a second such Day occurred, on the excess volumes taken over the maximum of any two (2) occurrences: (Note: This Demand Surcharge shall be in addition to any optional surcharge applied for firm curtailment buyout.)

Demand Surcharge:

The UOR Rate on gas taken between 100.0% and 102.5% of a specified volume
times three hundred and sixty-five (365)

times the average of the maximum two Days of Unauthorized Gas use in gigajoules (the "buyout volume").

Commencing on the first Day following a Month during which Shipper becomes subject to a Demand Surcharge, any firm curtailments applicable to Shipper hereunder shall be modified by an amount equal to the buyout volume converted to 10^3M^3 up to a maximum curtailment volume equal to Shipper's firm MDTV. Notwithstanding the foregoing, such curtailment modification shall be subject to Company's determination that adequate capacity exists on its transmission and distribution system.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

FAILURE TO DELIVER SURCHARGE:

If on any day Company curtails firm service to Shipper, as permitted under the Special Provisions hereunder, in order to access Shipper's gas as part of the utility's gas supply, and Shipper is unable to deliver to Company at the Interconnection Point at least the volume of gas to which Company is entitled to, then Shipper shall pay Company a Failure to Deliver Surcharge for that Month equal to the UOR Rate for gas taken over 110% of a specified volume times the volume Shipper failed to deliver during the Month.

In any Contract Year, this Failure to Deliver Surcharge shall apply to a maximum of the curtailable firm MDTV to which Company is entitled to hereunder times the five curtailment days, converted to gigajoules.

If on any day Company curtails Level 1 Interruptible service to Shipper in order to access Shipper's gas as part of the utility's gas supply and Shipper is unable to deliver the Level 1 MDTV to Company at the Interconnection Point, then Shipper shall be subject to the Company's costs of alternative gas supply, as provided for under Article VI of the Transportation Agreement.

OTHER FEES AND RATES:

Shipper shall be liable for and pay Company an amount equal to the franchise fees or like payments which Company is required to pay a municipality in respect of services provided to and revenues received from Shipper within such municipality during a calendar year. Any amount not collected by Company in Shipper's rates shall be due 10 days prior to the date Company must pay franchise fees or like fees to the municipality.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

Shipper shall, in addition, pay Company those rates or charges specified in the Transportation Agreement between Shipper and Company and any amounts due or payable under the General Terms and Conditions Applicable to Large Industrial Transportation Service.

SPECIAL PROVISIONS:

Firm Service

1. Firm transportation may be curtailed to a daily volume of 1/2 the MDTV on a maximum of five (5) days during any Contract Year. Subject to the agreement between Company and Shipper, Shipper may on occasion be curtailed by less than 1/2 the MDTV, and may be curtailed the balance of the one Day curtailment on a subsequent Day. On any Day the volume of gas delivered by Shipper at the Interconnection Point is less than the MDTV, Shipper shall be further subject to curtailment based on the volume of gas actually delivered at the Interconnection Point.
2. Notwithstanding Special Provision 1, Shipper may under the Transportation Agreement elect to pay for firm curtailment buyout in order to avoid discretionary curtailments by Company of the firm MDTV as specified hereunder.

Interruptible Service

3. Level 1 interruptible transportation may be curtailed to zero (0) whenever Company has insufficient capacity on its gas transmission or distribution system, or when all Level 2 interruptible transportation service hereunder is curtailed.
4. Level 2 interruptible transportation shall be subject to interruption or curtailment by Company at the Company's sole discretion.

Other Provisions

5. Notwithstanding the foregoing, transportation under this Schedule may be subject to further interruption or curtailment subject to the General Terms and Conditions Applicable to Large Industrial Transportation Service and shall be subject to Company's right thereunder to access Shipper's gas supply.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION SERVICE

6. Payment of the UOR rate for Unauthorized Gas use shall not, under any circumstances, be considered as giving Shipper the right to take Unauthorized Gas; nor shall such payment exclude or limit any other remedies available to the Company against Shipper for Shipper's failure to interrupt, curtail or limit its take after receiving notice from the Company to do so. Company shall have the right to suspend all gas deliveries without notice to Shipper and without penalty, if Shipper or End-User fails to adhere to any notice of the Company to curtail, interrupt or limit Shipper's take.
7. In the event Company nominates for use of Shipper's gas supply as permitted under Section 3.3 of the General Terms and Conditions Applicable to Large Industrial Transportation Service then Company shall purchase any volume of gas nominated and obtained in such a manner at the end of the month in which gas was obtained, and shall pay Shipper for such gas at a price specified in the Transportation Agreement, or may return such volume of gas as soon as practical and within 30 days.

GENERAL TERMS AND CONDITIONS:

Transportation service under this Schedule is subject to the General Terms and Conditions Applicable to Large Industrial Transportation Service, as amended from time to time.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE _____

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

BC GAS INC.

TRANSPORTATION AGREEMENT FOR SCHEDULE 22
(Large Industrial Transportation Services)

This Agreement dated this _____ day of _____, 19____, between
BC Gas Inc., (hereinafter called "BC Gas"), and _____
_____ (hereinafter called "Shipper").

