

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

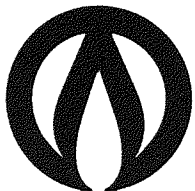
and

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

1996 Rate Design

Volume 2

Application



BC Gas

JUNE 1996

BC GAS UTILITY LTD.

1996 Rate Design

Volume 2

Application

JUNE 1996



BC Gas

1996 RATE DESIGN APPLICATION

TABLE OF CONTENTS

Volume 1

	<u>Tab</u>
Covering Letter	
Glossary of Terms	Tab 1
Application	Tab 2
System Map	A
General Terms and Conditions	B
Detailed Revenue Forecast Models	C
Application Outline	Tab 3
Residential, Commercial & Seasonal Rates	Tab 4
Industrial Service Rates	Tab 5
Gas Cost Allocation	Tab 6
Barakat & Chamberlin Study	Tab 7
Written Evidence	Tab 8

Volume 2

Long Run Incremental Cost Study	Tab 1
Fully Distributed Cost Study	Tab 2
Consolidated	A
Lower Mainland Division	B
Inland Divison	C
Columbia Division	D
Rate Base	E
Competitive Energy Prices & Energy Market Shares	Tab 3
Survey of Rates	Tab 4

BC GAS LONG RUN INCREMENTAL COSTS

This long run incremental cost (LRIC) study estimates the costs associated with serving future gas demand resulting from new customers attaching to the BC Gas system as well as increased demand from existing customers.

1.0 CONCEPTS AND COMPONENTS

Incremental costs are one of the factors used to design customer rates. They measure the costs customers are expected to impose on the gas system over the long-term. The incremental costs presented here cover both the BC Gas distribution system as well as upstream gas supply costs.

Long run incremental cost estimates in this study are grouped into three components:

- Demand costs
- Commodity costs
- Customer costs

The following sections describe the elements and the procedures used in deriving cost estimates for each component. The final section provides a summary and conclusions.

2.0 DEMAND COSTS

The demand cost component consists of costs associated with transmission and distribution capacity on the BC Gas system and the fixed demand costs for gas supply.

2.1 DEMAND COSTS: TRANSMISSION AND DISTRIBUTION SYSTEM IMPROVEMENTS

System improvements include capacity additions to the BC Gas

1 distribution and transmission system that accommodate the
2 incremental load requirements of new and existing customers.

3
4 The incremental cost estimate of transmission capacity was
5 derived from 20 year transmission plans for BC Gas. The
6 present value of total forecast capital transmission
7 expenditures over the 20 year forecast period was divided by
8 the present value of forecast incremental system peak day
9 demand over that same period. A capital recovery factor was
10 applied to derive the annual transmission cost of capacity in
11 \$/peak day GJ. Overhead was added to account for those
12 operation and maintenance expenditures capitalized into
13 transmission costs. Derivation of incremental overhead rates
14 is discussed in Section 5.

15
16 Estimates for the incremental cost of distribution capacity
17 were derived from the BC Gas Five Year System Plan. The
18 capital cost estimates for regions in the interior were
19 adjusted to account for districts with incomplete Five Year
20 Plans¹. Only those projects in the System Plan that were
21 required for meeting increases in capacity requirements, from
22 increased loads due to new or existing customers, were used in
23 the estimation. Replacement projects not associated with
24 incremental requirements were not included in the analysis.
25 The annual distribution cost of capacity was calculated in a
26 similar manner to that used for transmission. Capital
27 expenditures shown in the five year plan were averaged and
28 applied to future years². This extrapolation was required to
29 provide distribution capital costs on a consistent basis with
30 transmission capital costs and the peak day system forecast.

31 ¹ System planning budgets in the interior region were increased by 4.4% in each year,
32 representing the portion of customers residing in areas where 5 year plans have yet to be
33 completed.

34 ² System planners at BC Gas indicate that this procedure produces a reasonable proxy of longer
35 term capital project requirements to meet capacity demand growth.

Table 1 below shows the cost estimates for adding additional transmission and distribution capacity.

Table 1: Transmission and Distribution \$1996 per Peak Day GJ		
	Total	Annual*
Transmission	\$ 298	\$ 35
Distribution	\$ 410	\$ 41
Total T&D	\$ 708	\$ 77

* Capacity Recovery Factor 10.31%

Total forecast transmission and distribution expenditures together with the associated peak day demand forecast for the BC Gas system are given in Table 2.

Table 2: Transmission & Distribution System Costs and Peak Day Demand Forecasts				
	Capital Costs			Peak Day
	Transmission	Distribution (\$millions)	Total	(TJ)
1996	5.7	9.1	14.8	1,174
1997	7.2	10.7	17.9	1,186
1998	-	3.9	3.9	1,213
1999	7.2	3.5	10.7	1,240
2000	-	10.3	10.3	1,265
2001	6.8	7.5	14.3	1,288
2002	-	7.5	7.5	1,311
2003	10.8	7.5	18.3	1,333
2004	5.9	7.5	13.4	1,354
2005	7.2	7.5	14.7	1,376
2006	-	7.5	7.5	1,397
2007	31.0	7.5	38.5	1,420
2008	-	7.5	7.5	1,437
2009	-	7.5	7.5	1,454
2010	41.2	7.5	48.7	1,470
2011	-	7.5	7.5	1,485
2012	14.0	7.5	21.5	1,501
2013	-	7.5	7.5	1,517
2014	-	7.5	7.5	1,533
2015	-	7.5	7.5	1,549

2.2 DEMAND COSTS: GAS SUPPLY

Incremental gas supply costs were determined using the company's Gas Supply Optimization Model (GSOM). Gas supply incremental costs were estimated by assuming that gas demand will be two percent greater than currently forecasted. This

1 change in gas demand results in additional gas supply
2 requirements, the cost of which is the incremental gas supply
3 cost. GSOM selects available supply resources to meet
4 forecast demand requirements. The available supply resources
5 include contracts for various periods and amounts, space in
6 underground storage facilities, and peaking facilities such as
7 LNG. GSOM indicates that for an increase in load, with a
8 system average load factor, the long term marginal supply
9 source would be an annual base load supply contract.

10
11 The demand cost associated with gas supply was separated into
12 two parts.

13
14 Most supply resource options chosen by GSOM can be thought of
15 as serving a dual purpose - meeting peak day demands and
16 meeting demand on non-peak days. Since the marginal resource
17 selected by GSOM was long term base load contracts, a method
18 for deriving a pure peak-related demand cost was required. To
19 separate pure peak demand costs from the total fixed costs
20 identified in GSOM, an LNG facility was chosen as a proxy for
21 the cost of serving needle peak loads. The 2BCF LNG facility
22 described in the 1995 BC Gas IRP has an associated peak day
23 cost of \$518/GJ/day. Applying a capital recovery factor
24 results in an annual cost of capacity of approximately
25 \$53/GJ/day.

26
27 The fixed cost (demand charges) of meeting incremental load as
28 determined by GSOM is \$334/peak day GJ (levelized). When the
29 cost for LNG peaking is subtracted, the residual demand
30 component is:

31
32
$$\$334 - \$53 = \$281 \text{ GJ/peak day}$$

33
$$\$281/364 \text{ days} = \$0.77/\text{GJ (at 100\% load factor).}$$

1 This residual demand component is termed here the average
2 demand.

3
4 **3.0 COMMODITY COSTS**

5
6 The variable gas supply cost was derived from the annual
7 estimates produced by GSOM. The levelized commodity cost was
8 estimated to be \$0.95/GJ (\$1996). The winter (November -
9 March) commodity cost was estimated to be \$1.08/GJ while the
10 summer (April-October) was \$0.70/GJ.

11
12 **4.0 LONG RUN CUSTOMER CAPITAL COSTS**

13
14 The costs of attaching additional customers to the gas
15 distribution system includes one time capital expenditures for
16 meter sets, services and mains. These costs can be attributed
17 to specific customer rate classes on a per customer basis
18 using data for typical customer attachments. Table 3 provides
19 current estimates of customer capital costs for rates 1, 2
20 and 3.

21
22 The costs given in the table were developed by BC Gas
23 distribution service engineers and represent typical costs
24 associated with attaching customers in each class. Attachment
25 costs for specific customers could vary substantially from
26 these estimates. The costs shown for services and mains
27 assume a ratio of 1.2 customers per service to account for
28 multiple accounts from single services.

Table 3: Meter Set, Service Line and Main Costs per Customer \$1996			
	Rate 1	Rate 2	Rate 3
Meter Set	\$ 346	\$ 477	\$ 3,016
Service	\$ 539	\$ 539	\$ 539
Main	\$ 516	\$ 516	\$ 516
Overhead	\$ 517	\$ 566	\$ 1,503
Total	\$ 1,918	\$ 2,098	\$ 5,574
Annual Cost	\$ 198	\$ 216	\$ 575

* Capital Recovery Factor 10.31%

Because seasonal and larger industrial customers comprise a heterogeneous group with wide cost variations and no readily identifiable typical customer, customer attachment cost estimates for these industrial customers are not meaningful.

An overhead rate was applied to the total direct costs in each rate class (see Section 5 for a discussion of overheads). It was assumed that future customer attachment costs for meters, services and mains will remain constant in real terms.

5.0 LONG RUN OPERATION AND MAINTENANCE COSTS

Incremental operation and maintenance (O&M) costs were determined using as a base the 1996 approved O&M budget from the 1996-1998 BC Gas Revenue Requirements Application. Incremental O&M costs associated with demand, commodity and customer components, shown in Table 4, were determined using the following approach.

Table 4: Operation & Maintenance Costs (\$1996)	
Demand	
(1) Demand Related O&M	\$ 11,790 (\$000)
(2) System Peak Day (1996)	\$ 1,174 (TJ)
(3) (1)/(2)	\$ 10.04 (\$/peak day GJ)
Commodity	
(1) Commodity Related O&M	\$ 1,178 (\$000)
(2) Total System Throughput	\$ 232,443 (TJ)
(3) (1)/(2)	\$ 0.005 (\$/GJ)
Customer	
(1) Customer Related O&M	\$ 37,298 (\$000)
(2) Total Customers	\$ 704,317
(3) (1)/(2)	\$ 53 (\$/customers)

First, individual budgeted O&M items (BCUC accounts) were evaluated using BC Gas staff expertise to determine what portion of the activity varied either with the number of customers or with additional gas volumes. This variable portion was then assigned as demand, commodity or customer related using allocation factors derived from the FDC study.

The values expressed in \$/GJ peak day, \$/GJ, and \$/customer were applied to the demand, commodity and customer components described in previous sections to arrive at total incremental cost estimates.³

³ These O&M cost estimates are included in the summary table (Table 6) in Section 6.

Incremental O&M expenditures were also used to determine the overhead percentages to apply to transmission, distribution and customer related investments in the incremental demand and customer cost components. This was done by applying an allocation procedure, similar to that described above, on those O&M costs which are typically capitalized⁴. Table 5 below shows the derivation of demand (transmission and distribution) and customer (meters, services and mains) related overhead rates.

For demand related and customer related components, the portion of incremental O&M charged to capital was divided into the estimated total incremental direct capital expenditures for 1996. Incremental O&M costs were assumed to remain constant in real terms throughout the analysis period.

Table 5: Overhead Costs (\$1996)	
Demand Related	
(1) O&M Charged to Capital	\$ 2,201,250
(2) Total T&D Capital (1996)	\$ 12,630,264
(3) Overhead Rate (1)/(2)	17%
New Customer Related	
(1) O&M Charged to Capital	\$ 9,822,750
(2) Total Meters et. al. Capital (1996)	\$ 26,600,830
(3) Overhead Rate (1)/(2)	37%

⁴ O&M costs allocated to overhead were the variable portions of BCUC account items dealing with "Charges to capital".

1 **6.0 SUMMARY**

2
3 Economic theory holds that efficiency is best served when the
4 price of a product or service reflects marginal costs. The
5 purpose of this study is to establish estimates of the
6 marginal cost of providing future gas service to consumers for
7 the purposes of comparing rates with marginal cost. BC Gas
8 has built on the LRIC study submitted in the Phase B
9 Application and has modified the analysis to reflect the
10 recommendations incorporated in the Commission's decision.
11 While BC Gas is satisfied with the methodology it has employed
12 in developing its marginal costs, caution needs to be used in
13 applying the specific values for rate design purposes.

14
15 While both FDC and LRIC studies are to some extent subjective
16 and judgemental, FDC studies are based on historic costs
17 whereas incremental costs are based on long term forecasts of
18 the future. Incremental costs are thus subject to
19 considerable uncertainty. Some of these uncertainties
20 include:

- 21
22 • forecasts of well-head gas prices
23 • forecast capital costs and requirements
24 • forecasts of gas demand
25 • Westcoast pipeline system toll forecasts
26 • the availability of future gas storage
27 • discount rates
28 • potential technological improvements

29
30 These factors influence the precision of the incremental cost
31 estimates and should therefore be considered when applying the
32 results to rate design.

33
34 The following is a summary of the demand, commodity and
35 customer incremental cost estimates.

6.1 DEMAND COSTS

Table 6 below provides a summary of demand cost estimates for transmission, distribution, peak day demand and average demand.

Table 6: Demand Costs Summary (\$1996)	
	(\$/GJ Peak Day)
Transmission*	\$ 40
Distribution*	\$ 47
Peak Day Demand (Supply)	\$ 53
	(\$/GJ)
Avg. Demand Cost	\$0.77

* Includes Operation and Maintenance Costs

The estimates for the value of peak day capacity, including operation and maintenance related costs, are \$40/GJ peak day and \$47/GJ peak day for transmission and distribution respectively. These estimates provide guidance for setting a price discount for interruptible capacity relative to firm capacity. At 100% load factor, these figures translate into a value of \$0.24/GJ (\$87/ 365 days / load factor) for transportation and distribution service.

The peak day supply cost of \$53/GJ peak day represents the estimated cost of pure demand derived using the cost for a new LNG facility. The average demand cost of \$0.77/GJ is an estimate of the incremental cost of average demand capacity for base load gas supply as derived using the Gas Supply Optimization Model (GSOM).

6.2 COMMODITY COSTS

Table 7 shows the levelized incremental commodity cost of gas. This estimate was derived using GSOM and includes related operation and maintenance costs.

Table 7: Commodity Costs Summary (\$1996)	
	(\$/GJ)
Levelized Variable*	\$ 0.95

* Includes Operation and Maintenance Costs

6.3 CUSTOMER CHARGES

Table 8 provides a summary incremental customer costs, indicative of the costs of attaching a typical new customer to the BC Gas system.

Table 8: Customer Costs Summary (\$1996)		
Meters, Services & Mains	\$/Customer	
	Per Year	Per Month
Rate 1	\$ 251	\$ 21
Rate 2	\$ 269	\$ 22
Rate 3	\$ 628	\$ 52

* Includes Operation and Maintenance

For residential, small commercial and large commercial customers, these costs do not vary over a wide range of gas consumption. To the extent that these customer costs reflect typical fixed costs, the estimates support higher basic charges for new customers in these markets.

FULLY DISTRIBUTED COST OF SERVICE STUDY

1 The fully distributed cost (FDC) study performed for purposes
2 of this rate design application employs, except as noted
3 herein, the same methodology as that of the FDC study in the
4 1993 Phase B Rate Design Hearing. The results of that study
5 were accepted by the Commission in support of the revenue
6 reallocation between customer classes (Decision dated October
7 25, 1993, Page 15).

8
9 As mentioned in BC Gas' evidence during that proceeding, the
10 basic purpose of a FDC study is to compare the revenue
11 generated by rates to the cost that a utility incurs in
12 serving its customer classes. A FDC study is one element
13 frequently considered in the setting of rates. It is worth
14 emphasizing, however, that even though it is a useful guide in
15 this regard, it is not a prescription for rate setting, as
16 many other factors must also be taken into account.

17
18 In a manner similar to the general description of the FDC
19 study in the 1993 Phase B Rate Design Application, the
20 paragraphs below summarize the procedures employed.

21 22 1.0 FULLY DISTRIBUTED COSTING METHODOLOGY

23
24 There is no cost apportionment formula that is perfect from a
25 theoretical standpoint and, at the same time, practical from
26 an administrative point of view. The National Association of
27 Regulatory Utility Commissioners, in its Cost Allocation
28 Manual, and American Gas Association, in its Gas Rate
29 Fundamentals, do not specify one method to the exclusion of
30 all others. There are arguments that can be made for variants
31 of fully distributed cost, i.e. coincident peak (CP), non-
32 coincident peak (NCP), average and excess (A&E) and others.

1 As in the 1993 Phase B Rate Design Application, the approach
2 taken by BC Gas in this application is to set out the findings
3 under various methods of cost allocation as a basis for
4 support for the rate design changes proposed. In this way, a
5 range of costs is developed to illustrate the probable floor
6 and ceiling for the cost of service.

8 **2. CATEGORIES OF COST**

10 Approximately 50% of BC Gas' cost of doing business relates to
11 the cost of natural gas supplies. The remaining 50% of the
12 cost that BC Gas incurs in serving its customers is for what
13 can be called "cost of service margin" or "margin". It is the
14 total cost to serve less cost of gas. The allocation of the
15 total margin to customer classes is the topic of the material
16 under this Tab.

18 There are three primary categories of cost causation factors
19 in utility operations: demand-related cost, customer-related
20 cost, and commodity-related cost. The first two are called
21 "standing costs" -- the costs incurred in standing by to serve
22 customers whenever they apply a load to the system.
23 Commodity-related costs vary with consumption of energy and
24 are called "running cost" or the additional cost that is
25 incurred with the consumption of one more or one less
26 gigajoule of gas. There are also revenue sensitive costs,
27 e.g. one percent of revenue in lieu of property taxes on
28 distribution facilities.