WITNESSETH:

WHEREAS BC Gas owns and operates a gas transmission and distribution system including facilities necessary to deliver gas to Shipper;

WHEREAS Shipper has requested that BC Gas arrange for the movement of gas through BC Gas' transmission and distribution system to _____ located in or near _____, B.C.;

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

ARTICLE I

Transportation of Gas

- 1.1 Subject to the terms, conditions and limitations of this Agreement, BC Gas will arrange the movement of gas owned by Shipper from the Interconnection Point through BC Gas' transmission and distribution system to the Delivery Point; provided, however, BC Gas shall not be obligated to deliver on any Day more than the following Maximum Day Transportation Volume ("MDTV"):

_____ () 10^3 m^3 of Schedule 22 Firm Service; and

_____ () 10^3 m^3 of Schedule 22 Level 1 Interruptible Service.

- 1.2 Shipper agrees to transport hereunder, and require End-User to utilize, natural gas prior to use of alternative fuels except those fuels resulting as an adjunct to the End-User's operations.

SCHEDULE 22LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

- 1.3 Notwithstanding Articles 1.1 and 1.2, BC Gas shall not be obligated to deliver on any Day a volume of gas greater than the following amount:
- (a) the volume of gas delivered by Shipper at the Interconnection Point and accepted by BC Gas on the same Day, plus
 - (b) the volume of gas nominated by Shipper and accepted by BC Gas, for the same Day under BC Gas' Schedule 10 and 13 Sales Agreement with Shipper.

The obligation hereunder shall be further subject to the Special Provisions of Schedule 22.

- 1.4 BC Gas shall not be obligated to deliver to Shipper during any one (1) hour more than five percent (5%) of the volume of gas which Shipper is entitled to receive on any Day.
- 1.5 When requested by BC Gas, Shipper shall provide to BC Gas each Day not later than 10:00 a.m. Vancouver local time, or such other time as may be specified by BC Gas, the following information:
- (a) Shipper's Daily Nomination for the next Day;
 - (b) Shipper's best estimates of gas consumption for the previous Day, the current Day, and the next Day based on the most current information available to Shipper.

In the event Shipper does not provide BC Gas with a Daily Nomination by the time specified by BC Gas, the nomination for the current Day shall be deemed to be Shipper's Daily Nomination for the next Day.

- 1.6 BC Gas shall provide to its Pipeline Supplier the Shipper's daily volume nomination for transportation service on the Pipeline Supplier's system.
- 1.7 BC Gas shall not be liable in damages for or on account of any interruption or curtailment permitted under this Agreement; nor shall BC Gas be liable for any costs or penalties charged by its Pipeline Supplier against Shipper which arise out of nominations made by BC Gas with respect to Shipper's transportation volumes.

ARTICLE II

Rate Schedule

- 2.1 Shipper shall pay BC Gas for all transportation services provided hereunder the rates established under Schedule 22 or amendments thereto, or those agreed to in accordance with a Tariff Supplement, all as filed with the British Columbia Utilities Commission. Such rates shall include the costs of odorizing Shipper's gas.
- 2.2 All Federal and/or Provincial taxes, where payable on the delivery of gas by Shipper to BC Gas or by BC Gas to Shipper under the terms of this Agreement, and Franchise Fees or other municipal taxes on gas consumed within a municipality pursuant to this Agreement, shall be borne by Shipper.

SCHEDULE 22LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

- 2.3 This Agreement is subject to the provisions of Schedule 22 and the General Terms and Conditions Applicable to Large Industrial Transportation Service, as amended from time to time, all of which is made a part of this Agreement by reference.

ARTICLE III

Term of Agreement

- 3.1 The initial term of this Agreement shall commence at 8:00 a.m. Pacific Standard Time on the ____ day of _____, 19____, and shall continue in effect until 8:00 a.m. Pacific Standard Time on November 1, 19____. Unless otherwise agreed upon, this Agreement shall continue on a year to year basis thereafter until cancelled by either BC Gas or Shipper upon six (6) months written notice prior to the end of the Contract Year then in effect.
- 3.2 BC Gas may, at its sole discretion, implement a change in a gas Day subject to prorata adjustment of volumes and rates to account for any Day of more or less than 24 hours. The parties agree that the effective term of the Agreement shall be similarly adjusted.

ARTICLE IV

Title to Gas

- 4.1 Shipper warrants that it shall have good title to all gas to delivered to BC Gas at the Interconnection Point from Suppliers other than BC Gas, and agrees to indemnify and save BC Gas harmless from any and all adverse claims, losses or expenses arising from any defect in title, or arising from any charges that are applicable to the gas delivered to BC Gas.
- 4.2 Shipper shall have title to all gas transported pursuant to this Transportation Agreement.
- 4.3 Shipper acknowledges that the gas transported hereunder will be odorized and commingled with gas within BC Gas' transmission and distribution system. Shipper agrees to accept a proportionate share of any gas lost by pipeline failure, fire or other similar cause which may affect Shipper's gas.

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

ARTICLE V

Receipt/Interconnection/Delivery Point

- 5.1 For gas acquired by Shipper from any Gas Supplier other than BC Gas for transportation hereunder, BC Gas shall nominate to its Pipeline Supplier for such gas at the Receipt Point specified in Appendix A attached hereto.
- 5.2 For gas acquired by Shipper from any Gas Supplier other than BC Gas for transportation hereunder, gas shall be delivered by Shipper to BC Gas at the Interconnection Point specified in Appendix A attached hereto, at the pressure available from time to time at such point.
- 5.3 All gas transported hereunder shall be delivered by BC Gas to Shipper at the Delivery Point, at an agreed upon gauge pressure, all as set forth in Appendix A attached hereto.

ARTICLE VI

Utility Gas Supply

- 6.1 Notwithstanding Sections 6.2 and 6.3, this Article shall not apply either to Firm Service subject to a Monthly Demand Surcharge for Firm curtailment buyout or to Level 2 Interruptible Service.
- 6.2 Shipper acknowledges that part of the gas to be transported hereunder for Firm and Level 1 Service forms an important and integral part of the gas supply of BC Gas used to meet its commitments to serve its customers. In the event Shipper fails to meet any of its commitment to deliver gas hereunder during periods in which BC Gas is entitled to curtail Shipper pursuant to the Special Provisions of Schedule 22, Shipper acknowledges that it is reasonably foreseeable that BC Gas may be unable to meet all its gas delivery commitments to its firm customers so that, as a consequence, BC Gas may suffer damages in that:
 - (a) BC Gas' customers or other persons might have claims against BC Gas resulting from such failure to deliver, or arising from BC Gas' efforts made to minimize such failure, and
 - (b) BC Gas may incur expenses in attempting to minimize such failure, and losses arising from its inability to deliver gas.
- 6.3 Except when Shipper's failure to meet its commitment to deliver gas hereunder is caused by an event of force majeure on the Pipeline Supplier's system or on a pipeline upstream of such system, and such event has been communicated to BC Gas in accordance with the notice provisions specified herein, Shipper agrees to indemnify and save harmless BC Gas from any and all adverse claims, losses and expenses arising from the events outlined in Article 6.2.; more particularly, if Shipper fails to deliver a quantity of gas to BC Gas on days when BC Gas has a right to such gas under Section 2.6 of the General Terms and Conditions Applicable to Large Industrial Transportation Service, up to 1/2 the Firm MDTV, Shipper agrees to pay a Failure to Deliver Surcharge as specified under Schedule 22 as a minimum consideration for such adverse claims, losses and expenses, whether or not BC Gas experiences any such aforesaid costs.

SCHEDULE 22LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

ARTICLE V11

Indemnity

- 7.1 Shipper agrees to indemnify and save harmless BC Gas from any and all suits, actions, judgements, demands, debts, accounts, damages, costs, losses, and expenses (including all legal fees and disbursements) arising from or out of municipalities claiming that BC Gas has breached a franchise or operating agreement as a result of providing service under this Transportation Agreement.
- 7.2 Shipper agrees to indemnify and save harmless BC Gas from any and all adverse claims, losses and expenses arising from or out of gas delivered by Shipper to BC Gas failing to meet the quality specifications set out in Section 8.1 of the General Terms and Conditions Applicable to Large Industrial Transportation Service.

ARTICLE VIII

Force Majeure

- 8.1 Except for Shipper's obligation to make payments for gas transportation hereunder, neither party hereto shall be liable for any failure to perform the terms of the Agreement when such failure is due to "force majeure" as hereinafter defined. The term "force majeure" shall mean 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 to BC Gas; which act of force majeure was not due to negligence of the party claiming force majeure. Further, force majeure shall also include a declaration of force majeure by a Pipeline Supplier to BC Gas which results in gas being unavailable for delivery at the Interconnection Point.
- 8.2 However, such causes or contingencies affecting the performance of the Agreement by either party shall not relieve it of liability in the event of its concurring negligence or in the event of its failure (except in the case of strike or lockout) to use due diligence to remedy the situation and remove the cause in an adequate manner and with all reasonable dispatch, nor shall such causes or contingencies affecting the performance of this Agreement relieve either party from the obligation to make payments of amounts due hereunder, nor shall such causes or contingencies relieve either party of liability unless such party shall give notice and full particulars of the same in writing to the other party as soon as possible after the occurrence relied on.
- 8.3 If, for the purpose of repairing or replacing its system or equipment, BC Gas deems it necessary to shut off the gas being delivered to Shipper, BC Gas may temporarily shut off the delivery of gas for the said purpose but shall give Shipper as much notice as possible but at least Eight (8) hours notice of its intention so to do, except when prevented by force majeure. BC Gas will use all diligence to restore service as quickly as possible.

SCHEDULE 22LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

ARTICLE IX

Arbitration

- 9.1 If at any time a dispute or difference arises between the parties concerning this Agreement, then every such dispute or difference shall be referred to a single arbitrator appointed by the parties hereunder, if they can agree on one, or, in the event of failure of agreement, to one to be appointed under the provisions of the Commercial Arbitration Act of the Province of British Columbia, and the said arbitration shall be held under the provisions of that Statute.
- 9.2 Subsequent to receipt of written notice of any dispute given by either party, a period of Thirty (30) days shall be allowed for the parties to reach an agreement, but thereafter either party shall have the right to institute the appropriate proceedings to determine the dispute in question by way of arbitration provided herein.
- 9.3 The award, determination or decision made under any arbitration held pursuant to the terms of this Agreement shall be final and binding upon the parties hereunder, save as otherwise provided in the Commercial Arbitration Act of the Province of British Columbia.

ARTICLE X

Prior Termination10.1 Act of Default

If Shipper fails at any time to perform any of the obligations imposed upon it under this Agreement, and does not, within thirty (30) days after BC Gas has given to it notice of such failure, commence to remedy with due diligence and thereafter continue to remedy the matter in which it is at fault, then BC Gas may, without liability therefor, discontinue the delivery of gas to Shipper; but no such discontinuance shall relieve the Shipper from any obligation under this Agreement. BC Gas may resume the supply of gas under this Agreement after such failure has been fully remedied, or may, at its sole discretion, cancel the Agreement. Cancellation of the Agreement pursuant to these provisions shall not exclude the right of BC Gas to collect any amount due to it by Shipper for the term of this Agreement or exclude any rights either party may have before such termination.

10.2 Bankruptcy or Insolvency

If 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 Shipper seeks protection from the demands of its creditors pursuant to any legislation enacted for that purpose, BC Gas shall have the right, at its sole discretion, to terminate this Agreement by giving notice in writing to Shipper and thereupon BC Gas may cease further delivery of gas to Shipper and the amount then outstanding for gas provided hereunder shall immediately be due and payable by Shipper.