30 **3.0 PROCEDURES INVOLVED IN FDC STUDIES**

32 BC Gas has followed the traditional three steps in preparing
33 fully distributed cost of service studies: 1) functional-
34 ization, 2) classification of function costs into demand,
35 commodity, and customer-related components, and 3) allocation

1 of these costs to the various rate classes. Functionalization
2 is the determination of costs by utility functional groups:
3 gas supply, gas supply administration, transmission,
4 distribution, marketing and customer accounting.
5 Classification is the separation of the functional groups into
6 demand, commodity and customer components by cost causation.
7 Allocation is the process of apportioning each of the
8 functionalized and classified cost groups to the various
9 classes of customers. When possible, costs have been directly
10 assigned to specific customer classes that caused the cost.
11 The process starts with the utility's chart of accounts.
12

13 3.1 Chart of Accounts

14

15 BC Gas maintains its accounting records in accordance with the
16 uniform system of accounts prescribed by the Commission.
17 These plant and revenue requirement records are the basic
18 accounting data source for the fully distributed cost study.
19

20 3.2 Functionalization

21

22 The functionalization procedure begins with plant and
23 operating expense accounts. The investment associated with
24 each facility is assigned to a function, e.g. gas supply, gas
25 supply administration, transmission, distribution, marketing
26 and customer accounting. After assigning plant costs
27 functionally, related expenses usually follows the same
28 functionalization logic.
29

30 From this analysis, ratios based on the proportion of gas
31 plant assigned to each cost of service function are developed.
32 These plant ratios can be used for the functionalization of
33 most of the other cost items. This process requires the
34 assistance of the Company's engineering and accounting

1 personnel to match the plant investment and associated
2 operating expenses to the proper cost function.

3 4 **3.3 Classification**

5
6 In the next step of the FDC, functional cost is divided into
7 cost causation categories. The three principal categories are
8 demand-related, commodity-related and customer-related costs.

9 10 **3.3.1 Demand-Related**

11
12 The term demand (or capacity) refers to utility service that
13 must be available upon the customer's demand. Demand related
14 costs pertain to the peak usage of utility service by the
15 Company's customers.

16
17 Storage (LNG), pipeline and compressor costs are assigned to
18 the demand classification and can be apportioned on the basis
19 of the relative demands placed on the system by the various
20 customer classes.

21 22 **3.3.2 Commodity-Related**

23
24 A commodity-related cost is the variable cost of gas. Few of
25 the costs to operate the facilities of BC Gas are variable
26 with respect to the volume of gas delivered to customers. Gas
27 supply administration expenses are classified as commodity-
28 related cost in these FDC studies as a means to apportion the
29 expenses to all sales and T-service customers.

30 31 **3.3.3 Customer-Related**

32
33 At the distribution level, the closer a plant item is
34 physically located to a customer, e.g. a meter and service
35 line, the more that particular item can be related to the

requirements of that customer. Customer-related costs are those associated with services, meters, regulators, marketing and customer accounting. They are directly assigned in certain cases or are allocated to the customers of a particular class of service based on customer weighting factors.

A number of different approaches have been used by utilities to classify distribution mains costs. Sometimes distribution mains are classified as demand-related, in other FDC studies a portion of the cost of mains is classified as customer-related¹. The latter is the approach most commonly used and has been employed in this FDC study. The concept of classifying some portion of the mains as customer-related is based on the premise that there is some cost incurred to reach the customer irrespective of the customer's capacity requirement. At the distribution level, the capacity of facilities is closely related to the number of customers connected to those facilities. In the 1993 FDC study, distribution mains were classified as demand related costs. In this study, BC Gas has used the zero-intercept method² to classify a portion of mains as customer-related. This method follows the more commonly used practice in the utility industry. In the Lower Mainland service area, the customer

¹ For a discussion on classifying a portion of distribution mains as customer-related see the following: Gas Rate Fundamentals, American Gas Association, 1987, pg. 136; Electric Utility Cost Allocation Manual, National Association of Regulatory Utility Commissioners, 1992, pg. 86-95; Gas Distribution Rate Design Manual, NARUC Staff Subcommittee on Gas, 1989, pg. 22-23; and Principles of Public Utility Rates, James C. Bonbright, Albert L. Danielsen and David R. Kamerschen, Public Utilities Reports, Inc., 1988, pg. 490-492.

² Economic Growth in the Future: The Growth Debate in National and Global Perspective, Edison Electric Institute, McGraw-Hill Book Company, pg. 391-393; and Electric Utility Cost Allocation Manual, National Association of Regulatory Utility Commissioners, 1992, pg. 92-95.

1 -related portion is 20.9%, in the Inland service area it is
2 24.5% and in the Columbia service area 27.5%.

3 4 3.4 Capacity Allocation

5
6 Allocation of the functionalized and classified costs among
7 the various classes of customers is the third step of the FDC
8 process. As mentioned earlier, there are various methods that
9 are used in this process. Three of the more commonly used
10 methods have been employed in this study. They are the
11 coincident peak (CP), non-coincident peak (NCP) and the
12 average and excess (A&E) methods. Each is discussed below.

13
14 Consistent with the 1993 FDC study, the demand allocators for
15 the firm industrial captive and bypass customers in the Inland
16 service area have been weighted by transmission distance in
17 this study.

18
19 For purposes of the 1996 study, all load factors used in the
20 capacity allocation process were reviewed. As a result, the
21 load factor for Rate Schedule 5, previously estimated at 45%,
22 has been increased to 65%. All other load factors are close
23 to those used in the 1993 FDC study, and reflect those used
24 for the 1996 gas cost flow-through.

25 26 3.4.1 Coincident Peak (CP)

27
28 The CP method is used in this study to allocate capacity costs
29 according to the demand imposed on the system by the various
30 classes of customers during the peak day. The correlation
31 between very cold weather and the firm system peak loads
32 imposed on the BC Gas system forms the basis of using the
33 coincident peak method as a capacity cost allocator. BC Gas
34 builds its system on the basis of having to deliver gas to firm
35 customers under extreme cold weather conditions.

1 The coincident peak method assigns the capital required to
2 provide service during the peak load requirements of its
3 customers.

4 5 **3.4.2 Non-coincident Peak (NCP)**

6
7 Under the NCP method of allocating capacity cost, the maximum
8 rates of consumption of all customers or classes are added
9 together irrespective of the time of occurrence to find the
10 aggregate "non-coincident demand". In the case of BC Gas,
11 peak day loads for the core customers are forecasted to occur
12 on the coldest winter day, which for the NCP method is the
13 same as for the CP method.

14
15 Industrial loads usually have a heating component to some
16 extent, but they are more process oriented. Their peak loads
17 may occur at times other than the coldest day of the year. It
18 may be necessary to build certain portions of the system large
19 enough to carry their loads regardless of when the coincident
20 peak occurs. The NCP capacity cost allocation method is of
21 assistance under these circumstances since capacity costs are
22 allocated to each class according to the ratio of the maximum
23 rate of consumption that each class bears to the aggregate
24 non-coincident demand of all of the classes.

25 26 **3.4.3 Average & Excess (A&E)**

27
28 The A&E method is a two part calculation that takes into
29 account the average use of the system and the non-coincident
30 demands that are placed on the system. The method recognizes
31 the dual service a pipeline system provides - a peak capacity
32 deliverability service and a continuous throughput service.
33 The first part of the formula recognizes the average demand of
34 the system capacity. The second part of the formula
35 recognizes the excess of non-coincident demand over average

demand placed on the system. The A&E method is expressed algebraically as follows:

$$D = L \times A/B + (1-L) \times C/E$$

Where: D = customer group's demand responsibility ratio

L = system's annual load factor

A = customer group's energy requirements

B = total system energy requirements

C = customer group's excess demand responsibility

E = sum of all customer groups' excess demand responsibility³

4.0 THE FDC STUDY

The FDC input values reflect the BC Gas Revenue Requirement for the 1996 Test Year as approved by Commission Decision and Order No. G-99-95 of November 27, 1995, with the following changes:

1. The cost of gas in the FDC study is based on the approved cost of gas flow-through effective January 1, 1996. The change in the cost of gas is equally offset by a revenue change. These changes, therefore, result in no change to the margin (revenue minus cost of gas) approved by the Commission (see Tables 1 and 2).
2. Consistent with the 1993 FDC study, the Burrard and PCEC margin, which was included in the Revenue Requirement Application as "Other Revenue" as a reduction of cost of service, has been transferred to Lower Mainland "Other Class" revenue, and
3. corresponding sales and transportation service (T-service) rate schedules have been combined to calculate a common cost of service margin for each class of customers.

³ Electric Cost Allocation Manual, National Association of Regulatory Utility Commissioners, 1992, pg. 81, 82. See also Gas Rate Fundamentals, American Gas Association, 1987, pg. 144-145.

1 4. In order to better reflect the actual joint use of the
2 transmission system during peak periods and throughput
3 service during non-peak periods, transmission costs,
4 except for the Byron Creek lateral and the PCEC stubline,
5 have been allocated on a system-wide basis.

6 5. In order to derive values by service area from the
7 consolidated 1996 Test Year data, mid-year distribution
8 plant and related accumulated depreciation account
9 balances for the 1996 Test Year have been prorated to the
10 service areas on the basis of 1995 actual year end
11 balances.
12

13 For each of the three capacity allocation methods, the
14 consolidated results for the three former service areas of BC
15 Gas are contained in Tab 2A. Lower Mainland service area
16 results are contained in Tab 2B, Inland service area results
17 in Tab 2C and Columbia service area results in Tab 2D. The
18 pages filed under Tabs 2A, B, C and D are taken from the full
19 study.
20

21 Under Tabs A, B, C and D the first section shows the findings
22 using the coincident peak method (CP), the second section the
23 findings using the non-coincident peak method (NCP), and the
24 third section the findings using the average and excess method
25 (A&E).
26

27 The details from which the results of the study are derived
28 are contained in Tab 2E. In this tab, a listing by account
29 (as prescribed by the Uniform Code of Accounts) is included
30 along with details on the functionalization, classification
31 and allocators. Section 1, containing 18 pages, identified on
32 the upper right as "Function - Rate Base", shows the
33 functionalized rate base costs. Section 2, consisting of
34 thirty-seven pages, displays the classified rate base costs
35 identified as "Classify - Rate Base". Section 3 is the

1 functionalization of the cost of service (which is cost of
2 gas, O&M expenses, taxes, return, etc.) and is identified on
3 the upper right as "Function - Cost of Service". It contains
4 13 pages. Section 4, classification of the cost of service,
5 contains ten pages. Sections 5, 6 and 7 contain the
6 allocation of direct assignments of rate base and cost of
7 service for the Lower Mainland, Inland and Columbia service
8 areas. Each of the three sections are identified by "Direct
9 Assignment" and service area. Sections 5, 6 and 7 each
10 contains four pages. Sections 8, 9 and 10 summarize the
11 allocation factors and consist of two pages each.

12
13 Lines 17 and 20 of the FDC summary pages (Pages 1.0 and 1.1 of
14 Tabs A to D) show the cost to serve the various customer
15 classes including and excluding the cost of gas. Per-unit
16 values of demand, commodity and customer-related costs without
17 the cost of gas are shown on Lines 31 through 34.

18
19 Line 23 on the summary pages contains the ratio of "gross
20 margin" to "cost of service margin", i.e. revenue excluding
21 cost of gas divided by total cost to serve excluding cost of
22 gas.

23 24 **5.0 SUMMARY AND CONCLUSIONS**

25
26 Table 3 contains the summary of the margin to cost of service
27 margin ratios under the three demand allocation methods for
28 each of the customer classes.

29
30 The results of the FDC support directionally the need for a
31 revenue shift from industrial to residential customers.
32 Tables 4 and 5 show the revised margin to cost of service
33 margin ratios resulting from the proposed revenue shift.

BC GAS UTILITY LTD.

Tab 2
Page 11
Table 1

APPROVED 1996 RATE CHANGES
- COST OF GAS CHANGE AND ADR APPROVED INCREASE

(\$000)

Line No.	Particulars	1996 Cost of Gas	1995 Cost of Gas	Change in Cost of Gas	ADR Approved Increase	Total Approved Rate Changes
	(1)	(2)	(3)	(4) (2)-(3)	(5)	(6) (4)+(5)
1	<u>Consolidated</u>					
2	Schedule 1 - Residential	\$188,784	\$238,692	(\$49,908)	\$10,508	(\$39,400)
3	Schedule 2 - Small Commercial	57,326	71,971	(14,645)	2,391	(12,254)
4	Schedule 3 - Large Commercial	65,994	84,232	(18,238)	2,400	(15,838)
5	Schedule 5/25 - General Firm Industrial &					
6	S/T-Service Captive	7,027	9,185	(2,158)	602	(1,556)
7	Schedule 7/27 - Int. S. Industrial &					
8	S/T-Service Captive	5,841	8,049	(2,208)	365	(1,843)
9	Schedule 6/6A - NGV & VRA	1,143	1,610	(467)	97	(370)
10	Schedule 4 - Seasonal	495	707	(212)	25	(187)
11	Schedule 25 - General Firm Industrial &					
12	T-Service Non-Captive	2	(2)	4	0	4
13	Schedule 22 - Firm/Int. L. Industrial					
14	T-Service Captive	8	12	(4)	539	535
15	Schedule 22 - Firm/Int. L. Industrial					
16	T-Service Non-Captive	2	5	(3)	0	(3)
17	Schedule 22A - Firm/Int. L. Industrial					
18	S/T-Service Captive	28	(10)	38	217	255
19	Schedule 22A - Firm/Int. L. Industrial					
20	S/T-Service Non-Captive	17	(14)	31	0	31
21	Schedule 22B - Firm/Int. L. Industrial					
22	S/T-Service Captive	41	90	(49)	80	31
23	Other	19,542	30,325	(10,783)	17	(10,766)
24		<u>\$346,250</u>	<u>\$444,852</u>	<u>(\$98,602)</u>	<u>\$17,241</u>	<u>(\$81,361)</u>

BC GAS UTILITY LTD.

Tab 2
Page 12
Table 2

APPROVED 1996 RATE CHANGES
- COST OF GAS CHANGE AND ADR APPROVED INCREASE

(\$000)

Line No.	Particulars	1996 Cost of Gas (2)	1995 Cost of Gas (3)	Change in Cost of Gas (4) (2) - (3)	ADR Approved Increase (5)	Total Approved Rate Changes (6) (4) + (5)
1	<u>Lower Mainland</u>					
2	Schedule 1 - Residential	\$141,274	\$178,883	(\$37,609)	\$7,614	(\$29,995)
3	Schedule 2 - Small Commercial	41,332	52,020	(10,688)	1,685	(9,003)
4	Schedule 3 - Large Commercial	55,663	71,160	(15,497)	1,996	(13,501)
5	Schedule 5/25 - General Firm Industrial &					
6	S/T - Service Captive	4,720	6,181	(1,461)	312	(1,149)
7	Schedule 7/27 - Int. S. Industrial &					
8	S/T - Service Captive	5,736	7,905	(2,169)	361	(1,808)
9	Schedule 6/6A - NGV & VRA	1,046	1,470	(424)	88	(336)
10	Schedule 4 - Seasonal	283	409	(126)	16	(110)
11	Schedule 22 - Firm/Int. L. Industrial					
12	T - Service Captive	8	12	(4)	539	535
13	Schedule 22 - Firm/Int. L. Industrial					
14	T - Service Non-Captive	0	0	0	0	0
15	Other	19,542	30,325	(10,783)	17	(10,766)
16		<u>\$269,604</u>	<u>\$348,365</u>	<u>(\$78,761)</u>	<u>\$12,628</u>	<u>(\$66,133)</u>
17						
18	<u>Inland</u>					
19	Schedule 1 - Residential	42,651	53,896	(\$11,245)	2,608	(\$8,637)
20	Schedule 2 - Small Commercial	14,093	17,649	(3,556)	626	(2,930)
21	Schedule 3 - Large Commercial	9,431	11,966	(2,535)	369	(2,166)
22	Schedule 5/25 - General Firm Industrial &					
23	S/T - Service Captive	2,180	2,843	(663)	269	(394)
24	Schedule 7/27 - Int. S. Industrial &					
25	S/T - Service Captive	105	144	(39)	4	(35)
26	Schedule 6/6A - NGV & VRA	96	138	(42)	9	(33)
27	Schedule 4 - Seasonal	212	298	(86)	9	(77)
28	Schedule 25 - General Firm Industrial &					
29	T - Service Non-Captive	2	(2)	4	0	4
30	Schedule 22A - Firm/Int. L. Industrial					
31	S/T - Service Captive	28	(10)	38	217	255
32	Schedule 22A - Firm/Int. L. Industrial					
33	S/T - Service Non-Captive	17	(14)	31	0	31
34	Other	0	0	0	0	0
35		<u>\$68,815</u>	<u>\$86,908</u>	<u>(\$18,093)</u>	<u>\$4,111</u>	<u>(\$13,982)</u>
36						
37	<u>Columbia</u>					
38	Schedule 1 - Residential	4,859	5,913	(\$1,054)	286	(\$768)
39	Schedule 2 - Small Commercial	1,901	2,302	(401)	80	(321)
40	Schedule 3 - Large Commercial	900	1,106	(206)	35	(171)
41	Schedule 5/25 - General Firm Industrial &					
42	S/T - Service Captive	127	161	(34)	21	(13)
43	Schedule 6 - NGV	1	2	(1)	0	(1)
44	Schedule 4 - Seasonal	0	0	0	0	0
45	Schedule 22B - Firm/Int. L. Industrial					
46	S/T - Service Captive	41	90	(49)	80	31
47	Schedule 22 - Firm/Int. L. Industrial					
48	T - Service Non-Captive	2	5	(3)	0	(3)
49	Other	0	0	0	0	0
50		<u>\$7,831</u>	<u>\$9,579</u>	<u>(\$1,748)</u>	<u>\$502</u>	<u>(\$1,246)</u>