SCHEDULE 22LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

ARTICLE XI

Miscellaneous11.1 Headings

The headings in this Agreement are inserted for the purposes of convenient reference only and are not to be used to interpret the Agreement.

11.2 Records

Each party shall have the right to examine at reasonable times the books, records and charts of the other party to the extent necessary to verify the accuracy of any statement, charge, computation or demand made pursuant to any provisions of this Agreement.

11.3 Non-Waiver

No failure by BC Gas or Shipper at any time, or from time to time, to enforce or require a strict observance or performance of any of the provisions of this Agreement shall constitute a waiver of such provisions or affect or impair such provisions or the right of either party at any time to enforce such provisions or to avail itself of any remedy it may have.

11.4 Successors and Assigns

This Agreement shall be binding on and enure to the benefit of the parties and their respective successors and assigns, provided, however, that this Agreement shall not be transferred or assigned by Shipper without prior written consent of BC Gas.

11.5 Law

This Agreement and the respective obligations for the parties under this Agreement are subject to all relevant laws and regulations and the relevant orders, rules and requirements of all authorities having jurisdiction. This Agreement shall be construed in accordance with the laws of British Columbia.

11.6 Industry Usage

The words, phrases or expressions which are not defined herein and which in the usage or custom of the business of transportation, distribution or sale of gas have an accepted meaning shall have that meaning.

SCHEDULE 22LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

ARTICLE XII

Notices

- 12.1 Any notice, request, statement or bill to be given to Shipper, except those specified below, shall be in writing and shall be considered as fully delivered when mailed, personally delivered or sent by facsimile, telecopier or telex to the address of Shipper.
- 12.2 Notices with respect to curtailment, interruption or restoration of deliveries of gas or with respect to force majeure shall be sufficient if given by BC Gas in writing by facsimile, telecopier, telex, or orally in person, or by telephone (to be confirmed in writing) to the person or persons designated from time to time by Shipper as authorized to receive such notices.
- 12.3 Unless otherwise designated by BC Gas or Shipper, the address for the receipt of notices under this Agreement shall be:

BC Gas:

BC Gas Inc.
23rd Floor
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

Attention: _____

Shipper:

IN WITNESS WHEREOF the parties hereto have executed this Agreement.

BC GAS INC.

BY: _____
(Signature)

(Title)

(Name - Please Print)

DATE: _____

BY: _____
(Signature)

(Title)

(Name - Please Print)

DATE: _____

SCHEDULE 22LARGE INDUSTRIAL TRANSPORTATION AGREEMENTELECTION FOR OF FIRM CURTAILMENT BUYOUT

(The following election should only be made by customers wishing to buy out of the 1/2 day Firm curtailments.)

Shipper herein elects to pay the Monthly Firm Buyout Surcharge as provided for under Schedule 22, and to be relieved of all terms under Schedule 22 and under this Agreement which relate to a failure by Shipper to deliver gas to the Interconnection Point.

Nomination for Firm Curtailment Buyout

_____ 10³ M³ .

BC GAS INC.

BY: _____
(Signature)

BY: _____
(Signature)

(Title)

(Title)

(Name - Please Print)

(Name - Please Print)

DATE: _____

DATE: _____

SCHEDULE 22

LARGE INDUSTRIAL TRANSPORTATION AGREEMENT

APPENDIX A

This is Appendix A of the Schedule 22 Transportation Agreement between BC Gas Inc. ("BC Gas") and _____ (the "Shipper").

RECEIPT POINT/DELIVERY POINT:

The Receipt Point shall be at :

The Delivery Point shall be at:

The End-User shall be:

The Delivery Pressure at the Delivery Point shall not be greater than _____ kilopascals and not less than _____ kilopascals.

INTERCONNECTION POINT:

The Interconnection Point means the points where the Westcoast Pipeline System in British Columbia interconnects (Westcoast km-post -----) with the BC Gas Inland Division pipeline system in British Columbia.

PRICE FOR GAS PURCHASED BY COMPANY UNDER SPECIAL PROVISION 7:

BC GAS INC.

GENERAL TERMS & CONDITIONS

APPLICABLE TO LARGE INDUSTRIAL TRANSPORTATION SERVICE

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

GENERAL TERMS AND CONDITIONS

APPLICABLE TO LARGE INDUSTRIAL TRANSPORTATION SERVICE

1. DEFINITIONS

- 1.1 Except where the context requires another meaning, the following terms when used herein, in any large industrial tariff Schedule or agreement thereunder shall have the following meanings:
- (a) A.N.G.: means Alberta Natural Gas Company
 - (b) Backstopping Gas: means gas sold by Company under Schedule 13 as an interruptible backup supply to gas obtained by Shipper from other Gas Suppliers.
 - (c) Buyer: means a person who enters into a Sales Agreement with Company.
 - (d) Contract Year: means a period of 12 consecutive months beginning on the first Day of November and ending on the next succeeding first Day of November.
 - (e) Daily Nomination: means the volume for each Day specified by a Shipper and received and confirmed by Company's gas control department for transportation under a Transportation Agreement.
 - (f) Day: means the period beginning at 8:00 a.m. Pacific Standard Time and ending at 8:00 a.m. Pacific Standard time on the following calendar day; this definition shall be subject to any change required by Company in the starting time of its gas day.
 - (g) Delivery Point: means the point specified in a Transportation Agreement where Company delivers gas to Shipper.
 - (h) End-User: means a person specified in a Transportation Agreement which is a consumer of natural gas within the service area of Company.
 - (i) Franchise Fees: means all monies payable by Company to a municipality for the use of its streets and other property to construct and operate Company's utility business, or all monies payable by Company to a municipality relating to the revenues received by Company for gas consumed within the municipality.
 - (j) Gas Supplier: means a party who sells gas to Shipper or Company pursuant to a

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By _____

D. M. MASUHARA
VICE PRESIDENT
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BC GAS INC.
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GENERAL TERMS AND CONDITIONS

APPLICABLE TO LARGE INDUSTRIAL TRANSPORTATION SERVICE

gas sales agreement, or a party who has access to its own supplies of gas.