BC GAS UTILITY LTD.
REVENUE TO COST RATIOS – EXCLUDING THE COST OF GAS

Tab 2
Page 13
Table 3

Line No.	Rate Schedule	Coincident Peak		Non-Coincident Peak		Average & Excess	
		Post Phase B Decision Ratio %	1996 FDC Ratio %	Post Phase B Decision Ratio %	1996 FDC Ratio %	Post Phase B Decision Ratio %	1996 FDC Ratio %
	(1)	(2)	(3)	(5)	(6)	(7)	(8)
1	<u>Consolidated</u>						
2	Residential	90%	87.1%	96%	90.8%	97%	91.6%
3	Small Commercial	95%	95.0%	104%	101.0%	107%	103.1%
4	Large Commercial	100%	117.0%	113%	127.6%	112%	128.3%
5	General Firm Industrial – Captive	112%	186.1%	124%	203.7%	114%	184.0%
6	Interruptible Small Industrial – Captive	780%	875.4%	140%	171.4%	126%	155.8%
7	NGV / VRA	82%	67.8%	83%	68.4%	79%	66.9%
8	Seasonal	127%	181.1%	87%	158.2%	79%	137.5%
9	General Firm Industrial – Non-Captive	117%	127.8%	98%	121.1%	87%	108.3%
10	Large Industrial T-Service – Captive (22)	754%	1827.8%	80%	164.9%	76%	144.9%
11	Large Industrial T-Service – Non-Captive (22)	N / A	879.3%	N / A	119.7%	N / A	105.4%
12	Large Industrial T-Service – Captive (22A)	123%	111.2%	85%	89.4%	82%	83.7%
13	Large Industrial T-Service – Non-Captive (22A)	169%	192.8%	137%	171.1%	132%	165.5%
14	Large Industrial T-Service – Captive (22B)	90%	115.5%	84%	126.4%	81%	121.7%
15	Other	269%	127.8%	155%	79.0%	150%	76.0%
16							
17	Total	101%	100.0%	101%	100.0%	101%	100.0%
18							
19	<u>Lower Mainland</u>						
20	Residential	89%	86.3%	96%	90.4%	97%	91.3%
21	Small Commercial	92%	91.7%	102%	98.3%	104%	100.3%
22	Large Commercial	98%	114.6%	112%	125.8%	111%	126.5%
23	General Firm Industrial – Captive	103%	190.6%	116%	201.5%	107%	183.2%
24	Interruptible Small Industrial – Captive	763%	890.9%	137%	171.7%	124%	156.1%
25	NGV / VRA	99%	76.6%	102%	77.5%	96%	75.5%
26	Seasonal	134%	221.0%	120%	191.5%	99%	164.9%
27	Large Industrial T-Service – Captive (22)	754%	1827.8%	80%	164.9%	76%	144.9%
28	Large Industrial T-Service – Non-Captive (22)	N / A	2105.7%	N / A	123.5%	N / A	107.9%
29	Other	270%	127.7%	170%	78.4%	161%	75.4%
30							
31	Total	101%	100.1%	101%	99.5%	101%	99.6%
32							
33	<u>Inland</u>						
34	Residential	93%	88.6%	96%	90.8%	97%	91.5%
35	Small Commercial	105%	103.2%	112%	107.4%	115%	109.5%
36	Large Commercial	113%	129.8%	123%	137.0%	119%	137.3%
37	General Firm Industrial – Captive	127%	186.7%	138%	204.7%	127%	183.6%
38	Interruptible Small Industrial – Captive	N / A	347.6%	N / A	145.1%	N / A	134.1%
39	NGV / VRA	45%	39.0%	45%	39.1%	44%	38.8%
40	Seasonal	120%	134.4%	67%	118.5%	65%	104.1%
41	General Firm Industrial – Non-Captive	117%	127.8%	98%	121.1%	87%	108.3%
42	Large Industrial T-Service – Captive (22A)	123%	111.2%	85%	89.4%	82%	83.7%
43	Large Industrial T-Service – Non-Captive (22A)	169%	192.8%	137%	171.1%	132%	165.5%
44							
45	Total	101%	98.6%	101%	100.1%	101%	100.0%
46							
47	<u>Columbia</u>						
48	Residential	89%	100.2%	90%	102.4%	91%	103.1%
49	Small Commercial	104%	115.7%	107%	120.0%	110%	122.2%
50	Large Commercial	N / A	147.1%	N / A	154.3%	N / A	154.0%
51	General Firm Industrial – Captive	109%	132.5%	113%	229.0%	104%	203.7%
52	NGV / VRA	10%	34.1%	10%	34.1%	10%	33.9%
53	Large Industrial T-Service – Captive (22B)	90%	115.5%	84%	126.4%	81%	121.7%
54	Large Industrial T-Service – Non-Captive (22)	N / A	67.9%	N / A	74.0%	N / A	71.3%
55	Other	97%	139.2%	96%	139.2%	96%	139.2%
56							
57	Total	93%	108.1%	93%	113.6%	93%	113.4%

TABLE 4

BC GAS UTILITY LTD.

REVENUE TO COST RATIOS (EXCLUDING COST OF GAS)
AFTER PROPOSED REVENUE SHIFT

(\$000)

Line No.	Particulars	Margin	Margin Shift	Revised Margin	Coincident Peak		Non-Coincident Peak		Average & Excess	
					Cost of Service Margin	Margin to CoS Ratio	Cost of Service Margin	Margin to CoS Ratio	Cost of Service Margin	Margin to CoS Ratio
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	<u>Consolidated</u>									
2	Schedule 1 – Residential	\$202,238	\$11,212	\$213,450	\$232,106	92.0%	\$222,731	95.8%	\$220,673	96.7%
3	Schedule 2 – Small Commercial	45,870	0	45,870	48,284	95.0%	45,416	101.0%	44,504	103.1%
4	Schedule 3 – Large Commercial	46,386	0	46,386	39,654	117.0%	36,342	127.6%	36,149	128.3%
5	Schedule 5/25 – General Firm Industrial &									
6	S/T–Service Captive	11,448	(4,195)	7,253	6,151	117.9%	5,620	129.1%	6,222	116.6%
7	Schedule 7/27 – Int. S. Industrial &									
8	S/T–Service Captive	7,126	(2,552)	4,574	814	561.9%	4,158	110.0%	4,575	100.0%
9	Schedule 6/6A – NGV & VRA	2,798	0	2,798	4,128	67.8%	4,092	68.4%	4,184	66.9%
10	Schedule 4 – Seasonal	468	(118)	350	258	135.7%	296	118.2%	340	102.9%
11	Schedule 26 – General Firm Industrial &									
12	T–Service Non–Captive	721	0	721	564	127.8%	595	121.2%	666	108.3%
13	Schedule 22 – Firm/Int. L. Industrial									
14	T–Service Captive	10,524	(3,886)	6,638	576	1152.4%	6,381	104.0%	7,261	91.4%
15	Schedule 22 – Firm/Int. L. Industrial									
16	T–Service Non–Captive	1,463	(309)	1,154	166	695.2%	1,222	94.4%	1,388	83.1%
17	Schedule 22A – Firm/Int. L. Industrial									
18	S/T–Service Captive	4,010	(67)	3,943	3,605	109.4%	4,483	88.0%	4,790	82.3%
19	Schedule 22A – Firm/Int. L. Industrial									
20	S/T–Service Non–Captive	1,708	(49)	1,659	886	187.2%	999	166.1%	1,032	160.8%
21	Schedule 22B – Firm/Int. L. Industrial									
22	S/T–Service Captive	1,495	(36)	1,459	1,295	112.7%	1,183	123.3%	1,229	118.7%
23	Other	10,265	0	10,265	8,030	127.8%	12,999	79.0%	13,505	76.0%
24		<u>\$346,520</u>	<u>\$0</u>	<u>\$346,520</u>	<u>\$346,517</u>		<u>\$346,517</u>		<u>\$346,518</u>	
25										
26	<u>Lower Mainland</u>									
27	Schedule 1 – Residential	\$148,762	\$8,124	\$156,886	\$172,460	91.0%	\$164,497	95.4%	\$162,878	96.3%
28	Schedule 2 – Small Commercial	32,920	0	32,920	35,889	91.7%	33,504	98.3%	32,819	100.3%
29	Schedule 3 – Large Commercial	38,990	0	38,990	34,016	114.6%	30,996	125.8%	30,813	126.5%
30	Schedule 5/25 – General Firm Industrial &									
31	S/T–Service Captive	6,111	(2,146)	3,965	3,207	123.6%	3,033	130.7%	3,336	118.9%
32	Schedule 7/27 – Int. S. Industrial &									
33	S/T–Service Captive	7,045	(2,522)	4,523	791	571.8%	4,102	110.3%	4,515	100.2%
34	Schedule 6/6A – NGV & VRA	2,420	0	2,420	3,158	76.6%	3,123	77.5%	3,207	75.5%
35	Schedule 4 – Seasonal	308	(77)	231	139	166.2%	161	143.5%	187	123.5%
36	Schedule 22 – Firm/Int. L. Industrial									
37	T–Service Captive	10,524	(3,886)	6,638	576	1152.4%	6,381	104.0%	7,261	91.4%
38	Schedule 22 – Firm/Int. L. Industrial									
39	T–Service Non–Captive	1,395	(303)	1,092	66	1654.5%	1,130	96.6%	1,293	84.5%
40	Other	10,098	0	10,098	7,910	127.7%	12,879	78.4%	13,385	75.4%
41		<u>\$258,573</u>	<u>(\$810)</u>	<u>\$257,763</u>	<u>\$258,212</u>		<u>\$259,806</u>		<u>\$259,694</u>	

TABLE 5

BC GAS UTILITY LTD.

REVENUE TO COST RATIOS (EXCLUDING COST OF GAS)
AFTER PROPOSED REVENUE SHIFT

(\$000)

Line No.	Particulars	Margin	Margin Shift	Revised Margin	Coincident Peak		Non-Coincident Peak		Average & Excess	
					Cost of Service Margin	Margin to CoS Margin Ratio	Cost of Service Margin	Margin to CoS Margin Ratio	Cost of Service Margin	Margin to CoS Margin Ratio
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1	<u>Inland</u>									
2	Schedule 1 - Residential	\$48,168	\$2,783	\$50,951	\$54,349	93.7%	\$53,053	96.0%	\$52,647	96.8%
3	Schedule 2 - Small Commercial	11,461	0	11,461	11,107	103.2%	10,671	107.4%	10,467	109.5%
4	Schedule 3 - Large Commercial	6,753	0	6,753	5,201	129.8%	4,929	137.0%	4,919	137.3%
5	Schedule 5/25 - General Firm Industrial &									
6	S/T-Service Captive	4,948	(1,899)	3,049	2,650	115.1%	2,417	126.1%	2,695	113.1%
7	Schedule 7/27 - Int. S. Industrial &									
8	S/T-Service Captive	81	(30)	51	23	221.7%	56	91.1%	60	85.0%
9	Schedule 6/6A - NGV & VRA	373	0	373	956	39.0%	954	39.1%	962	38.8%
10	Schedule 4 - Seasonal	160	(41)	119	119	100.0%	135	88.1%	154	77.3%
11	Schedule 25 - General Firm Industrial &									
12	T-Service Non-Captive	721	0	721	564	127.8%	595	121.2%	666	108.3%
13	Schedule 22A - Firm/Int. L. Industrial									
14	S/T-Service Captive	4,010	(67)	3,943	3,605	109.4%	4,483	88.0%	4,790	82.3%
15	Schedule 22A - Firm/Int. L. Industrial									
16	S/T-Service Non-Captive	1,708	(49)	1,659	886	187.2%	999	166.1%	1,032	160.8%
17	Other	0	0	0	0		0		0	
18		<u>\$78,383</u>	<u>\$697</u>	<u>\$79,080</u>	<u>\$79,460</u>		<u>\$78,292</u>		<u>\$78,392</u>	
19										
20	<u>Columbia</u>									
21	Schedule 1 - Residential	\$5,308	\$305	\$5,613	\$5,297	106.0%	\$5,181	108.3%	\$5,147	109.1%
22	Schedule 2 - Small Commercial	1,489	0	1,489	1,287	115.7%	1,241	120.0%	1,218	122.2%
23	Schedule 3 - Large Commercial	643	0	643	437	147.1%	417	154.2%	418	153.8%
24	Schedule 5/25 - General Firm Industrial &									
25	S/T-Service Captive	389	(150)	239	294	81.3%	170	140.6%	191	125.1%
26	Schedule 6 - NGV	5	0	5	15	33.3%	15	33.3%	15	33.3%
27	Schedule 4 - Seasonal	0	0	0	0		0		0	
28	Schedule 22B - Firm/Int. L. Industrial									
29	S/T-Service Captive	1,495	(36)	1,459	1,295	112.7%	1,183	123.3%	1,229	118.7%
30	Schedule 22 - Firm/Int. L. Industrial									
31	T-Service Non-Captive	68	(6)	62	100	62.0%	92	67.4%	95	65.3%
32	Other	167	0	167	120	139.2%	120	139.2%	120	139.2%
33		<u>\$9,564</u>	<u>\$113</u>	<u>\$9,677</u>	<u>\$8,845</u>		<u>\$8,419</u>		<u>\$8,433</u>	

BC GAS UTILITY LTD.

FULLY DISTRIBUTED COST OF SERVICE STUDY (FDC)
FOR THE YEAR ENDED DECEMBER 31, 1996
INDEX

	<u>Tab</u>	<u>Section</u>	<u>Page</u>
FDC- Consolidated	2A		
Coincident Peak		1	1.0-1.1
Non-Coincident Peak		2	1.0-1.1
Average and Excess		3	1.0-1.1
FDC- Lower Mainland	2B		
Coincident Peak		1	1.0-1.1
Non-Coincident Peak		2	1.0-1.1
Average and Excess		3	1.0-1.1
FDC- Inland	2C		
Coincident Peak		1	1.0-1.1
Non-Coincident Peak		2	1.0-1.1
Average and Excess		3	1.0-1.1
FDC- Columbia	2D		
Coincident Peak		1	1.0-1.1
Non-Coincident Peak		2	1.0-1.1
Average and Excess		3	1.0-1.1
Rate Base - Function	2E	1	
Summary Page			1.0
Gas Plant in Service			2.0-2.12
Contribution in Aid of Construction			3.0
Construction Advances, Gas Plant Under Construction not Attracting AFUDC and Deferred Income Tax			4.0
Deferred Charges			5.0
Cash Working Capital and Other Working Capital			6.0
Rate Base - Classify		2	
Summary			1.0
Gas Supply			2.0
Transmission			4.0
Distribution - Lower Mainland			5.0-5.10
Distribution - Inland			6.0-6.10
Distribution - Columbia			7.0-7.10
Marketing and Customer Accounting			8.0

	<u>Tab</u>	<u>Section</u>	<u>Page</u>
Cost of Service - Function	2E	3	
Summary			1.0
O & M Expenses			2.0-2.2
Property Taxes			3.0
Depreciation and Amortization			4.0-4.4
Other Revenue			5.0
Income Taxes			6.0-6.1
Cost of Service - Classify		4	
Summary			1.0-1.01
Gas Supply - Gas Purchases/LNG			2.10
Gas Supply - Administration			3.10
Transmission			4.10
Distribution - Lower Mainland			5.10
Distribution - Inland			6.10
Distribution - Columbia			7.10
Marketing			8.10
Customer Accounting			9.10
Direct Assignment - Lower Mainland		5	
Rate Base			1.0
Cost of Service			2.0-2.2
Direct Assignment - Inland		6	
Rate Base			1.0
Cost of Service			2.0-2.2
Direct Assignment - Columbia		7	
Rate Base			1.0
Cost of Service			2.0-2.2
Allocation Factors - Lower Mainland		8	
Demand			1
Commodity and Customer			2
Allocation Factors - Inland		9	
Demand			1
Commodity and Customer			2
Allocation Factors - Columbia		10	
Demand			1
Commodity and Customer			2

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

COINCIDENT PEAK

Consolidated
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total	Total Large Industrial	Subtotal	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1	Revenue	\$774,131	\$59,739	\$714,392	\$430,422	\$115,450	\$128,218	\$20,031	\$14,810	\$4,311	\$1,150
2	Add: Approved Rate Changes -- COG / COS	(81,361)	(9,913)	(71,448)	(39,400)	(12,254)	(15,838)	(1,556)	(1,843)	(370)	(187)
3	Less: Cost of Gas	346,250	19,640	326,610	188,784	57,326	65,994	7,027	5,841	1,143	495
4											
5	Gross Margin	\$346,520	\$30,186	\$316,334	\$202,238	\$45,870	\$46,386	\$11,448	\$7,126	\$2,798	\$468
6		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
7											
8	Operation & Maintenance	\$109,761	\$4,330	\$105,431	\$73,152	\$15,585	\$12,778	\$2,072	\$368	\$1,395	\$82
9	Vehicle / FIS Lease	2,309	86	2,223	1,578	326	259	43	3	13	2
10	Core Market Costs	0	0	0	0	0	0	0	0	0	0
11	Property Tax	27,364	1,750	25,614	16,240	4,221	4,124	741	152	110	25
12	Depreciation & Amortization	49,558	2,140	47,418	33,250	6,742	5,374	820	53	1,142	36
13	Other Operating Revenue	(7,158)	(1)	(7,157)	(4,975)	(954)	(943)	(59)	(0)	(224)	(3)
14	Income Tax	26,458	1,027	25,430	18,415	3,434	2,917	170	33	448	13
15	Earned Return	138,225	5,789	132,436	94,446	18,930	15,145	2,363	206	1,243	103
16											
17	Cost of Service Margin	346,517	15,122	331,396	232,106	48,284	39,654	6,151	814	4,128	258
18	Cost of Gas	346,250	19,640	326,610	188,784	57,326	65,994	7,027	5,841	1,143	495
19											
20	Total Cost of Service	\$692,767	\$34,762	\$658,006	\$420,890	\$105,610	\$105,648	\$13,178	\$6,655	\$5,271	\$753
21		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
22											
23	Gross Margin / CoS Margin Ratio L5 / L17	100.0%	199.6%	95.5%	87.1%	95.0%	117.0%	186.1%	875.4%	67.8%	181.1%
24											
25	Revenue to Cost Ratio (L1 + L2) / L20				92.9%	97.7%	106.4%				
26											
27	Sales / T-Service Volumes (TJ)	232,442.7	93,130.3	139,312.4	74,174.2	21,368.6	27,833.0	8,487.2	6,171.3	855.3	422.8
28	Average # of Customers	704,317	58	704,259	631,315	66,189	6,107	250	98	234	66
29											
30	Cost of Service Margin unit Costs										
31	Demand \$ / GJ				\$1.255	\$1.343	\$1.137	\$0.606	(\$0.000)	\$2.296	\$0.239
32	Commodity \$ / GJ				\$0.078	\$0.074	\$0.067	\$0.037	\$0.033	\$0.067	\$0.041
33	Customer \$ / GJ				\$1.796	\$0.842	\$0.221	\$0.082	\$0.099	\$2.463	\$0.331
34	Customer \$ / Cust. / Mo.				\$17.59	\$22.66	\$84.05	\$232.18	\$520.45	\$750.18	\$176.59
35											
36	Rate Base	\$1,467,697	\$61,469	\$1,406,228	\$1,002,839	\$200,999	\$160,811	\$25,093	\$2,189	\$13,203	\$1,094
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38											
39	Margin (Surplus) / Deficiency L17 -- L5	(\$3)	(\$15,064)	\$15,062	\$29,868	\$2,414	(\$6,732)	(\$5,297)	(\$6,312)	\$1,330	(\$210)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Consolidated
Allocated Costs
including
Direct Assignment
Page 1.0.1

COINCIDENT PEAK

Line No.	Description	Subtotal	Firm / S. Indust. T-Service Non-Captive Sched 25	Firm / Interruptible L. Indust. T-Service Captive Sched 22	Firm / Interruptible L. Indust. T-Service Non-Captive Sched 22	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22B	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	Revenue	\$59,739	\$719	\$9,997	\$1,468	\$3,783	\$1,694	\$1,505	\$40,573
2	Add: Approved Rate Changes – COG / COS	(9,913)	4	535	(3)	255	31	31	(10,766)
3	Less: Cost of Gas	19,640	2	8	2	28	17	41	19,542
4									
5	Gross Margin	\$30,186	\$721	\$10,524	\$1,463	\$4,010	\$1,708	\$1,495	\$10,265
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	\$4,330	\$231	\$314	\$62	\$958	\$351	\$353	\$2,060
9	Vehicle / FIS Lease	86	4	2	0	24	2	8	46
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	1,750	69	109	19	363	41	124	1,025
12	Depreciation & Amortization	2,140	61	10	21	557	125	200	1,166
13	Other Operating Revenue	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
14	Income Tax	1,027	37	8	16	105	101	45	714
15	Earned Return	5,789	161	133	48	1,598	265	565	3,019
16									
17	Cost of Service Margin	15,122	564	576	166	3,605	886	1,295	8,030
18	Cost of Gas	19,640	2	8	2	28	17	41	19,542
19									
20	Total Cost of Service	\$34,762	\$566	\$584	\$168	\$3,633	\$903	\$1,336	\$27,572
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	199.6%	127.8%	1827.8%	879.3%	111.2%	192.8%	115.5%	127.8%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20								
26									
27	Sales / T-Service Volumes (TJ)	93,130.3	1,393.1	11,824.2	2,382.9	9,761.4	14,543.4	4,353.9	48,871.4
28	Average # of Customers	58	8	20	2	11	8	6	3
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$0.316	\$0.011	\$0.022	\$0.319	\$0.018	\$0.241	
32	Commodity \$ / GJ		\$0.023	\$0.017	\$0.024	\$0.022	\$0.019	\$0.022	
33	Customer \$ / GJ		\$0.066	\$0.021	\$0.024	\$0.028	\$0.023	\$0.035	
34	Customer \$ / Cust. / Mo.		\$964.32	\$1,016.53	\$2,430.52	\$2,079.27	\$3,559.07	\$2,095.07	
35									
36	Rate Base	\$61,469	\$1,710	\$1,411	\$508	\$16,966	\$2,817	\$6,002	\$32,056
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	(\$15,064)	(\$157)	(\$9,948)	(\$1,297)	(\$405)	(\$822)	(\$200)	(\$2,235)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

NON-COINCIDENT PEAK

Consolidated
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total	Total Large Industrial	Subtotal	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S /T-Service Captive Sched 5/25	Interruptible S. Indust. S /T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1	Revenue	\$774,131	\$59,739	\$714,392	\$430,422	\$115,450	\$128,218	\$20,031	\$14,810	\$4,311	\$1,150
2	Add: Approved Rate Changes – COG / COS	(81,361)	(9,913)	(71,448)	(39,400)	(12,254)	(15,838)	(1,556)	(1,843)	(370)	(187)
3	Less: Cost of Gas	346,250	19,640	326,610	188,784	57,326	65,994	7,027	5,841	1,143	495
4											
5	Gross Margin	\$346,520	\$30,186	\$316,334	\$202,238	\$45,870	\$46,386	\$11,448	\$7,126	\$2,798	\$468
6											
7											
8	Operation & Maintenance	\$109,761	\$7,543	\$102,218	\$70,729	\$14,847	\$11,910	\$1,935	\$1,318	\$1,386	\$94
9	Vehicle / FIS Lease	2,309	177	2,132	1,511	305	235	39	26	13	2
10	Core Market Costs	0	0	0	0	0	0	0	0	0	0
11	Property Tax	27,364	2,913	24,451	15,404	3,964	3,832	687	428	107	29
12	Depreciation & Amortization	49,558	3,975	45,583	31,912	6,332	4,904	745	511	1,137	42
13	Other Operating Revenue	(7,158)	(1)	(7,156)	(4,973)	(953)	(943)	(59)	(0)	(224)	(5)
14	Income Tax	26,458	2,113	24,344	17,616	3,190	2,635	127	315	445	16
15	Earned Return	138,225	11,141	127,084	90,532	17,731	13,768	2,147	1,561	1,229	118
16											
17	Cost of Service Margin	346,517	27,861	318,656	222,731	45,416	36,342	5,620	4,158	4,092	296
18	Cost of Gas	346,250	19,640	326,610	188,784	57,326	65,994	7,027	5,841	1,143	495
19											
20	Total Cost of Service	\$692,767	\$47,501	\$645,266	\$411,515	\$102,742	\$102,336	\$12,647	\$9,999	\$5,235	\$791
21											
22											
23	Gross Margin / CoS Margin Ratio L5 / L17	100.0%	108.3%	99.3%	90.8%	101.0%	127.6%	203.7%	171.4%	68.4%	158.2%
24											
25	Revenue to Cost Ratio (L1 + L2) / L20				95.0%	100.4%	109.8%				
26											
27	Sales / T-Service Volumes (TJ)	232,442.7	93,130.3	139,312.4	74,174.2	21,368.6	27,833.0	8,487.2	6,171.3	855.3	422.8
28	Average # of Customers	704,317	58	704,259	631,315	66,189	6,107	250	98	234	66
29											
30	Cost of Service Margin unit Costs										
31	Demand \$ / GJ				\$1.129	\$1.209	\$1.018	\$0.543	\$0.542	\$2.254	\$0.328
32	Commodity \$ / GJ				\$0.078	\$0.074	\$0.067	\$0.037	\$0.033	\$0.067	\$0.041
33	Customer \$ / GJ				\$1.796	\$0.842	\$0.221	\$0.082	\$0.099	\$2.463	\$0.331
34	Customer \$ / Cust. / Mo.				\$17.59	\$22.66	\$84.05	\$232.18	\$520.45	\$750.18	\$176.59
35											
36	Rate Base	\$1,467,698	\$118,301	\$1,349,398	\$961,282	\$188,272	\$146,188	\$22,793	\$16,570	\$13,045	\$1,249
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38											
39	Margin (Surplus) / Deficiency L17 – L5	(\$3)	(\$2,325)	\$2,322	\$20,493	(\$454)	(\$10,044)	(\$5,828)	(\$2,968)	\$1,294	(\$172)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Consolidated
Allocated Costs
including
Direct Assignment
Page 1.0.1

NON-COINCIDENT PEAK

Line No.	Description	Subtotal	Firm / S. Indust. T-Service Non-Captive Sched 25	Firm / Interruptible L. Indust. T-Service Captive Sched 22	Firm / Interruptible L. Indust. T-Service Non-Captive Sched 22	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22B	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Revenue	\$59,739	\$719	\$9,997	\$1,468	\$3,783	\$1,694	\$1,505	\$40,573
2	Add: Approved Rate Changes – COG / COS	(9,913)	4	535	(3)	255	31	31	(10,766)
3	Less: Cost of Gas	19,640	2	8	2	28	17	41	19,542
4									
5	Gross Margin	\$30,186	\$721	\$10,524	\$1,463	\$4,010	\$1,708	\$1,495	\$10,265
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	\$7,543	\$244	\$1,962	\$362	\$1,148	\$373	\$329	\$3,124
9	Vehicle / FIS Lease	177	4	42	8	31	3	7	83
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	2,913	74	586	106	453	52	112	1,531
12	Depreciation & Amortization	3,975	65	805	165	689	144	183	1,924
13	Other Operating Revenue	(1)	(0)	(0)	(0)	(0)	(0)	(0)	(1)
14	Income Tax	2,113	39	499	105	178	114	35	1,143
15	Earned Return	11,141	170	2,487	476	1,984	313	516	5,195
16									
17	Cost of Service Margin	27,861	595	6,381	1,222	4,483	999	1,183	12,999
18	Cost of Gas	19,640	2	8	2	28	17	41	19,542
19									
20	Total Cost of Service	\$47,501	\$597	\$6,389	\$1,224	\$4,511	\$1,016	\$1,224	\$32,541
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	108.3%	121.1%	164.9%	119.7%	89.4%	171.1%	126.4%	79.0%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20								
26									
27	Sales / T-Service Volumes (TJ)	93,130.3	1,393.1	11,824.2	2,382.9	9,761.4	14,543.4	4,353.9	48,871.4
28	Average # of Customers	58	8	20	2	11	8	6	3
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$0.338	\$0.502	\$0.465	\$0.409	\$0.026	\$0.215	
32	Commodity \$ / GJ		\$0.023	\$0.017	\$0.024	\$0.022	\$0.019	\$0.022	
33	Customer \$ / GJ		\$0.066	\$0.021	\$0.024	\$0.028	\$0.023	\$0.035	
34	Customer \$ / Cust. / Mo.		\$964.32	\$1,016.53	\$2,430.52	\$2,079.27	\$3,559.07	\$2,095.07	
35									
36	Rate Base	\$118,301	\$1,810	\$26,407	\$5,050	\$21,069	\$3,320	\$5,481	\$55,163
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	(\$2,325)	(\$126)	(\$4,143)	(\$241)	\$473	(\$709)	(\$312)	\$2,734

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

AVERAGE & EXCESS

Consolidated
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total	Total Large Industrial	Subtotal	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Revenue	\$774,131	\$59,739	\$714,392	\$430,422	\$115,450	\$128,218	\$20,031	\$14,810	\$4,311	\$1,150
2	Add: Approved Rate Changes - COG / COS	(81,361)	(9,913)	(71,448)	(39,400)	(12,254)	(15,838)	(1,556)	(1,843)	(370)	(187)
3	Less: Cost of Gas	346,250	19,640	326,610	188,784	57,326	65,994	7,027	5,841	1,143	495
4											
5	Gross Margin	\$346,520	\$30,186	\$316,334	\$202,238	\$45,870	\$46,386	\$11,448	\$7,126	\$2,798	\$468
6		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
7											
8	Operation & Maintenance	\$109,761	\$8,071	\$101,690	\$70,143	\$14,577	\$11,872	\$2,132	\$1,443	\$1,414	\$109
9	Vehicle / FIS Lease	2,309	192	2,117	1,497	299	234	43	29	14	2
10	Core Market Costs	0	0	0	0	0	0	0	0	0	0
11	Property Tax	27,364	3,095	24,270	15,218	3,881	3,814	749	461	114	33
12	Depreciation & Amortization	49,558	4,266	45,292	31,619	6,203	4,881	825	566	1,150	48
13	Other Operating Revenue	(7,158)	(2)	(7,156)	(4,954)	(934)	(960)	(73)	(0)	(228)	(7)
14	Income Tax	26,458	2,282	24,176	17,445	3,113	2,620	175	350	454	20
15	Earned Return	138,225	11,966	126,259	89,705	17,366	13,688	2,372	1,727	1,266	135
16											
17	Cost of Service Margin	346,518	29,870	316,647	220,673	44,504	36,149	6,222	4,575	4,184	340
18	Cost of Gas	346,250	19,640	326,610	188,784	57,326	65,994	7,027	5,841	1,143	495
19											
20	Total Cost of Service	\$692,768	\$49,510	\$643,257	\$409,457	\$101,830	\$102,143	\$13,249	\$10,416	\$5,327	\$835
21		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
22											
23	Gross Margin / CoS Margin Ratio L5 / L17	100.0%	101.1%	99.9%	91.6%	103.1%	128.3%	184.0%	155.8%	66.9%	137.5%
24											
25	Revenue to Cost Ratio (L1 + L2) / L20				95.5%	101.3%	110.0%				
26											
27	Sales / T-Service Volumes (TJ)	232,442.7	93,130.3	139,312.4	74,174.2	21,368.6	27,833.0	8,487.2	6,171.3	855.3	422.8
28	Average # of Customers	704,317	58	704,259	631,315	66,189	6,107	250	98	234	66
29											
30	Cost of Service Margin unit Costs										
31	Demand \$ / GJ				\$1.101	\$1.166	\$1.011	\$0.614	\$0.609	\$2.361	\$0.433
32	Commodity \$ / GJ				\$0.078	\$0.074	\$0.067	\$0.037	\$0.033	\$0.067	\$0.041
33	Customer \$ / GJ				\$1.796	\$0.842	\$0.221	\$0.082	\$0.099	\$2.463	\$0.331
34	Customer \$ / Cust. / Mo.				\$17.59	\$22.66	\$84.05	\$232.16	\$520.45	\$750.17	\$176.57
35											
36	Rate Base	\$1,467,698	\$127,061	\$1,340,637	\$952,505	\$184,399	\$145,342	\$25,185	\$18,334	\$13,440	\$1,432
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38											
39	Margin (Surplus) / Deficiency L17 - L5	(\$2)	(\$316)	\$313	\$18,435	(\$1,366)	(\$10,237)	(\$5,226)	(\$2,551)	\$1,386	(\$128)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Consolidated
Allocated Costs
including
Direct Assignment
Page 1.0.1

AVERAGE & EXCESS

Line No.	Description	Subtotal	Firm / S. Indust. T-Service Non-Captive Sched 25	Firm / Interruptible L. Indust. T-Service Captive Sched 22	Firm / Interruptible L. Indust. T-Service Non-Captive Sched 22	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22B	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	Revenue	\$59,739	\$719	\$9,997	\$1,468	\$3,783	\$1,694	\$1,505	\$40,573
2	Add: Approved Rate Changes – COG / COS	(9,913)	4	535	(3)	255	31	31	(10,766)
3	Less: Cost of Gas	19,640	2	8	2	28	17	41	19,542
4		-----	-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$30,186	\$721	\$10,524	\$1,463	\$4,010	\$1,708	\$1,495	\$10,265
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	\$8,071	\$270	\$2,225	\$412	\$1,213	\$379	\$339	\$3,232
9	Vehicle / FIS Lease	192	4	48	9	33	3	8	87
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	3,095	83	655	119	484	54	117	1,583
12	Depreciation & Amortization	4,266	72	922	187	740	154	190	2,001
13	Other Operating Revenue	(2)	(0)	(0)	(0)	(0)	(0)	(0)	(1)
14	Income Tax	2,282	44	573	119	203	117	39	1,187
15	Earned Return	11,966	192	2,838	542	2,117	325	536	5,417
16		-----	-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	29,870	666	7,261	1,388	4,790	1,032	1,229	13,505
18	Cost of Gas	19,640	2	8	2	28	17	41	19,542
19		-----	-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$49,510	\$668	\$7,269	\$1,390	\$4,818	\$1,049	\$1,270	\$33,047
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	101.1%	108.3%	144.9%	105.4%	83.7%	165.5%	121.7%	76.0%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20								
26									
27	Sales / T-Service Volumes (TJ)	93,130.3	1,393.1	11,824.2	2,382.9	9,761.4	14,543.4	4,353.9	48,871.4
28	Average # of Customers	58	8	20	2	11	8	6	3
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$0.389	\$0.576	\$0.534	\$0.440	\$0.028	\$0.226	
32	Commodity \$ / GJ		\$0.023	\$0.017	\$0.024	\$0.022	\$0.019	\$0.022	
33	Customer \$ / GJ		\$0.066	\$0.021	\$0.024	\$0.029	\$0.024	\$0.035	
34	Customer \$ / Cust. / Mo.		\$964.18	\$1,016.53	\$2,430.52	\$2,118.66	\$3,602.70	\$2,095.07	
35									
36	Rate Base	\$127,061	\$2,036	\$30,131	\$5,755	\$22,479	\$3,451	\$5,695	\$57,515
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	(\$316)	(\$55)	(\$3,263)	(\$75)	\$780	(\$676)	(\$266)	\$3,240

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

COINCIDENT PEAK

Lower Mainland
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Lower Mainland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)		(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1	Revenue	\$594,310	\$320,031	\$83,255	\$108,154	\$11,980	\$14,589	\$3,802	\$701
2	Add: Approved Rate Changes – COG / COS	(66,133)	(29,995)	(9,003)	(13,501)	(1,149)	(1,808)	(336)	(110)
3	Less: Cost of Gas	269,604	141,274	41,332	55,663	4,720	5,736	1,046	283
4		-----	-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$258,573	\$148,762	\$32,920	\$38,990	\$6,111	\$7,045	\$2,420	\$308
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	80,075	53,382	11,149	10,681	1,002	356	1,088	42
9	FIS/Vehicle Lease	1,662	1,132	234	217	20	3	7	1
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	19,221	11,283	2,863	3,358	334	149	90	14
12	Depreciation & Amortization	36,156	24,198	4,948	4,576	409	50	817	18
13	Other Operating Revenue	(4,648)	(3,164)	(551)	(697)	(37)	(0)	(198)	(2)
14	Income Tax	23,684	16,126	3,164	2,896	257	36	453	12
15	Earned Return	102,062	69,503	14,083	12,985	1,221	197	900	55
16		-----	-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	258,212	172,460	35,889	34,016	3,207	791	3,158	139
18	Cost of Gas	269,604	141,274	41,332	55,663	4,720	5,736	1,046	283
19		-----	-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$527,816	\$313,734	\$77,221	\$89,679	\$7,927	\$6,527	\$4,204	\$422
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	100.1%	86.3%	91.7%	114.6%	190.6%	890.9%	76.6%	221.0%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20		92.4%	96.2%	105.5%				
26									
27	Sales / T-Service Volumes (TJ)	167,208.3	54,524.2	15,123.1	23,264.9	4,325.6	6,103.9	777.7	242.2
28	Average # of Customers	495,983	443,083	47,286	5,073	174	96	197	51
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$1.330	\$1.428	\$1.175	\$0.595	\$0.000	\$1.660	\$0.265
32	Commodity \$ / GJ		\$0.078	\$0.075	\$0.067	\$0.036	\$0.033	\$0.066	\$0.039
33	Customer \$ / GJ		\$1.755	\$0.870	\$0.220	\$0.110	\$0.097	\$2.334	\$0.271
34	Customer \$ / Cust. / Mo.		\$18.00	\$23.20	\$84.09	\$227.26	\$512.73	\$767.99	\$107.33
35									
36	Rate Base	\$1,083,707	\$737,989	\$149,533	\$137,874	\$12,961	\$2,096	\$9,552	\$580
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	(\$361)	\$23,698	\$2,969	(\$4,974)	(\$2,904)	(\$6,254)	\$738	(\$169)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