- (k) gas: means raw gas or residue gas as the context requires.
- (l) Interconnection Point: means a point where the Company's transmission and distribution facilities interconnect with the facilities of one of Company's Pipeline Suppliers.
- (m) Month: means the period beginning at 8:00 a.m. Pacific Standard Time on the first day of the calendar month and ending at 8:00 a.m. Pacific Standard Time on the first day of the next succeeding calendar month; this definition shall be subject to any change required by Company in the starting time of its gas Day.
- (n) Monthly Firm Volume: means the firm transportation volume delivered during a Month under Company's Schedule 22; more specifically, the lesser of (1) the volume of gas Company has sold to or received from Shipper during a calendar month plus any imbalance carried forward from the previous month and (2) the volume obtained by multiplying the firm Maximum Day Transportation Volume (the "firm MDTV") in the Agreement between Company and Shipper by the number of days in the calendar month adjusted to reflect days and volumes taken on days when deliveries were curtailed by Company below the firm MDTV.
- (o) Peaking Gas: means gas sold by Company under Schedule 13 as an interruptible peaking supply in the event a Shipper requires gas in addition to other interruptible gas available from Company, or in addition to volumes normally available to Shipper from Gas Suppliers other than Company.
- (p) Pipeline Supplier: means, in the case of Columbia Division, A.N.G., and in the case of Fort Nelson, Inland and Lower Mainland Divisions, Westcoast, but also means any other natural gas Pipeline Suppliers connected to Company's facilities from which Company receives gas for purposes of gas transportation or resale.
- (q) Raw Gas: means natural gas produced from wells.
- (r) Receipt Point: means the point specified as the "Delivery Point" in the transportation agreement relied upon by Shipper for movement of gas through the Pipeline Supplier's system pursuant to Shipper's Transportation Agreement with

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BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

GENERAL TERMS AND CONDITIONS

APPLICABLE TO LARGE INDUSTRIAL TRANSPORTATION SERVICE

Company.

- (s) Residue 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; and
 - (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, storage, removal from storage and delivery.
- (t) Sales Agreement: means an agreement to provide sales service pursuant to Company's tariffs.
- (u) Shipper: means a person who enters into a Transportation Agreement with Company. If Shipper is not an End-User, then the word "Shipper" in the context of Delivery Points or 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/or daily nomination for gas, shall also mean "End-User".
- (v) Monthly Level 1 Volume: means the Level 1 transportation volume delivered during a Month and derived as the lesser of (1) the volume of gas delivered during a Month to Shipper at the Delivery Point less the Monthly Firm Volume and (2) the volume obtained by multiplying the Level 1 Maximum Day Transportation Volume (the "Level 1 MDTV") in the agreement between Company and Shipper by the number of days in the Month.
- (w) Transportation Agreement: means an agreement to provide transportation service pursuant to Company's tariffs.
- (x) Unauthorized Gas: means any gas taken by Shipper in excess of the volume specified in any notice or order of Company to curtail, interrupt or limit Shipper's take.

Issued _____ Accepted for Filing _____

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GENERAL TERMS AND CONDITIONS

APPLICABLE TO LARGE INDUSTRIAL TRANSPORTATION SERVICE

- (y) Westcoast: means Westcoast Energy Inc..
- (z) Westcoast Firm Transportation Service Terms: means the Westcoast General Terms and Conditions - Service as filed with the National Energy Board.

- 1.2 In these General Terms and Conditions, and in any Large Industrial Schedule or agreement thereunder, words importing the singular shall include the plural, and vice versa, and words importing the masculine gender shall include the feminine gender, and vice versa, and words importing persons shall include firms and corporations and vice versa.

2. GENERAL PROVISIONS

- 2.1 These General Terms and Conditions specify terms with respect to Company's provision of large industrial sales and contract transportation services. The nature of Company's transportation service is to provide a contract service; Company is not offering to provide service as a common carrier.
- 2.2 Shipper, if not an End-User, shall not be permitted to deliver gas to a party other than the End-User specified in the Transportation Agreement.
- 2.3 In order to secure the prompt and orderly payment of the charges to be paid by Shipper to Company under a Transportation Agreement, Company may require Shipper to provide, and at all times maintain, an irrevocable letter of credit in favour of Company issued by a financial institution acceptable to Company in an amount equal to the maximum amount payable by Shipper under a Transportation Agreement for a period of 90 days. Where Company requires Shipper to provide a letter of credit and Shipper is able to provide alternative security acceptable to Company, Company may accept such security in lieu of a letter of credit.
- 2.4 Company will endeavour to give as much notice as possible with respect to the interruption or curtailment of service but in no event less than two (2) hours unless prevented by force majeure conditions or unless Company's Pipeline Supplier or Gas Supplier is unable to provide greater than two (2) hours notice of curtailment to Company.
- 2.5 Notwithstanding any other condition provided herein, in the Transportation Schedule or

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
VICE PRESIDENT
LEGAL AND REGULATORY AFFAIRS

SECRETARY
BRITISH COLUMBIA UTILITIES COMMISSION

EFFECTIVE

BC GAS INC.
1066 West Hastings Street
Vancouver, B.C. V6E 3G3

GENERAL TERMS AND CONDITIONS

APPLICABLE TO LARGE INDUSTRIAL TRANSPORTATION SERVICE

In a Transportation Agreement, all transportation subject to these General Terms and Conditions may be curtailed or interrupted at the sole judgment of Company whenever the supply of gas available to Company from its Gas Suppliers is insufficient at any time to meet the total demands of all customers supplied gas by Company and is due to factors beyond the control of Company.