COINCIDENT PEAK

Lower Mainland
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm / Interruptible L. Indust. T-Service Captive Sched 22	Firm / Interruptible L. Indust. T-Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	
1	Revenue	\$51,798	\$9,997	\$1,395	\$40,406
2	Add: Approved Rate Changes - COG / COS	(10,231)	535		(10,766)
3	Less: Cost of Gas	19,550	8	0	19,542
4		-----	-----	-----	-----
5	Gross Margin	\$22,017	\$10,524	\$1,395	\$10,098
6		=====	=====	=====	=====
7					
8	Operation & Maintenance	2,374	314	35	2,025
9	Vehicle / FIS Lease	48	2	0	46
10	Core Market Costs	0	0	0	0
11	Property Tax	1,131	109	13	1,009
12	Depreciation & Amortization	1,140	10	6	1,123
13	Other Operating Revenue	(0)	(0)	(0)	(0)
14	Income Tax	741	8	6	726
15	Earned Return	3,119	133	5	2,981
16		-----	-----	-----	-----
17	Cost of Service Margin	8,552	576	66	7,910
18	Cost of Gas	19,550	8	0	19,542
19		-----	-----	-----	-----
20	Total Cost of Service	\$28,102	\$584	\$66	\$27,452
21		=====	=====	=====	=====
22					
23	Gross Margin / CoS Margin Ratio L5 / L17	257.5%	1827.8%	2105.7%	127.7%
24					
25	Revenue to Cost Ratio (L1 + L2) / L20				
26					
27	Sales / T-Service Volumes (TJ)	62,846.7	11,824.2	2,151.1	48,871.4
28	Average # of Customers	23	20	1	2
29					
30	Cost of Service Margin unit Costs				
31	Demand \$ / GJ		\$0.011	\$0.000	\$0.126
32	Commodity \$ / GJ		\$0.017	\$0.024	\$0.026
33	Customer \$ / GJ		\$0.021	\$0.007	\$0.010
34	Customer \$ / Cust. / Mo.		\$1,016.53	\$1,210.53	\$19,898.64
35					
36	Rate Base	\$33,122	\$1,411	\$58	\$31,653
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%
38					
39	Margin (Surplus) / Deficiency L17 - L5	(\$13,465)	(\$9,948)	(\$1,329)	(\$2,188)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

NON-COINCIDENT PEAK

Lower Mainland
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Lower Mainland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	Revenue	\$594,310	\$320,031	\$83,255	\$108,154	\$11,980	\$14,589	\$3,802	\$701
2	Add: Approved Rate Changes – COG / COS	(66,133)	(29,995)	(9,003)	(13,501)	(1,149)	(1,808)	(336)	(110)
3	Less: Cost of Gas	269,604	141,274	41,332	55,663	4,720	5,736	1,046	283
4		-----	-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$258,573	\$148,762	\$32,920	\$38,990	\$6,111	\$7,045	\$2,420	\$308
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	80,416	51,258	10,513	9,876	958	1,296	1,079	48
9	Vehicle / FIS Lease	1,674	1,075	217	196	19	26	7	1
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	19,384	10,591	2,655	3,095	319	421	87	15
12	Depreciation & Amortization	36,399	23,076	4,612	4,151	384	503	813	22
13	Other Operating Revenue	(4,648)	(3,163)	(551)	(697)	(37)	(0)	(198)	(2)
14	Income Tax	23,821	15,450	2,961	2,639	242	315	450	14
15	Earned Return	102,761	66,210	13,097	11,736	1,148	1,540	885	64
16		-----	-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	259,807	164,497	33,504	30,996	3,033	4,102	3,123	161
18	Cost of Gas	269,604	141,274	41,332	55,663	4,720	5,736	1,046	283
19		-----	-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$529,411	\$305,771	\$74,836	\$86,659	\$7,753	\$9,838	\$4,169	\$444
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	99.5%	90.4%	98.3%	125.8%	201.5%	171.7%	77.5%	191.5%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20		94.9%	99.2%	109.2%				
26									
27	Sales / T-Service Volumes (TJ)	167,208.3	54,524.2	15,123.1	23,264.9	4,325.6	6,103.9	777.7	242.2
28	Average # of Customers	495,983	443,083	47,286	5,073	174	96	197	51
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$1.184	\$1.270	\$1.045	\$0.555	\$0.543	\$1.616	\$0.354
32	Commodity \$ / GJ		\$0.078	\$0.075	\$0.067	\$0.036	\$0.033	\$0.066	\$0.039
33	Customer \$ / GJ		\$1.755	\$0.870	\$0.220	\$0.110	\$0.097	\$2.334	\$0.271
34	Customer \$ / Cust. / Mo.		\$17.997	\$23.198	\$84.089	\$227.262	\$512.729	\$767.986	\$107.331
35									
36	Rate Base	\$1,091,125	\$703,023	\$139,062	\$124,615	\$12,189	\$16,354	\$9,402	\$675
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	\$1,234	\$15,735	\$584	(\$7,994)	(\$3,078)	(\$2,943)	\$703	(\$147)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

NON-COINCIDENT PEAK

Lower Mainland
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm / Interruptible L. Indust. T-Service Captive Sched 22	Firm / Interruptible L. Indust. T-Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	
1	Revenue	\$51,798	\$9,997	\$1,395	\$40,406
2	Add: Approved Rate Changes – COG / COS	(10,231)	535	0	(10,766)
3	Less: Cost of Gas	19,550	8	0	19,542
4		-----	-----	-----	-----
5	Gross Margin	\$22,017	\$10,524	\$1,395	\$10,098
6		=====	=====	=====	=====
7					
8	Operation & Maintenance	5,388	1,962	337	3,089
9	Vehicle / FIS Lease	133	42	7	83
10	Core Market Costs	0	0	0	0
11	Property Tax	2,201	586	101	1,514
12	Depreciation & Amortization	2,838	805	152	1,881
13	Other Operating Revenue	(1)	(0)	(0)	(1)
14	Income Tax	1,750	499	96	1,155
15	Earned Return	8,081	2,487	437	5,157
16		-----	-----	-----	-----
17	Cost of Service Margin	20,390	6,381	1,130	12,879
18	Cost of Gas	19,550	8	0	19,542
19		-----	-----	-----	-----
20	Total Cost of Service	\$39,940	\$6,389	\$1,130	\$32,421
21		=====	=====	=====	=====
22					
23	Gross Margin / CoS Margin Ratio L5 / L17	108.0%	164.9%	123.5%	78.4%
24					
25	Revenue to Cost Ratio (L1 + L2) / L20				
26					
27	Sales / T-Service Volumes (TJ)	62846.7	11,824.2	2,151.1	48,871.4
28	Average # of Customers		20	1	2
29					
30	Cost of Service Margin unit Costs				
31	Demand \$ / GJ		\$0.502	\$0.495	\$0.227
32	Commodity \$ / GJ		\$0.017	\$0.024	\$0.026
33	Customer \$ / GJ		\$0.021	\$0.007	\$0.010
34	Customer \$ / Cust. / Mo.		\$1,016.531	\$1,210.531	\$19,898.642
35					
36	Rate Base	\$85,805	\$26,407	\$4,638	\$54,761
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%
38					
39	Margin (Surplus) / Deficiency L17 – L5	(\$1,627)	(\$4,143)	(\$265)	\$2,781

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

AVERAGE & EXCESS

Lower Mainland
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Lower Mainland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	Revenue	\$594,310	\$320,031	\$83,255	\$108,154	\$11,980	\$14,589	\$3,802	\$701
2	Add: Approved Rate Changes – COG / COS	(66,133)	(29,995)	(9,003)	(13,501)	(1,149)	(1,808)	(336)	(110)
3	Less: Cost of Gas	269,604	141,274	41,332	55,663	4,720	5,736	1,046	283
4		-----	-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$258,573	\$148,762	\$32,920	\$38,990	\$6,111	\$7,045	\$2,420	\$308
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	80,392	50,802	10,314	9,835	1,051	1,420	1,105	56
9	Vehicle / FIS Lease	1,673	1,064	212	195	21	29	7	1
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	19,372	10,456	2,599	3,077	342	453	93	17
12	Depreciation & Amortization	36,382	22,849	4,514	4,129	427	558	825	26
13	Other Operating Revenue	(4,648)	(3,148)	(538)	(710)	(46)	(0)	(201)	(4)
14	Income Tax	23,812	15,311	2,902	2,625	269	350	458	16
15	Earned Return	102,711	65,545	12,815	11,662	1,271	1,705	920	74
16		-----	-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	259,694	162,878	32,819	30,813	3,336	4,515	3,207	187
18	Cost of Gas	269,604	141,274	41,332	55,663	4,720	5,736	1,046	283
19		-----	-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$529,298	\$304,152	\$74,151	\$86,476	\$8,056	\$10,251	\$4,253	\$470
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	99.6%	91.3%	100.3%	126.5%	183.2%	156.1%	75.5%	164.9%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20		95.4%	100.1%	109.5%				
26									
27	Sales / T-Service Volumes (TJ)	167,208.3	54,524.2	15,123.1	23,264.9	4,325.6	6,103.9	777.7	242.2
28	Average # of Customers	495,983	443,083	47,286	5,073	174	96	197	51
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$1.154	\$1.225	\$1.037	\$0.625	\$0.610	\$1.723	\$0.462
32	Commodity \$ / GJ		\$0.078	\$0.075	\$0.067	\$0.036	\$0.033	\$0.066	\$0.039
33	Customer \$ / GJ		\$1.755	\$0.870	\$0.220	\$0.110	\$0.097	\$2.334	\$0.271
34	Customer \$ / Cust. / Mo.		\$17.997	\$23.198	\$84.089	\$227.262	\$512.729	\$767.986	\$107.331
35									
36	Rate Base	\$1,090,592	\$695,968	\$136,072	\$123,826	\$13,498	\$18,103	\$9,768	\$788
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	\$1,121	\$14,116	(\$101)	(\$8,177)	(\$2,775)	(\$2,530)	\$787	(\$121)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

AVERAGE & EXCESS

Lower Mainland
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm / Interruptible L. Indust. T-Service Captive Sched 22	Firm / Interruptible L. Indust. T-Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	
1	Revenue	\$51,798	\$9,997	\$1,395	\$40,406
2	Add: Approved Rate Changes - COG / COS	(10,231)	535	0	(10,766)
3	Less: Cost of Gas	19,550	8	0	19,542
4					
5	Gross Margin	\$22,017	\$10,524	\$1,395	\$10,098
6		=====	=====	=====	=====
7					
8	Operation & Maintenance	5,809	2,225	385	3,198
9	Vehicle / FIS Lease	144	48	9	87
10	Core Market Costs	0	0	0	0
11	Property Tax	2,334	655	114	1,566
12	Depreciation & Amortization	3,054	922	174	1,958
13	Other Operating Revenue	(1)	(0)	(0)	(1)
14	Income Tax	1,881	573	110	1,199
15	Earned Return	8,718	2,838	502	5,379
16					
17	Cost of Service Margin	21,939	7,261	1,293	13,385
18	Cost of Gas	19,550	8	0	19,542
19					
20	Total Cost of Service	\$41,489	\$7,269	\$1,293	\$32,927
21		=====	=====	=====	=====
22					
23	Gross Margin / CoS Margin Ratio L5 / L17	100.4%	144.9%	107.9%	75.4%
24					
25	Revenue to Cost Ratio (L1 + L2) / L20				
26					
27	Sales / T-Service Volumes (TJ)	62846.7	11,824.2	2,151.1	48,871.4
28	Average # of Customers		20	1	2
29					
30	Cost of Service Margin unit Costs				
31	Demand \$ / GJ		\$0.576	\$0.570	\$0.238
32	Commodity \$ / GJ		\$0.017	\$0.024	\$0.026
33	Customer \$ / GJ		\$0.021	\$0.007	\$0.010
34	Customer \$ / Cust. / Mo.		\$1,016.531	\$1,210.531	\$19,898.642
35					
36	Rate Base	\$92,570	\$30,131	\$5,327	\$57,112
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%
38					
39	Margin (Surplus) / Deficiency L17 - L5	(\$78)	(\$3,263)	(\$102)	\$3,287

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

COINCIDENT PEAK

Inland
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Inland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	Revenue	\$161,180	\$99,456	\$28,484	\$18,350	\$7,522	\$221	\$502	\$449
2	Add: Approved Rate Changes – COG / COS	(13,982)	(8,637)	(2,930)	(2,166)	(394)	(35)	(33)	(77)
3	Less: Cost of Gas	68,815	42,651	14,093	9,431	2,180	105	96	212
4		-----	-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$78,383	\$48,168	\$11,461	\$6,753	\$4,948	\$81	\$373	\$160
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	\$26,733	\$17,971	\$3,972	\$1,932	\$965	\$11	\$301	\$40
9	Vehicle / FIS Lease	583	406	82	38	20	0	6	1
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	7,330	4,523	1,220	709	372	3	20	12
12	Depreciation & Amortization	12,053	8,253	1,608	734	372	3	320	18
13	Other Operating Revenue	(2,281)	(1,645)	(360)	(227)	(21)	(0)	(26)	(1)
14	Income Tax	2,507	2,094	240	27	(90)	(3)	(6)	1
15	Earned Return	32,535	22,747	4,345	1,988	1,033	9	340	48
16		-----	-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	79,461	54,349	11,107	5,201	2,650	23	956	119
18	Cost of Gas	68,815	42,651	14,093	9,431	2,180	105	96	212
19		-----	-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$148,276	\$97,000	\$25,200	\$14,632	\$4,830	\$128	\$1,052	\$331
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	98.6%	88.6%	103.2%	129.8%	186.7%	347.6%	39.0%	134.4%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20		93.6%	101.4%	110.6%				
26									
27	Sales / T-Service Volumes (TJ)	57,192.0	17,652.7	5,503.4	4,168.0	3,845.2	67.4	76.8	180.6
28	Average # of Customers	188,944	170,796	17,053	945	70	2	36	15
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$1.057	\$1.150	\$0.949	\$0.599	(\$0.023)	\$8.668	\$0.204
32	Commodity \$ / GJ		\$0.077	\$0.073	\$0.066	\$0.038	\$0.051	\$0.082	\$0.044
33	Customer \$ / GJ		\$1.944	\$0.795	\$0.233	\$0.052	\$0.317	\$3.692	\$0.411
34	Customer \$ / Cust. / Mo.		\$16.74	\$21.38	\$85.69	\$238.55	\$891.19	\$656.38	\$412.08
35									
36	Rate Base	\$345,462	\$241,535	\$46,137	\$21,110	\$10,971	\$93	\$3,610	\$514
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	\$1,078	\$6,181	(\$354)	(\$1,552)	(\$2,298)	(\$58)	\$583	(\$41)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996 COINCIDENT PEAK
(\$000)

Inland
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm S. Indust. T-Service Non-Captive Sched 25	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22A	Other
	(1)	(2)	(3)	(4)	(5)	(6)
1	Revenue	\$6,196	\$719	\$3,783	\$1,694	\$0
2	Add: Approved Rate Changes - COG / COS	290	4	255	31	
3	Less: Cost of Gas	47	2	28	17	0
4		-----	-----	-----	-----	-----
5	Gross Margin	\$6,439	\$721	\$4,010	\$1,708	\$0
6		=====	=====	=====	=====	=====
7						
8	Operation & Maintenance	\$1,541	\$231	\$958	\$351	\$0
9	Vehicle / FIS Lease	29	4	24	2	0
10	Core Market Costs	0	0	0	0	0
11	Property Tax	473	69	363	41	0
12	Depreciation & Amortization	744	61	557	125	0
13	Other Operating Revenue	(0)	(0)	(0)	(0)	0
14	Income Tax	244	37	105	101	0
15	Earned Return	2,024	161	1,598	265	0
16		-----	-----	-----	-----	-----
17	Cost of Service Margin	5,055	564	3,605	886	0
18	Cost of Gas	47	2	28	17	0
19		-----	-----	-----	-----	-----
20	Total Cost of Service	\$5,102	\$566	\$3,633	\$903	\$0
21		=====	=====	=====	=====	=====
22						
23	Gross Margin / CoS Margin Ratio L5 / L17	127.4%	127.8%	111.2%	192.8%	0.0%
24						
25	Revenue to Cost Ratio (L1 + L2) / L20					
26						
27	Sales / T-Service Volumes (TJ)	25,697.9	1,393.1	9,761.4	14,543.4	0.0
28	Average # of Customers	27	8	11	8	0
29						
30	Cost of Service Margin unit Costs					
31	Demand \$ / GJ		\$0.316	\$0.319	\$0.018	
32	Commodity \$ / GJ		\$0.023	\$0.022	\$0.019	
33	Customer \$ / GJ		\$0.066	\$0.028	\$0.023	
34	Customer \$ / Cust. / Mo.		\$964.32	\$2,079.27	\$3,559.07	
35						
36	Rate Base	\$21,493	\$1,710	\$16,966	\$2,817	\$0
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	0.00%
38						
39	Margin (Surplus) / Deficiency L17 - L5	(\$1,384)	(\$157)	(\$405)	(\$822)	\$0

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

NON-COINCIDENT PEAK

Inland
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Inland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	Revenue	\$161,180	\$99,456	\$28,484	\$18,350	\$7,522	\$221	\$502	\$449
2	Add: Approved Rate Changes – COG / COS	(13,982)	(8,637)	(2,930)	(2,166)	(394)	(35)	(33)	(77)
3	Less: Cost of Gas	68,815	42,651	14,093	9,431	2,180	105	96	212
4		-----	-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$78,383	\$48,168	\$11,461	\$6,753	\$4,948	\$81	\$373	\$160
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	\$26,483	\$17,690	\$3,878	\$1,873	\$908	\$22	\$300	\$46
9	Vehicle / FIS Lease	575	397	79	36	18	0	6	1
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	7,211	4,390	1,175	681	346	7	20	14
12	Depreciation & Amortization	11,875	8,056	1,542	693	338	7	320	20
13	Other Operating Revenue	(2,281)	(1,644)	(360)	(227)	(21)	(0)	(26)	(2)
14	Income Tax	2,406	1,983	203	3	(109)	(1)	(6)	2
15	Earned Return	32,023	22,182	4,155	1,869	937	20	339	54
16		-----	-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	78,292	53,053	10,671	4,929	2,417	56	954	135
18	Cost of Gas	68,815	42,651	14,093	9,431	2,180	105	96	212
19		-----	-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$147,107	\$95,704	\$24,764	\$14,360	\$4,597	\$161	\$1,050	\$347
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	100.1%	90.8%	107.4%	137.0%	204.7%	145.1%	39.1%	118.5%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20		94.9%	103.2%	112.7%				
26									
27	Sales / T-Service Volumes (TJ)	57,192.0	17,652.7	5,503.4	4,168.0	3,845.2	67.4	76.8	180.6
28	Average # of Customers	188,944	170,796	17,053	945	70	2	36	15
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$0.984	\$1.071	\$0.884	\$0.539	\$0.460	\$8.645	\$0.292
32	Commodity \$ / GJ		\$0.077	\$0.073	\$0.066	\$0.038	\$0.051	\$0.082	\$0.044
33	Customer \$ / GJ		\$1.944	\$0.795	\$0.233	\$0.052	\$0.317	\$3.692	\$0.411
34	Customer \$ / Cust. / Mo.		\$16.74	\$21.38	\$85.69	\$238.55	\$891.19	\$656.38	\$412.08
35									
36	Rate Base	\$340,026	\$235,527	\$44,114	\$19,849	\$9,944	\$215	\$3,602	\$574
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	(\$91)	\$4,885	(\$790)	(\$1,824)	(\$2,531)	(\$25)	\$581	(\$25)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996 NON-COINCIDENT PEAK
(\$000)

Inland
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm S. Indust. T-Service Non-Captive Sched 25	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22A	Other
	(1)	(2)	(3)	(4)	(5)	(6)
1	Revenue	\$6,196	\$719	\$3,783	\$1,694	\$0
2	Add: Approved Rate Changes - COG / COS	290	4	255	31	0
3	Less: Cost of Gas	47	2	28	17	0
4		-----	-----	-----	-----	-----
5	Gross Margin	\$6,439	\$721	\$4,010	\$1,708	\$0
6		=====	=====	=====	=====	=====
7						
8	Operation & Maintenance	\$1,765	\$244	\$1,148	\$373	\$0
9	Vehicle / FIS Lease	37	4	31	3	0
10	Core Market Costs	0	0	0	0	0
11	Property Tax	578	74	453	52	0
12	Depreciation & Amortization	898	65	689	144	0
13	Other Operating Revenue	(0)	(0)	(0)	(0)	0
14	Income Tax	331	39	178	114	0
15	Earned Return	2,467	170	1,984	313	0
16		-----	-----	-----	-----	-----
17	Cost of Service Margin	6,077	595	4,483	999	0
18	Cost of Gas	47	2	28	17	0
19		-----	-----	-----	-----	-----
20	Total Cost of Service	\$6,124	\$597	\$4,511	\$1,016	\$0
21		=====	=====	=====	=====	=====
22						
23	Gross Margin / CoS Margin Ratio L5 / L17	106.0%	121.1%	89.4%	171.1%	0.0%
24						
25	Revenue to Cost Ratio (L1 + L2) / L20					
26						
27	Sales / T-Service Volumes (TJ)	25,697.9	1,393.1	9,761.4	14,543.4	0.0
28	Average # of Customers	27	8	11	8	0
29						
30	Cost of Service Margin unit Costs					
31	Demand \$ / GJ		\$0.338	\$0.409	\$0.026	
32	Commodity \$ / GJ		\$0.023	\$0.022	\$0.019	
33	Customer \$ / GJ		\$0.066	\$0.028	\$0.023	
34	Customer \$ / Cust. / Mo.		\$964.32	\$2,079.27	\$3,559.07	
35						
36	Rate Base	\$26,200	\$1,810	\$21,069	\$3,320	\$0
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	0.00%
38						
39	Margin (Surplus) / Deficiency L17 - L5	(\$362)	(\$126)	\$473	(\$709)	\$0

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

AVERAGE & EXCESS

Inland
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Inland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T–Service Captive Sched 5/25	Interruptible S. Indust. S / T–Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1	Revenue	\$161,180	\$99,456	\$28,484	\$18,350	\$7,522	\$221	\$502	\$449
2	Add: Approved Rate Changes – COG / COS	(13,982)	(8,637)	(2,930)	(2,166)	(394)	(35)	(33)	(77)
3	Less: Cost of Gas	68,815	42,651	14,093	9,431	2,180	105	96	212
4		-----	-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$78,383	\$48,168	\$11,461	\$6,753	\$4,948	\$81	\$373	\$160
6		=====	=====	=====	=====	=====	=====	=====	=====
7									
8	Operation & Maintenance	\$26,504	\$17,570	\$3,813	\$1,874	\$1,004	\$23	\$303	\$53
9	Vehicle / FIS Lease	575	394	77	36	20	0	6	1
10	Core Market Costs	0	0	0	0	0	0	0	0
11	Property Tax	7,221	4,342	1,150	680	382	7	21	16
12	Depreciation & Amortization	11,889	7,995	1,513	691	373	8	321	23
13	Other Operating Revenue	(2,281)	(1,640)	(354)	(230)	(26)	(0)	(26)	(3)
14	Income Tax	2,415	1,953	187	2	(90)	(0)	(5)	3
15	Earned Return	32,067	22,033	4,080	1,864	1,031	22	342	61
16		-----	-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	78,391	52,647	10,467	4,919	2,695	60	962	154
18	Cost of Gas	68,815	42,651	14,093	9,431	2,180	105	96	212
19		-----	-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$147,206	\$95,298	\$24,560	\$14,350	\$4,875	\$165	\$1,058	\$366
21		=====	=====	=====	=====	=====	=====	=====	=====
22									
23	Gross Margin / CoS Margin Ratio L5 / L17	100.0%	91.5%	109.5%	137.3%	183.6%	134.1%	38.8%	104.1%
24									
25	Revenue to Cost Ratio (L1 + L2) / L20		95.3%	104.0%	112.8%				
26									
27	Sales / T–Service Volumes (TJ)	57,192.0	17,652.7	5,503.4	4,168.0	3,845.2	67.4	76.8	180.6
28	Average # of Customers	188,944	170,796	17,053	945	70	2	36	15
29									
30	Cost of Service Margin unit Costs								
31	Demand \$ / GJ		\$0.961	\$1.034	\$0.881	\$0.611	\$0.528	\$8.749	\$0.396
32	Commodity \$ / GJ		\$0.077	\$0.073	\$0.066	\$0.038	\$0.051	\$0.082	\$0.044
33	Customer \$ / GJ		\$1.944	\$0.795	\$0.233	\$0.052	\$0.317	\$3.692	\$0.411
34	Customer \$ / Cust. / Mo.		\$16.74	\$21.38	\$85.67	\$238.47	\$891.01	\$656.35	\$411.98
35									
36	Rate Base	\$340,487	\$233,948	\$43,324	\$19,792	\$10,951	\$231	\$3,631	\$644
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%
38									
39	Margin (Surplus) / Deficiency L17 – L5	\$8	\$4,479	(\$994)	(\$1,834)	(\$2,253)	(\$21)	\$589	(\$6)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

AVERAGE & EXCESS

Inland
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm S. Indust. T-Service Non-Captive Sched 25	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22A	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22A	Other
	(1)	(2)	(3)	(4)	(5)	(6)
1	Revenue	\$6,196	\$719	\$3,783	\$1,694	\$0
2	Add: Approved Rate Changes - COG / COS	290	4	255	31	0
3	Less: Cost of Gas	47	2	28	17	0
4		-----	-----	-----	-----	-----
5	Gross Margin	\$6,439	\$721	\$4,010	\$1,708	\$0
6		=====	=====	=====	=====	=====
7						
8	Operation & Maintenance	\$1,863	\$270	\$1,213	\$379	\$0
9	Vehicle / FIS Lease	40	4	33	3	0
10	Core Market Costs	0	0	0	0	0
11	Property Tax	621	83	484	54	0
12	Depreciation & Amortization	966	72	740	154	0
13	Other Operating Revenue	(0)	(0)	(0)	(0)	0
14	Income Tax	364	44	203	117	0
15	Earned Return	2,634	192	2,117	325	0
16		-----	-----	-----	-----	-----
17	Cost of Service Margin	6,488	666	4,790	1,032	0
18	Cost of Gas	47	2	28	17	0
19		-----	-----	-----	-----	-----
20	Total Cost of Service	\$6,535	\$668	\$4,818	\$1,049	\$0
21		=====	=====	=====	=====	=====
22						
23	Gross Margin / CoS Margin Ratio L5 / L17	99.2%	108.3%	83.7%	165.5%	0.0%
24						
25	Revenue to Cost Ratio (L1 + L2) / L20					
26						
27	Sales / T-Service Volumes (TJ)	25,697.9	1,393.1	9,761.4	14,543.4	0.0
28	Average # of Customers	27	8	11	8	0
29						
30	Cost of Service Margin unit Costs					
31	Demand \$ / GJ		\$0.389	\$0.440	\$0.028	
32	Commodity \$ / GJ		\$0.023	\$0.022	\$0.019	
33	Customer \$ / GJ		\$0.066	\$0.029	\$0.024	
34	Customer \$ / Cust. / Mo.		\$964.18	\$2,118.66	\$3,602.70	
35						
36	Rate Base	\$27,965	\$2,036	\$22,479	\$3,451	\$0
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	0.00%
38						
39	Margin (Surplus) / Deficiency L17 - L5	\$49	(\$55)	\$780	(\$676)	\$0

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

COINCIDENT PEAK

Columbia
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Columbia	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T - Service Captive Sched 5/25	NGV Sched 6	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1	Revenue	\$18,641	\$10,935	\$3,711	\$1,714	\$529	\$7	\$0
2	Add: Approved Rate Changes - COG / COS	(1,246)	(768)	(321)	(171)	(13)	(1)	0
3	Less: Cost of Gas	7,831	4,859	1,901	900	127	1	0
4		-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$9,564	\$5,308	\$1,489	\$643	\$389	\$5	\$0
6		=====	=====	=====	=====	=====	=====	=====
7								
8	Operation & Maintenance	\$2,953	\$1,799	\$464	\$165	\$105	\$6	\$0
9	Vehicle / FIS Lease	64	40	10	3	2	0	0
10	Core Market Costs	0	0	0	0	0	0	0
11	Property Tax	813	434	138	58	35	0	0
12	Depreciation & Amortization	1,349	799	186	64	39	4	0
13	Other Operating Revenue	(229)	(166)	(43)	(19)	(1)	(0)	0
14	Income Tax	267	195	30	(5)	4	1	0
15	Earned Return	3,628	2,196	502	172	109	4	0
16		-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	8,844	5,297	1,287	437	294	15	0
18	Cost of Gas	7,831	4,859	1,901	900	127	1	0
19		-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$16,675	\$10,156	\$3,188	\$1,337	\$421	\$16	\$0
21		=====	=====	=====	=====	=====	=====	=====
22								
23	Gross Margin / CoS Margin Ratio L5 / L17	108.1%	100.2%	115.7%	147.1%	132.5%	34.1%	
24								
25	Revenue to Cost Ratio (L1 + L2) / L20		100.1%	106.3%	115.4%			
26								
27	Sales / T - Service Volumes (TJ)	8,042.4	1,997.3	742.1	400.1	316.4	0.8	0.0
28	Average # of Customers	19,390	17,436	1,850	89	6	1	0
29								
30	Cost of Service Margin unit Costs							
31	Demand \$ / GJ		\$0.962	\$1.047	\$0.856	\$0.825	\$8.979	
32	Commodity \$ / GJ		\$0.076	\$0.071	\$0.065	\$0.035	\$0.104	
33	Customer \$ / GJ		\$1.614	\$0.617	\$0.173	\$0.068	\$9.270	
34	Customer \$ / Cust. / Mo.		\$15.41	\$20.61	\$64.72	\$300.63	\$618.02	
35								
36	Rate Base	\$38,529	\$23,315	\$5,329	\$1,828	\$1,161	\$41	\$0
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	
38								
39	Margin (Surplus) / Deficiency L17 - L5	(\$720)	(\$11)	(\$202)	(\$206)	(\$95)	\$10	\$0

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

COINCIDENT PEAK

Columbia
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22B	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	
1	Revenue	\$1,745	\$1,505	\$73	\$167
2	Add: Approved Rate Changes – COG / COS	28	31	(3)	
3	Less: Cost of Gas	43	41	2	0
4		-----	-----	-----	-----
5	Gross Margin	\$1,730	\$1,495	\$68	\$167
6		=====	=====	=====	=====
7					
8	Operation & Maintenance	\$415	\$353	\$27	\$35
9	Vehicle / FIS Lease	8	8	0	0
10	Core Market Costs	0	0	0	0
11	Property Tax	146	124	6	17
12	Depreciation & Amortization	257	200	14	43
13	Other Operating Revenue	(0)	(0)	(0)	0
14	Income Tax	43	45	10	(12)
15	Earned Return	646	565	42	38
16		-----	-----	-----	-----
17	Cost of Service Margin	1,515	1,295	100	120
18	Cost of Gas	43	41	2	0
19		-----	-----	-----	-----
20	Total Cost of Service	\$1,558	\$1,336	\$102	\$120
21		=====	=====	=====	=====
22					
23	Gross Margin / CoS Margin Ratio L5 / L17	114.2%	115.5%	67.9%	139.2%
24					
25	Revenue to Cost Ratio (L1 + L2) / L20				
26					
27	Sales / T-Service Volumes (TJ)	4,585.7	4,353.9	231.8	NA
28	Average # of Customers	8	6	1	1
29					
30	Cost of Service Margin unit Costs				
31	Demand \$ / GJ		\$0.241	\$0.222	
32	Commodity \$ / GJ		\$0.022	\$0.021	
33	Customer \$ / GJ		\$0.035	\$0.189	
34	Customer \$ / Cust. / Mo.		\$2,095.07	\$3,650.51	\$10,000.49
35					
36	Rate Base	\$6,855	\$6,002	\$450	\$402
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%
38					
39	Margin (Surplus) / Deficiency L17 – L5	(\$215)	(\$200)	\$32	(\$47)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

NON-COINCIDENT PEAK

Columbia
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Columbia	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	NGV Sched 6	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1	Revenue	\$18,641	\$10,935	\$3,711	\$1,714	\$529	\$7	\$0
2	Add: Approved Rate Changes – COG / COS	(1,246)	(768)	(321)	(171)	(13)	(1)	0
3	Less: Cost of Gas	7,831	4,859	1,901	900	127	1	0
4		-----	-----	-----	-----	-----	-----	-----
5	Gross Margin	\$9,564	\$5,308	\$1,489	\$643	\$389	\$5	\$0
6		=====	=====	=====	=====	=====	=====	=====
7								
8	Operation & Maintenance	\$2,862	\$1,780	\$456	\$161	\$69	\$6	\$0
9	Vehicle / FIS Lease	60	39	9	3	1	0	0
10	Core Market Costs	0	0	0	0	0	0	0
11	Property Tax	769	423	134	56	22	0	0
12	Depreciation & Amortization	1,284	780	179	61	23	4	0
13	Other Operating Revenue	(229)	(166)	(43)	(19)	(1)	(0)	0
14	Income Tax	230	184	26	(7)	(6)	1	0
15	Earned Return	3,442	2,141	480	162	62	4	0
16		-----	-----	-----	-----	-----	-----	-----
17	Cost of Service Margin	8,418	5,181	1,241	417	170	15	0
18	Cost of Gas	7,831	4,859	1,901	900	127	1	0
19		-----	-----	-----	-----	-----	-----	-----
20	Total Cost of Service	\$16,249	\$10,040	\$3,142	\$1,317	\$297	\$16	\$0
21		=====	=====	=====	=====	=====	=====	=====
22								
23	Gross Margin / CoS Margin Ratio L5 / L17	113.6%	102.4%	120.0%	154.3%	229.0%	34.1%	
24								
25	Revenue to Cost Ratio (L1 + L2) / L20		101.3%	107.9%	117.2%			
26								
27	Sales / T-Service Volumes (TJ)	8,042.4	1,997.3	742.1	400.1	316.4	0.8	
28	Average # of Customers	19,390	17,436	1,850	89	6	1	
29								
30	Cost of Service Margin unit Costs							
31	Demand \$ / GJ		\$0.904	\$0.984	\$0.804	\$0.434	\$8.962	
32	Commodity \$ / GJ		\$0.076	\$0.071	\$0.065	\$0.035	\$0.104	
33	Customer \$ / GJ		\$1.614	\$0.617	\$0.173	\$0.068	\$9.270	
34	Customer \$ / Cust. / Mo.		\$15.41	\$20.61	\$64.72	\$300.63	\$618.02	
35								
36	Rate Base	\$36,547	\$22,732	\$5,096	\$1,724	\$660	\$41	
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	
38								
39	Margin (Surplus) / Deficiency L17 – L5	(\$1,146)	(\$127)	(\$248)	(\$226)	(\$219)	\$10	

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

NON-COINCIDENT PEAK

Columbia
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm / Interruptible L. Indust. S / T-Service Captive Sched 22B	Firm / Interruptible L. Indust. S / T-Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	
1	Revenue	\$1,745	\$1,505	\$73	\$167
2	Add: Approved Rate Changes - COG / COS	28	31	(3)	0
3	Less: Cost of Gas	43	41	2	0
4					
5	Gross Margin	\$1,730	\$1,495	\$68	\$167
6		=====	=====	=====	=====
7					
8	Operation & Maintenance	\$389	\$329	\$25	\$35
9	Vehicle / FIS Lease	8	7	0	0
10	Core Market Costs	0	0	0	0
11	Property Tax	134	112	5	17
12	Depreciation & Amortization	238	183	13	43
13	Other Operating Revenue	(0)	(0)	(0)	0
14	Income Tax	32	35	9	(12)
15	Earned Return	593	516	39	38
16					
17	Cost of Service Margin	1,394	1,183	92	120
18	Cost of Gas	43	41	2	0
19					
20	Total Cost of Service	\$1,437	\$1,224	\$94	\$120
21		=====	=====	=====	=====
22					
23	Gross Margin / CoS Margin Ratio L5 / L17	124.1%	126.4%	74.0%	139.2%
24					
25	Revenue to Cost Ratio (L1 + L2) / L20				
26					
27	Sales / T-Service Volumes (TJ)	4,585.7	4,353.9	231.8	NA
28	Average # of Customers	8	6	1	1
29					
30	Cost of Service Margin unit Costs				
31	Demand \$ / GJ		\$0.215	\$0.187	
32	Commodity \$ / GJ		\$0.022	\$0.021	
33	Customer \$ / GJ		\$0.035	\$0.189	
34	Customer \$ / Cust. / Mo.		\$2,095.07	\$3,650.51	\$10,000.49
35					
36	Rate Base	\$6,295	\$5,481	\$412	\$402
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%
38					
39	Margin (Surplus) / Deficiency L17 - L5	(\$336)	(\$312)	\$24	(\$47)