- 2.6 On any day Company curtails or interrupts transportation subject to these General Terms and Conditions, Shippers shall make their supply of gas available to Company, to the extent required by Company, to maintain service priority to those customers or classes of customers which Company in its sole judgment considers should be served. Company shall return equivalent volumes of gas to Shippers within 90 days.

3. NOMINATIONS TO PIPELINE SUPPLIER

- 3.1 It shall be the responsibility of Shipper to ensure the delivery of a volume of gas to the Interconnection Point at least equivalent to that specified in Company's Transportation Agreement with Shipper, including any required provision for differences in heat content on the Pipeline Supplier's system.
- 3.2 Company shall have the right to provide to its Pipeline Supplier the Daily Nomination of Shipper for transportation service on the Pipeline Supplier's system.
- 3.3 Notwithstanding section 3.2, Company shall on any Day between November 1 and April 1 during a Contract Year have the right to increase the nomination for transportation on the Pipeline Supplier's system to the normal level available under Shipper's contract arrangements on such system, for gas deliveries to Company at the Interconnection Point for transportation to the Delivery Point, and shall be entitled to take the balance of Shipper's gas delivered at the Interconnection Point. Company shall purchase such gas at the price set out in the Transportation Agreement. Notwithstanding Company's change in nomination for transportation on the Pipeline Supplier's system, it is not intended that the customer's Daily Nomination be varied as a result of Company's decision to order additional gas.
- 3.4 If less gas is delivered at the Interconnection Point than is nominated by Company and Company is unable to ascertain which Shipper is responsible for a deficiency, Company may in its discretion curtail Shippers on a basis deemed equitable by Company.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
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GENERAL TERMS AND CONDITIONS

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Company shall reallocate the deficiency to the Shipper responsible in the event Company obtains information which allows it to determine responsibility.

- 3.5 Company shall not be liable for any costs or penalties charged by the Pipeline Supplier against Shipper which arise out of nominations made by Company in respect of Shipper's transportation volumes.

4. GAS BALANCING

- 4.1 Shipper shall be required to nominate for gas on a daily basis in a reasonable manner in that, other than for circumstances beyond the ability of Shipper to forecast, its Daily Nominations will approximately equal the quantity of gas that Shipper shall deliver or cause to be delivered to Company.

4.2 Winter Balancing

For deliveries to Company in the winter Months (November to March, inclusive) for gas taken below the level of any curtailment, Company will make a daily adjustment for the imbalance quantity (the difference between the Daily Nomination and the daily gas volume taken by Shipper) as follows:

- (a) For overdeliveries (the Daily Nomination is greater than the gas volume taken by Shipper) Company shall maintain an inventory account for Shipper and shall increase the balance in the account by the amount of the excess. Company shall have the right to limit the volume of gas maintained in its inventory account and shall return excess volumes to Shipper when convenient to Company within a period of 90 days. Company shall charge Shipper a balancing fee as specified under the Schedule upon return of such inventory gas.
- (b) For underdeliveries (the Daily Nomination is less than the gas volume taken by Shipper), Company will sell to Shipper the deficiency volume at the rate set out in the Sales Agreement with Company under Schedules 10 and 13.

Issued _____ Accepted for Filing _____

By _____

D. M. MASUHARA
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GENERAL TERMS AND CONDITIONS

APPLICABLE TO LARGE INDUSTRIAL TRANSPORTATION SERVICE

4.3 Summer Balancing

For deliveries to Company in the summer Months (April to October, inclusive) for gas taken below the level of any curtailment, Company will make a monthly adjustment for the imbalance quantity (the difference between the sum of the Daily Nominations and the monthly gas volume taken by Shipper) as follows:

- (a) For overdeliveries (the sum of the Daily Nominations is greater than the gas volume taken by the Shipper) Company shall increase the balance in the inventory account by the amount of the excess. Company shall have the right to limit the volume of gas maintained in its inventory account and shall return the excess volumes to Shipper when convenient to Company within a period of 30 days. Company shall charge Shipper a balancing fee as specified under Schedule 22 upon return of such inventory gas.
- (b) For underdeliveries (the sum of the Daily Nominations is less than the gas volume taken by Shipper) Company will sell to Shipper the net deficiency volume at the rate set out in the Sales Agreement with Company under Schedules 10 and 13.

- 4.4 If after termination of a Transportation Agreement Company has received a volume of gas in excess of volumes delivered to Shipper, then Shipper shall have the right to request these volumes be returned within 90 days. If not claimed within 90 days, such imbalance volume shall be forfeited to Company.

5. MINIMUM CHARGE ADJUSTMENT

- 5.1 If on any day Company fails, when Shipper wishes delivery of gas, either to deliver to Shipper a volume of gas which Shipper has nominated on the same day or Shipper has, in writing, claimed relief by reason of force majeure, then a credit shall apply to the Minimum Charge under the transportation Schedule.

5.2 Monthly Demand Charge Adjustment

- a) This Section 5.2 shall apply only to customers with a firm MDTV nomination. The Monthly Demand Charge Adjustment shall not alter other terms of transportation pursuant to Schedule 22 except as provided for herein.

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LEGAL AND REGULATORY AFFAIRS

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- b) When force majeure is claimed on firm transportation service for a full Day or number of Days (by either Shipper or Company) and notice of force majeure has been provided in accordance with a Transportation Agreement subject hereto, a credit shall be calculated as the number of force majeure Days times the Daily Demand Rate for transportation service, as indicated below, times the firm MDTV. When force majeure is claimed for a partial Day, the credit shall apply to the difference between the MDTV and the volume of gas delivered by Company to Shipper during that Day excluding the period force majeure is claimed. The Monthly Firm Volume obligation by Company shall be correspondingly reduced to reflect the volumes on which credits have been provided. Provided, however, in the case of force majeure arising out of strike or lockout, the credit provisions shall apply for no more than 90 days in any Contract Year.
- c) The Daily Demand Rate shall be the amount equal to the Monthly Demand Charge in effect per 10^3m^3 of daily demand times 12 divided by 365.
- d) If Shipper nevertheless requires some gas while claiming force majeure, Shipper shall pay a rate for transportation service equivalent to the sum of two (2) times the Monthly Demand Charge calculated at a 75% load factor, plus the Commodity Rate, based on the rates specified for firm service under Schedule 22.
- e) Notwithstanding the other provisions under this Monthly Demand Charge Adjustment, no credit shall apply for an event of force majeure which has occurred upstream of the Company's Pipeline Supplier and Shipper shall continue to pay Company the Monthly Demand Charge.

5.3 All reasonable costs associated with the alteration of facilities of Company necessary to measure reduced gas volumes due to force majeure and to remove such alterations after force majeure ends, shall be paid by Shipper. Such alterations shall be made at the sole discretion of Company.

5.4 Other Minimum Charge adjustments

If the Company interrupts or curtails transportation service not subject to a Monthly Demand Charge, Company shall provide a prorata credit to the Minimum Charge to reflect such loss of service. If service is totally interrupted, the credit for any such Day shall be calculated based on the Minimum Charge divided by the number of days in the

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month. In the event service is partially curtailed, the credit shall be prorated based on the curtailed Daily Nomination divided by the volume Company would have delivered in the absence of any curtailment.

6. STATEMENTS AND PAYMENTS

- 6.1 Company shall, on or before the 15th day of each month, deliver to Shipper a statement for the preceding Month showing the gas volumes delivered to Shipper and the amount due. Any errors in any statement shall be promptly reported to the other party as provided hereunder, and statements shall be final and binding unless questioned within one (1) year after the date of the statement.
- 6.2 Payment for the full amount of the statement, including federal, provincial and municipal taxes or fees applicable thereon, shall be made in Canadian funds to Company at its Vancouver, British Columbia office, or such other place in Canada as it shall designate, on or before the 20th day of the month in which a statement is rendered; provided, however, that Shipper shall have at least five days excluding Statutory Holidays, Saturdays and Sundays, from the day Company delivers a statement until and including the date for payment. If presentation of a statement by Company is delayed after the 15th of the month, then the time for payment shall be extended correspondingly unless Shipper is responsible for such delay. If Shipper fails to make payment as required hereunder, or any portion thereof, to Company when due, interest thereon shall accrue at the rate of interest which is equal to the rate of interest declared from time to time by the chartered bank in Canada used by Company as the rate of interest charged by such bank to its most credit worthy commercial borrowers for loans in Canadian dollars payable on demand and commonly referred to as its "prime rate", plus:
- (a) 2% if Shipper has not been overdue in making any payment or portion thereof during the immediately preceding 6 month period. If such failure to pay shall continue for 30 days after payment is due, then interest shall accrue at the "prime rate" plus 5%; or
- (b) 5% if Shipper has been overdue in making any payment or portion thereof during the immediately preceding 6 month period.

Further, if such failure to pay shall continue for 30 days after payment is due, Company

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may suspend further transportation service to Shipper and may refuse to deliver gas to Shipper until any overdue amount is paid.

- 6.3 If at any time within 12 months after the date of any statement rendered by Company, Shipper finds it has been overcharged in such statement, upon verifying that an overcharge occurred Company shall refund the amount of any overcharge which has been paid by Shipper within 30 days of verification, including interest thereon from the date of Shipper's payment until refund is made, at a rate of interest equal to the prime rate as defined herein, plus 2%.
- 6.4 If at any time within 12 months after the date of any statement rendered by it, Company finds that there has been an undercharge in the amount billed in such statement, it may after a final determination of the correct volume or values involved, submit a statement for such undercharge and Shipper shall within 30 days pay the same without interest.

7. PRORATA INDEMNIFICATION

- 7.1 If more than one customer is receiving transportation service pursuant to a tariff, then Shipper and all other customers receiving services which have contributed to increased expenses, as specified in Transportation Agreements, shall indemnify Company such that Company is fully indemnified. The amount to be contributed to the indemnification of Company by each Shipper shall be determined on a basis deemed equitable by Company, within 60 days after the end of each Contract Year. The amount to be paid by Shipper as its contribution to the indemnification shall be the share of the total increased expenses of Company taking into account the volumes of gas transported for and delivered to each Shipper which has contributed to such increased expenses during the Contract Year.
- 7.2 Company shall render a statement to Shipper indicating the amount required from Shipper to indemnify Company or to contribute to the indemnification of Company. Such statement shall set forth the complete basis of determination of the amount required from Shipper. Shipper shall pay to Company, at Company's office at Vancouver, B.C., the full amount indicated on the statement within 20 days of receipt of the statement. Should Shipper fail to pay the amount of any statement as herein provided when due, interest thereon shall accrue at the rate of interest equal to the prime rate, as defined herein, plus 2%, during the period from the date when such payment is due, until paid. If such failure to pay continues for 30 days after payment is due, Company may suspend further transportation service to Shipper and may refuse to sell gas to Shipper or End-User until the overdue amount is paid.