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

AVERAGE & EXCESS

Columbia
Allocated Costs
including
Direct Assignment
Page 1.0.0

Line No.	Description	Total Columbia	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	NGV Sched 6	Seasonal Sched 4
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1	Revenue	\$18,641	\$10,935	\$3,711	\$1,714	\$529	\$7	\$0
2	Add: Approved Rate Changes – COG / COS	(1,246)	(768)	(321)	(171)	(13)	(1)	0
3	Less: Cost of Gas	7,831	4,859	1,901	900	127	1	0
4								
5	Gross Margin	\$9,564	\$5,308	\$1,489	\$643	\$389	\$5	\$0
6		=====	=====	=====	=====	=====	=====	=====
7								
8	Operation & Maintenance	\$2,865	\$1,771	\$449	\$162	\$76	\$6	\$0
9	Vehicle / FIS Lease	61	39	9	3	1	0	0
10	Core Market Costs	0	0	0	0	0	0	0
11	Property Tax	771	420	131	56	24	0	0
12	Depreciation & Amortization	1,287	775	176	61	25	4	0
13	Other Operating Revenue	(229)	(166)	(42)	(20)	(1)	(0)	0
14	Income Tax	231	181	24	(7)	(4)	1	0
15	Earned Return	3,448	2,127	471	162	69	4	0
16								
17	Cost of Service Margin	8,433	5,147	1,218	418	191	15	0
18	Cost of Gas	7,831	4,859	1,901	900	127	1	0
19								
20	Total Cost of Service	\$16,264	\$10,006	\$3,119	\$1,318	\$318	\$16	\$0
21		=====	=====	=====	=====	=====	=====	=====
22								
23	Gross Margin / CoS Margin Ratio L5 / L17	113.4%	103.1%	122.2%	154.0%	203.7%	33.9%	
24								
25	Revenue to Cost Ratio (L1 + L2) / L20		101.6%	108.7%	117.1%			
26								
27	Sales / T-Service Volumes (TJ)	8,042.4	1,997.3	742.1	400.1	316.4	0.8	
28	Average # of Customers	19,390	17,436	1,850	89	6	1	
29								
30	Cost of Service Margin unit Costs							
31	Demand \$ / GJ		\$0.887	\$0.954	\$0.806	\$0.500	\$9.064	
32	Commodity \$ / GJ		\$0.076	\$0.071	\$0.065	\$0.035	\$0.104	
33	Customer \$ / GJ		\$1.614	\$0.617	\$0.173	\$0.068	\$9.270	
34	Customer \$ / Cust. / Mo.		\$15.41	\$20.61	\$64.72	\$300.63	\$618.02	
35								
36	Rate Base	\$36,619	\$22,589	\$5,003	\$1,724	\$736	\$41	
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	
38								
39	Margin (Surplus) / Deficiency L17 – L5	(\$1,131)	(\$161)	(\$271)	(\$225)	(\$198)	\$10	

BC GAS UTILITY LTD.
FULLY DISTRIBUTED COST OF SERVICE
GROSS MARGIN TO COST OF SERVICE MARGIN RATIO
REVENUE TO TOTAL COST OF SERVICE RATIO
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

AVERAGE & EXCESS

Columbia
Allocated Costs
including
Direct Assignment
Page 1.0.1

Line No.	Description	Subtotal	Firm / Interruptible L. Indust. S / T - Service Captive Sched 22B	Firm / Interruptible L. Indust. S / T - Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	
1	Revenue	\$1,745	\$1,505	\$73	\$167
2	Add: Approved Rate Changes - COG / COS	28	31	(3)	0
3	Less: Cost of Gas	43	41	2	0
4		-----	-----	-----	-----
5	Gross Margin	\$1,730	\$1,495	\$68	\$167
6		=====	=====	=====	=====
7					
8	Operation & Maintenance	\$400	\$339	\$26	\$35
9	Vehicle / FIS Lease	8	8	0	0
10	Core Market Costs	0	0	0	0
11	Property Tax	139	117	5	17
12	Depreciation & Amortization	246	190	13	43
13	Other Operating Revenue	(0)	(0)	(0)	0
14	Income Tax	37	39	10	(12)
15	Earned Return	615	536	40	38
16		-----	-----	-----	-----
17	Cost of Service Margin	1,444	1,229	95	120
18	Cost of Gas	43	41	2	0
19		-----	-----	-----	-----
20	Total Cost of Service	\$1,487	\$1,270	\$97	\$120
21		=====	=====	=====	=====
22					
23	Gross Margin / CoS Margin Ratio L5 / L17	119.8%	121.7%	71.3%	139.2%
24					
25	Revenue to Cost Ratio (L1 + L2) / L20				
26					
27	Sales / T-Service Volumes (TJ)	4,585.7	4,353.9	231.8	NA
28	Average # of Customers	8	6	1	1
29					
30	Cost of Service Margin unit Costs				
31	Demand \$ / GJ		\$0.226	\$0.201	
32	Commodity \$ / GJ		\$0.022	\$0.021	
33	Customer \$ / GJ		\$0.035	\$0.189	
34	Customer \$ / Cust. / Mo.		\$2,095.07	\$3,650.51	\$10,000.49
35					
36	Rate Base	\$6,526	\$5,695	\$428	\$402
37	Return on Rate Base	9.42%	9.42%	9.42%	9.42%
38					
39	Margin (Surplus) / Deficiency L17 - L5	(\$286)	(\$266)	\$27	(\$47)

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base

Page 1.0

Line No.	B.C.U.C. Account	Gas Supply				Distribution				Customer Accounting	Direct Assignment	COMMENTS
		Total	Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	GROSS PLANT IN SERVICE	\$1,693,205	\$31,167	\$0	\$381,394	\$914,482	\$321,077	\$30,559	\$0	\$0	\$14,525	Page 2.12, Line 17
2	ACCUMULATED DEPRECIATION	(233,025)	(6,683)	0	(61,377)	(117,480)	(40,415)	(3,794)	0	0	(3,276)	Page 2.12, Line 18
3												
4	NET GAS PLANT IN SERVICE	1,460,180	24,485	0	320,017	797,002	280,662	26,765	0	0	11,249	
5												
6												
7	CONTRIBUTIONS IN AID OF CONSTRUCTION	(43,234)	(31)	0	(384)	(6,299)	(33,165)	(3,110)	0	0	(245)	Page 3.0, Line 47
8												
9	ADJUSTMENT FOR 13 MONTH AVERAGING	861	16	0	195	466	164	16	0	0	5	
10												
11	CONSTRUCTION ADVANCES	(2,220)	0	0	0	(1,606)	(561)	(53)	0	0	0	Page 4.0, Line 1
12												
13	WORK IN PROGRESS, NO AFUDC	1,717	33	0	638	701	308	32	0	0	7	Page 4.0, Line 5
14												
15	UNAMORTIZED DEFERRED CHARGES	102	(15,195)	0	1,270	3,239	1,111	107	2,280	438	6,852	Page 5.0, Line 48
16												
17	CASH WORKING CAPITAL	10,224	0	0	0	0	0	0	0	0	10,224	Page 6.0, Line 17
18												
19	OTHER WORKING CAPITAL	45,124	20,613	0	443	4,608	1,651	153	0	0	17,657	Page 6.0, Line 39
20												
21	DEFERRED INCOME TAX	(5,056)	0	0	0	0	(4,433)	(422)	0	0	(201)	Page 4.0, Line 8
22												
23												
24	TOTAL RATE BASE	\$1,467,697	\$29,920	\$0	\$322,178	\$798,111	\$245,734	\$23,487	\$2,280	\$438	\$45,549	
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- SUMMARY

TAB 2E
SECTION 1
PAGE 1.0

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.0

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	STORAGE GAS											
2	440/441 Land in Fee Simple and Land Rights	\$1,101	\$1,101									
3												
4	442 Structures and Improvements											
5	Gross Plant	1,762	1,762									
6	Accumulated Depreciation	(489)	(489)									
7												
8	Net Book Value	1,273	1,273									
9												
10	443 Gas Holders - Storage											
11	Gross Plant	9,321	9,321									
12	Accumulated Depreciation	(2,856)	(2,856)									
13												
14	Net Book Value	6,465	6,465	0								
15												
16	449 Local Storage Equipment											
17	Gross Plant	14,751	14,751									
18	Accumulated Depreciation	(2,563)	(2,563)									
19												
20	Net Book Value	12,188	12,188	0								
21												
22	TOTAL LOCAL STORAGE											
23	Gross Plant	26,935	26,935									
24	Accumulated Depreciation	(5,908)	(5,908)									
25												
26	Net Book Value	21,027	21,027	0								
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.1

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	MANUFACTURED GAS											
2	430 Manufact'd Gas -- Land											
3	Gross Plant	\$31			\$31							
4												
5	432 Manufact'd Gas -- Struct. & Improvements											
6	Gross Plant	361			361							
7	Accumulated Depreciation	(27)			(27)							
8												
9	Net Book Value	335			335							
10												
11	433 Manufacturing Equipment											
12	Gross Plant	5			5							
13	Accumulated Depreciation	0			0							
14												
15	Net Book Value	5			5							
16												
17	434 Gas Holders -- Manufacturing											
18	Gross Plant	343			343							
19	Accumulated Depreciation	(79)			(79)							
20												
21	Net Book Value	265			265							
22												
23	436 Compressed Equipment											
24	Gross Plant	1			1							
25	Accumulated Depreciation	(1)			(1)							
26												
27	Net Book Value	0			0							
28												
29	437 Measuring & Regulating Equipment											
30	Gross Plant	322			322							
31	Accumulated Depreciation	(54)			(54)							
32												
33	Net Book Value	268			268							
34												
35	TOTAL MANUFACTURED GAS											
36	Gross Plant	1,063			1,063							
37	Accumulated Depreciation	(160)			(160)							
38												
39	Net Book Value	903			903							
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.2

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	TRANSMISSION PLANT											
2	460/461 Land in Fee Simple & Land Rights	\$30,636	\$0		\$30,563						\$73	
3												
4	461 Land Rights - Byron Creek											
5	Gross Plant	16									16	
6	Accumulated Depreciation	(9)									(9)	
7												
8	Net Book Value	8									8	
9												
10	462 Compressor Structures											
11	Gross Plant	6,804	0		6,804							
12	Accumulated Depreciation	(356)	0		(356)							
13												
14	Net Book Value	6,448	0		6,448							
15												
16	463 Measuring Structures											
17	Gross Plant	2,028			2,028							
18	Accumulated Depreciation	(147)			(147)							
19												
20	Net Book Value	1,881			1,881							
21												
22	464 Other Structures and Improvements											
23	Gross Plant	178	0		178							
24	Accumulated Depreciation	(36)	0		(36)							
25												
26	Net Book Value	143	0		143							
27												
28	465 Mains											
29	Gross Plant	238,610	0		235,477						3,133	
30	Accumulated Depreciation	(45,685)	0		(45,506)						(179)	
31												
32	Net Book Value	192,925	0		189,971						2,954	
33												
34	465 Mains - Byron Creek											
35	Gross Plant	680									680	
36	Accumulated Depreciation	(361)									(361)	
37												
38	Net Book Value	319									319	
39												
40	466 Compressor Equipment											
41	Gross Plant	37,201	0		37,201							
42	Accumulated Depreciation	(1,467)	0		(1,467)							
43												
44	Net Book Value	35,734	0		35,734							
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.3

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	TRANSMISSION PLANT											
2	467--00 Measuring and Regulating Equipment											
3	Gross Plant	\$14,435	\$0		14,435							
4	Accumulated Depreciation	(1,702)	0		(1,702)							
5												
6	Net Book Value	12,733	0		12,733							
7												
8	467--10 Telemetry											
9	Gross Plant	4,276	0		4,276							
10	Accumulated Depreciation	(2,248)	0		(2,248)							
11												
12	Net Book Value	2,028	0		2,028							
13												
14	468 Communication Structures and Equipment											
15	Gross Plant	899			899							
16	Accumulated Depreciation	(122)			(122)							
17												
18	Net Book Value	777			777							
19												
20	469 Other Transmission Equipment											
21	Gross Plant	1,949			1,949							
22	Accumulated Depreciation	(21)			(21)							
23												
24	Net Book Value	1,929			1,929							
25												
26	TOTAL TRANSMISSION PLANT											
27	Gross Plant	337,711	0	0	333,809	0	0	0	0	0	3,902	
28	Accumulated Depreciation	(52,152)	0	0	(51,603)	0	0	0	0	0	(549)	
29												
30	Net Book Value	285,559	0	0	282,206	0	0	0	0	0	3,353	
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.4

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	DISTRIBUTION PLANT											
2	470 Land	\$1,275				\$49	\$1,024	\$202				
3												
4	471 Land Rights	447				17	359	71				
5												
6	471 Land Rights - Byron Creek											
7	Gross Plant	1									1	
8	Accumulated Depreciation	(1)									(1)	
9												
10	Net Book Value	0									0	
11												
12	472 Structures and Improvements - Leasehold Alterations											
13	Gross Plant	0										
14	Accumulated Depreciation	0										
15												
16	Net Book Value	0				0	0	0				
17												
18	472 Structures and Improvements - Frame Buildings											
19	Gross Plant	3,900				1,062	2,433	405				
20	Accumulated Depreciation	(671)				(183)	(419)	(70)				
21												
22	Net Book Value	3,229				879	2,014	335				
23												
24	472 Structures and Improvements - Masonry Buildings											
25	Gross Plant	2				1	1	0				
26	Accumulated Depreciation	15				4	9	2				
27												
28	Net Book Value	17				5	11	2				
29												
30	472 Structures and Improvements - Byron Creek											
31	Gross Plant	2									2	
32	Accumulated Depreciation	(1)									(1)	
33												
34	Net Book Value	1									1	
35												
36	473 Services											
37	Gross Plant	364,884				257,717	97,570	9,596				
38	Accumulated Depreciation	(26,877)				(18,883)	(7,187)	(707)				
39												
40	Net Book Value	338,007				238,734	90,383	8,890				
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.5

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----			Marketing	Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	DISTRIBUTION PLANT											
2	474 House Regulators and Meter Installations											
3	Gross Plant	\$77,265				\$48,746	\$26,061	\$2,457				
4	Accumulated Depreciation	(8,448)				(5,330)	(2,850)	(269)				
5												
6	Net Book Value	68,817				43,417	23,212	2,188				
7												
8	475 Mains											
9	Gross Plant	518,342				396,479	111,443	10,419				
10	Accumulated Depreciation	(75,326)				(57,617)	(16,195)	(1,514)				
11												
12	Net Book Value	443,016				338,863	95,248	8,905				
13												
14	476 Compressor Equipment -- Commercial Cardlock Station											
15	Gross Plant	81									81	
16	Accumulated Depreciation	(124)									(124)	
17												
18	Net Book Value	(43)									(43)	
19												
20	476 Compressor Equipment -- Lower Mainland											
21	Gross Plant	2,013									2,013	
22	Accumulated Depreciation	(226)									(226)	
23												
24	Net Book Value	1,787									1,787	
25												
26	476 Compressor Equipment -- All Other											
27	Gross Plant	3,681									3,681	
28	Accumulated Depreciation	(1,679)									(1,679)	
29												
30	Net Book Value	2,003									2,003	
31												
32	477--00 Measuring and Regulating Equipment											
33	Gross Plant	33,217				17,130	14,270	1,817				
34	Accumulated Depreciation	(3,959)				(2,042)	(1,701)	(217)				
35												
36	Net Book Value	29,258				15,088	12,569	1,600				
37												
38	477--10 Telemetry Equipment											
39	Gross Plant	1,511				417	1,043	50				
40	Accumulated Depreciation	(799)				(220)	(552)	(27)				
41												
42	Net Book Value	712				196	491	24				
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.6

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	DISTRIBUTION PLANT											
2	477-00 Byron Creek											
3	Gross Plant	\$132									\$132	
4	Accumulated Depreciation	(62)									(62)	
5												
6	Net Book Value	71									71	
7												
8	478 Meters											
9	Gross Plant	107,520				78,887	28,891	1,742				
10	Accumulated Depreciation	(13,737)				(10,079)	(3,436)	(223)				
11												
12	Net Book Value	93,783				68,809	23,455	1,519				
13												
14	479 Other Distribution Equipment											
15	Gross Plant	872				630	220	21				
16	Accumulated Depreciation	(32)				(23)	(8)	(1)				
17												
18	Net Book Value	840				607	212	20				
19												
20												
21	TOTAL DISTRIBUTION PLANT											
22	Gross Plant	1,115,141				801,136	281,315	26,781			5,910	
23	Accumulated Depreciation	(131,926)				(94,473)	(32,337)	(3,024)			(2,092)	
24												
25	Net Book Value	983,216				706,663	248,978	23,756			3,818	
26												
27												
28	TOTAL MANUFACTURED GAS, STORAGE,											
29	TRANSMISSION & DISTRIBUTION											
30	Gross Plant	1,480,849	26,935	0	334,872	801,136	281,315	26,781	0	0	9,812	
31	Accumulated Depreciation	(190,145)	(5,908)	0	(51,763)	(94,473)	(32,337)	(3,024)	0	0	(2,640)	
32												
33	Net Book Value	1,290,705	21,027	0	283,109	706,663	248,978	23,756	0	0	7,171	
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.7