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- 7.3 Any dispute between Shipper and Company regarding the allocation of increased expenses shall be resolved by the B.C. Utilities Commission after payment has been made by Shipper. In the event Company is required to refund an amount to Shipper under this Section 7, interest thereon shall be calculated at the same rate as late payments under this Section 7 and shall accrue from the date Company is in receipt of such payment.

8. QUALITY

- 8.1 Gas transported shall conform to the quality specifications set forth in the Westcoast Firm Transportation Service Terms.

8.2 Failure to Meet Specifications

- (a) If the commingled gas delivered by Shipper to the Interconnection Point fails to meet the requirement of Section 8.1, then Company agrees to notify Westcoast and Shipper of such failure. If Westcoast and/or Shipper fail to promptly remedy any such failure in quality, then Company may at its option refuse to accept receipt of such gas pending remedy, or may accept receipt and may make changes necessary to bring Shipper's gas into conformity with the quality specifications. Shipper shall reimburse Company for any reasonable expenses incurred by Company in effecting such changes.
- (b) If gas delivered by Company fails to meet the requirement of Section 8.1, then Shipper agrees to notify Company of such failure. If Company fails to promptly remedy any such failure in quality, then Shipper may at its option refuse to accept delivery of such gas pending remedy by Company, or may accept delivery and may make changes necessary to bring such gas into conformity with the quality specifications. Company shall reimburse Shipper for any reasonable expenses incurred by Shipper in effecting such changes.

9. MEASURING EQUIPMENT

9.1 Measuring Site

Company shall install, maintain and operate at the Delivery Point metering and

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telemetering facilities as deemed necessary by Company for measuring the quantity of gas delivered to Shipper. If the Company deems it necessary to install its measuring equipment on Shipper's property, Shipper shall, without charge, provide a suitable site along with utilities and enclosures for the installation of Company's equipment. Company shall at all times have clear access to the site and to all of its equipment. Any equipment installed by the Company on Shipper's property shall remain the property of Company and may be removed by Company upon termination of the Transportation Agreement.

9.2 Calibration and Test of Meters

- (a) The accuracy of Company's measuring equipment shall be verified by standard tests and methods at regular intervals and at other times at the initiative of Company or upon the reasonable request of Shipper. Notice of the time and nature of each test conducted in response to communications with or at the request of Shipper, shall be given by Company to Shipper sufficiently in advance to permit a representative of Shipper to be present. If during a test any of the measuring equipment is found to be registering inaccurately, it shall be adjusted at once to read as accurately as possible. The results of each test and adjustment, if any, made by Company, whether or not Shipper is present for such test, shall be accepted until the next test. All tests of such measuring equipment shall be made at Company's expense, except that Shipper shall bear the expense of tests made at its request if the inaccuracy is found to be two percent (2%) or less.
- (b) If upon any test the inaccuracy of Company's measuring equipment is found to exceed two percent (2%), then any previous readings of such equipment shall be corrected to zero error for any period during which it is definitely known or agreed upon that the error existed. If the period is not definitely known or agreed upon, such correction shall be for a period covering the last half of the time elapsed since the date of the last test. Under no circumstances shall an adjustment be made for a period of more than the preceding twelve (12) calendar months.

9.3 Correction of Metering Errors

In the event 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

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shall 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;
- (c) by estimating the quantity delivered by deliveries during the preceding periods under similar conditions when the meter was registering accurately.

9.4 Check Measuring

Shipper may at its own expense install, maintain and operate check measuring equipment, provided that such equipment shall be installed so as not to interfere with the operation of Company's measuring equipment. Measurement of gas for the purpose of the Transportation Agreement shall be by Company's measuring equipment, except as herein specifically provided.

9.5 Right to be Present

Company and Shipper shall have the right to inspect 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 shall be performed by the party furnishing the measuring equipment.

9.6 Preservation of Records

Both parties shall cause to be preserved all test data, charts and/or other records of gas measurement for a period of two (2) years.

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10. MEASUREMENT

10.1 Unit of Volume

The unit of volume of gas for all purposes hereunder shall be one (1) cubic metre at a temperature of fifteen degrees (15°) Celsius and an absolute pressure of 101.325 kilopascals.

10.2 Determination of Volume

Gas delivered hereunder shall be metered using metering apparatus approved by the Standards Division, Department of Consumer & Corporate Affairs of Canada and the determination of standard volumes delivered hereunder shall be in accordance with terms and conditions pursuant to the Electricity and Gas Inspection Act of Canada.

10.3 Conversion to Energy Units

- (a) In accordance with the Electricity and Gas Inspection Act, volumes delivered each Day shall be converted to energy units by multiplying the standard volume by the heat content of each unit of gas. For large volume customers, volumes shall be specified in 10^3m^3 to one decimal place and energy shall be specified in gigajoules rounded to the nearest gigajoule.
- (b) The term "heat content" when applied to a cubic metre of gas shall mean the gross heating value of the gas, determined on the basis of a temperature of fifteen degrees (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 shall be expressed in megajoules per cubic metre of gas (MJ/M^3) rounded to two decimal places.

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