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	GENERAL PLANT											
2	480 Land	\$5,140	\$94	\$0	\$1,163	\$2,782	\$977	\$93	\$0	\$0	\$31	
3												
4	481 Land Rights	0										
5												
6	482 Structures and Improvements - Leasehold Alterations											
7	Gross Plant	8,936	163	0	2,022	4,837	1,698	162	0	0	54	
8	Accumulated Depreciation	(2,852)	(52)	0	(645)	(1,544)	(542)	(52)	0	0	(17)	
9												
10	Net Book Value	6,084	111	0	1,377	3,293	1,156	110	0	0	37	
11												
12	482 Structures and Improvements - Lochburn Admin. Warehouse											
13	Gross Plant	19,774	360	0	4,474	10,704	3,759	358	0	0	120	
14	Accumulated Depreciation	(134)	(2)	0	(30)	(73)	(25)	(2)	0	0	(1)	
15												
16	Net Book Value	19,640	357	0	4,444	10,631	3,733	355	0	0	119	
17												
18	482 Structures and Improvements - All Other											
19	Gross Plant	6,685	122	0	1,513	3,619	1,271	121	0	0	41	
20	Accumulated Depreciation	(1,735)	(32)	0	(392)	(939)	(330)	(31)	0	0	(11)	
21												
22	Net Book Value	4,951	90	0	1,120	2,680	941	90	0	0	30	
23												
24	483 Office Furniture and Equipment - Fraser Valley/ Lochburn/ LNG											
25	Gross Plant	13,674	249	0	3,094	7,402	2,599	247	0	0	83	
26	Accumulated Depreciation	(2,371)	(43)	0	(536)	(1,283)	(451)	(43)	0	0	(14)	
27												
28	Net Book Value	11,303	206	0	2,557	6,118	2,148	205	0	0	69	
29												
30	483 Office Furniture and Equipment - Computers Software/ LNG/ Misc.											
31	Gross Plant	36,799	670	0	8,326	19,919	6,994	666	0	0	223	
32	Accumulated Depreciation	(10,854)	(198)	0	(2,456)	(5,875)	(2,063)	(196)	0	0	(66)	
33												
34	Net Book Value	25,945	472	0	5,870	14,044	4,931	469	0	0	157	
35												
36	483 Office Furniture and Equipment - Computers Micro. Comp. System											
37	Gross Plant	64	1	0	14	35	12	1	0	0	0	
38	Accumulated Depreciation	(57)	(1)	0	(13)	(31)	(11)	(1)	0	0	(0)	
39												
40	Net Book Value	7	0	0	2	4	1	0	0	0	0	
41												
42	483 Office Furniture and Equipment - EDP Equipment											
43	Gross Plant	21,087	384	0	4,771	11,414	4,008	382	0	0	128	
44	Accumulated Depreciation	(12,299)	(224)	0	(2,783)	(6,657)	(2,338)	(223)	0	0	(75)	
45												
46	Net Book Value	8,789	160	0	1,989	4,757	1,670	159	0	0	53	
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.8

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	GENERAL PLANT											
2	483 Office Furniture and Equipment -- Computers Assist Mapping											
3	Gross Plant	149	3	0	34	81	28	3	0	0	1	
4	Accumulated Depreciation	(226)	(4)	0	(51)	(122)	(43)	(4)	0	0	(1)	
5	Net Book Value	(77)	(1)	0	(17)	(41)	(15)	(1)	0	0	(0)	
6												
7												
8	483 Office Furniture and Equipment -- Training, Display & Documentation											
9	Gross Plant	0	0	0	0	0	0	0	0	0	0	
10	Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	
11	Net Book Value	0	0	0	0	0	0	0	0	0	0	
12												
13												
14	484 Transportation Equipment											
15	Gross Plant	8,859	161	0	2,004	4,795	1,684	160	0	0	54	
16	Accumulated Depreciation	(5,236)	(95)	0	(1,185)	(2,834)	(995)	(95)	0	0	(32)	
17	Net Book Value	3,623	66	0	820	1,961	689	66	0	0	22	
18												
19												
20	485 Heavy Work Equipment											
21	Gross Plant	2,080	38	0	471	1,126	395	38	0	0	13	
22	Accumulated Depreciation	(111)	(2)	0	(25)	(60)	(21)	(2)	0	0	(1)	
23	Net Book Value	1,970	36	0	446	1,066	374	36	0	0	12	
24												
25												
26	486 Tools and Work Equipment											
27	Gross Plant	14,047	256	0	3,178	7,604	2,670	254	0	0	85	
28	Accumulated Depreciation	(3,164)	(58)	0	(716)	(1,713)	(601)	(57)	0	0	(19)	
29	Net Book Value	10,883	198	0	2,462	5,891	2,069	197	0	0	66	
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

TAB 2E
SECTION 1
PAGE 2.8

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Gas Plant In Service
Page 2.9

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	GENERAL PLANT											
2	487 Equipment on Customer's Premises											
3	Gross Plant	\$1,816									\$1,816	
4	Accumulated Depreciation	(222)									(222)	
5												
6	Net Book Value	1,594									1,594	
7												
8	487 Equipment on Customer's Premises - VRA Compressor											
9	Gross Plant	1,177									1,177	
10	Accumulated Depreciation	(34)									(34)	
11												
12	Net Book Value	1,143									1,143	
13												
14	487 Equipment on Customer's Premises - VRA Installation Cost											
15	Gross Plant	154									154	
16	Accumulated Depreciation	(123)									(123)	
17												
18	Net Book Value	32									32	
19												
20	488 Communication Equipment - Structures & Equipment											
21	Gross Plant	5,484	100	0	1,241	2,968	1,042	99	0	0	33	
22	Accumulated Depreciation	(1,018)	(19)	0	(230)	(551)	(193)	(18)	0	0	(6)	
23												
24	Net Book Value	4,466	81	0	1,010	2,417	849	81	0	0	27	
25												
26	488 Communication Equipment - Radios											
27	Gross Plant	5,625	102	0	1,273	3,045	1,069	102	0	0	34	
28	Accumulated Depreciation	(1,883)	(34)	0	(426)	(1,019)	(356)	(34)	0	0	(11)	
29												
30	Net Book Value	3,742	68	0	847	2,026	711	68	0	0	23	
31												
32	489 Other General Equipment											
33	Gross Plant	297	5	0	67	161	56	5	0	0	2	
34	Accumulated Depreciation	(8)	(0)	0	(2)	(4)	(1)	(0)	0	0	(0)	
35												
36	Net Book Value	290	5	0	66	157	55	5	0	0	2	
37												
38	TOTAL GENERAL EQUIPMENT											
39	Gross Plant	151,845	2,706	0	33,645	80,491	28,264	2,691	0	0	4,048	
40	Accumulated Depreciation	(42,323)	(763)	0	(9,490)	(22,705)	(7,973)	(759)	0	0	(633)	
41												
42	Net Book Value	109,522	1,943	0	24,154	57,786	20,291	1,932	0	0	3,416	
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.10

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----					Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing	Customer Accounting		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	GENERAL PLANT											
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.11

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	INTANGIBLE PLANT											
2	172 Preliminary Survey and Investigation Charges											
4	Gross Plant	\$492	\$9	\$0	\$111	\$266	\$93	\$9	\$0	\$0	\$3	
5	Accumulated Depreciation	0	0	0	0	0	0	0	0	0	0	
7	Net Book Value	492	9	0	111	266	93	9	0	0	3	
9	175 Unamortized Conversion Expense											
11	Gross Plant	109	2	0	25	59	21	2	0	0	1	
12	Accumulated Depreciation	(37)	(1)	0	(8)	(20)	(7)	(1)	0	0	(0)	
14	Net Book Value	73	1	0	16	39	14	1	0	0	0	
16	178 Organization Expense											
17	Gross Plant	728	13	0	165	394	138	13	0	0	4	
18	Accumulated Depreciation	(272)	(5)	0	(61)	(147)	(52)	(5)	0	0	(2)	
20	Net Book Value	457	8	0	103	247	87	8	0	0	3	
22	179 Other Deferred Charges											
23	Gross Plant	0										
24	Accumulated Depreciation	0										
26	Net Book Value	0										
28	401 Franchise Consents											
29	Gross Plant	99	2	0	22	54	19	2	0	0	1	
30	Accumulated Depreciation	(37)	(1)	0	(8)	(20)	(7)	(1)	0	0	(0)	
32	Net Book Value	63	1	0	14	34	12	1	0	0	0	
34	402 Other Intangible Plant											
35	Gross Plant	148	3	0	33	80	28	3	0	0	1	
36	Accumulated Depreciation	(76)	(1)	0	(17)	(41)	(14)	(1)	0	0	(0)	
38	Net Book Value	73	1	0	16	39	14	1	0	0	0	
40	TOTAL INTANGIBLE PLANT											
41	Gross Plant	1,576	29	0	356	853	299	29	0	0	10	
42	Accumulated Depreciation	(420)	(8)	0	(95)	(227)	(80)	(8)	0	0	(3)	
44	Net Book Value	1,156	21	0	261	625	220	21	0	0	7	

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

GAS PLANT IN SERVICE
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Gas Plant in Service
Page 2.12

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	GAS PLANT HELD FOR FUTURE USE											
2	Gross Plant	\$9,248	\$168	\$0	\$2,092	\$5,006	\$1,758	\$167	\$0	\$0	\$56	
3												
4	OVERHEAD CHARGED TO CONSTRUCTION											
5	Gross Plant	53,323	1,396	0	11,251	28,964	10,132	958	0	0	622	
6	Accumulated Depreciation	(134)	(4)	0	(28)	(73)	(25)	(3)	0	0	(1)	
7												
8	Net Book Value	53,189	1,392	0	11,223	28,891	10,107	955	0	0	621	
9												
10												
11	1996 BUDGET REDUCTION	(3,636)	(66)	0	(823)	(1,968)	(691)	(66)	0	0	(22)	
12												
13												
14	RETIREMENT WORK IN PROGRESS	(4)	(0)	0	(1)	(2)	(1)	(0)	0	0	(0)	
15												
16	TOTAL NET GAS PLANT IN SERVICE											
17	Gross Plant	1,693,205	31,167	0	381,394	914,482	321,077	30,559	0	0	14,525	
18	Accumulated Depreciation	(233,025)	(6,683)	0	(61,377)	(117,480)	(40,415)	(3,794)	0	0	(3,276)	
19												
20	Net Book Value	\$1,460,180	\$24,485	\$0	\$320,017	\$797,002	\$280,662	\$26,765	\$0	\$0	\$11,249	
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- GAS PLANT IN SERVICE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

CONTRIBUTIONS IN AID OF CONSTRUCTION
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
CIAOC
Page 3.0

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	DSEP / PGEP											
2	Gross Grant	\$12,812				1,083	10,705	824				
3	Amortization	(2,868)				(228)	(2,264)	(174)				
4												
5	Net Grant	9,944				854	8,441	649				
6												
7	Natural Gas Vehicle Conversion Grants											
8	Gross Grant	65	1	0	15	35	12	1	0	0	0	
9	Amortization	(77)	(1)	0	(17)	(42)	(15)	(1)	0	0	(0)	
10												
11	Net Grant	(12)	(0)	0	(3)	(6)	(2)	(0)	0	0	(0)	
12												
13	Natural Gas Vehicle Station Grants											
14	Gross Grant	543									543	
15	Amortization	(308)									(308)	
16												
17	Net Grant	235									235	
18												
19	Leasehold Alterations											
20	Gross Grant	0										
21	Amortization	0										
22												
23	Net Grant	0	0	0	0	0	0	0	0	0	0	
24												
25	Furniture and Equipment											
26	Gross Grant	111	2	0	25	60	21	2	0	0	1	
27	Amortization	(41)	(1)	0	(9)	(22)	(8)	(1)	0	0	(0)	
28												
29	Net Grant	70	1	0	16	38	13	1	0	0	0	
30												
31	Computer Software Tax Savings											
32	Gross Grant	1,641	30	0	371	888	312	30	0	0	10	
33	Amortization	0	0	0	0	0	0	0	0	0	0	
34												
35	Net Grant	1,641	30	0	371	888	312	30	0	0	10	
36												
37	Other											
38	Gross Grant	35,577				5,134	27,686	2,757				
39	Amortization	(4,221)				(609)	(3,284)	(327)				
40												
41	Net Grant	31,356				4,525	24,401	2,430				
42												
43	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION											
44	Gross Grant	50,548	33	0	411	7,200	38,736	3,614	0	0	554	
45	Amortization	(7,314)	(2)	0	(27)	(902)	(5,571)	(503)	0	0	(309)	
46												
47	Net Grant	\$43,234	\$31	\$0	\$384	\$6,299	\$33,165	\$3,110	\$0	\$0	\$245	

RATE BASE - FUNCTION
- CIAOC

TAB 2E
SECTION 1
PAGE 3.0

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

CONSTRUCTION ADVANCES / GAS PLANT UNDER CONSTRUCTION / DEFERRED INCOME TAX
FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Rate Base
Customer Advances, Gas
Plant Under Const. &
Deferred Income Tax
Page 4.0

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	CONSTRUCTION ADVANCES	(\$2,220)				(1,606)	(561)	(53)				
2												
3												
4	GAS PLANT UNDER CONSTRUCTION NOT ATTRACTING											
5	AFUDC	\$1,717	33	0	638	701	306	32	0	0	7	
6												
7												
8	DEFERRED INCOME TAX	(\$5,056)	\$0	\$0	\$0	\$0	(\$4,433)	(\$422)	\$0	\$0	(\$201)	
9												
10												
11												
12												
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- ADVANCES, CWIP,
DEFERRED TAXES

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

DEFERRED CHARGES
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Deferred Charges
Page 5.0

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	179-008 Deferred Interest	\$2,793	\$51	\$0	\$629	\$1,508	\$530	\$50	\$0	\$0	\$24	
2	Preference Share Issue Cost	(367)	(7)	0	(83)	(198)	(70)	(7)	0	0	(3)	
3	Market Rebate Incentive:											
4	179-052 Water Heater Grants	566									566	
5	179-013 Commercial & Multi-Family	159									159	
6	179-018 NGV Conversion Grants	257									257	
7	NGV Conversion Grants 1996 - 1998	397									397	
8	179-041 NGV Fuelling Probe	154									154	
9	179-053 Local Gas Development	3,945	3,945									
10	179-092 Fraser Valley Gas Exploration	593	593									
11												
12	179-058 Rate Design Costs - Phase B	96									96	
13	179-059 Revenue Req. Hearing - 1992	17									17	
14	179-094 Revenue Req. Hearing - 1994/5	78									78	
15	Revenue Req. Hearing - 1996 - 98	167									167	
16	179-063 Demand Side Management G-69-93	95							95			
17	Demand Side Management G-60-94/G-9-95	1,619							1,619			
18	Demand Side Management 1996 - 98	566							566			
19												
20	179-064 Integrated Resource Plan G-69-93	250	250									
21	Integrated Resource Plan G-60-94	195	195									
22	Integrated Resource Plan 1996 - 98	54	54									
23	179-079 Appliance Insurance Program	68									68	
24	179-077 Corporate Reorganization	19									19	
25	Residential Thermostat Program	35									35	
26	179-062 Property Tax	(345)	(3)	0	(136)	(128)	(71)	(6)	0	0	(2)	
27	179-069 Westar Receivable	175									175	
28	179-088 G.C.R.A.	(20,556)	(20,556)									
29	Core Market Hearing Costs Order F-9-95	3	3									
30												
31	179-091/100 Buy-Sell Operating Costs	170	170									
32	179-120 Offsystem Sales Coordination Centre	42	42									
33	279-024 Revelstoke Propane Cost	(2)	(2)									
34	179-118 BC Hydro Service Agreement Incremental	438								438		
35	179-102 1993 Industrial Margin Shift	(50)									(50)	
36	179-065 T-Service Lost Margin	(34)									(34)	
37	179-103 Crestbrook, Elko Margin	16									16	
38	279-063 Recovery of Non-Utility Service	(7)									(7)	
39	179-089 RSAM	2,997									2,997	
40	179-105 NGV Transit Grants	707									707	
41	179-119 BC21 Power Smart Program	777									777	
42	Coastal Facilities											
43	Relocation	2,138	39	0	484	1,157	406	39	0	0	13	
44	Lochburn NBV Amortization	1,661	30	0	376	899	316	30	0	0	10	
45	Fraser Valley NBV Amortization	0	0	0	0	0	0	0	0	0	0	
46	Non-Core Margin Deferral	216									216	
47												
48	Total Deferred Charges in Rate Base	\$102	(\$15,195)	\$0	\$1,270	\$3,239	\$1,111	\$107	\$2,280	\$438	\$6,852	

RATE BASE - FUNCTION
- DEFERRED CHARGES

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF RATE BASE

WORKING CAPITAL
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Rate Base
Working Capital
Page 6.0

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Cash Working Capital											
2												
3	Cash Required for Operating Expenses	\$14,719										
4	Minimum Bank Balance	1,908										
5	Customers' Deposits	(2,384)										
6	Reserve for Bad Debts	(439)										
7												
8												
9												
10												
11												
12												
13												
14												
15	Withholding from Employees	(3,580)										
16												
17	Total Cash Working Capital	10,224	0	0	0	0	0	0	0	0	10,224	
18												
19												
20	Other Working Capital											
21												
22	Inventories											
23	Pipe	2,179				1,576	551	52				
24	Fittings	2,689				1,945	680	64				
25	Meters & Regulators	815				560	236	19				
26	Supplies & Other	639	12	0	145	346	121	12	0	0	4	
27												
28	NGV -- Cylinders	1,700									1,700	
29	-- Vehicle Refueling Appliance	120									120	
30	Manufacturing Inventories	250				181	63	6				
31	Merchandising Inventories	1,531									1,531	
32												
33	Total Inventory	9,923	12	0	145	4,608	1,651	153	0	0	3,355	
34												
35	Transmission Line Pack Gas	301	0	0	298	0	0	0	0	0	3	
36	Gas in Storage	20,601	20,601									
37	Appliance Financing Receivables	14,299									14,299	
38												
39	Total Other Working Capital	45,124	20,613	0	443	4,608	1,651	153	0	0	17,657	
40												
41												
42	Total Working Capital	\$55,348	\$20,613	\$0	\$443	\$4,608	\$1,651	\$153	\$0	\$0	\$27,881	
43												
44												
45												
46												
47												

RATE BASE - FUNCTION
- WORKING CAPITAL

TAB 2E
SECTION 1
PAGE 6.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

SUMMARY BY FUNCTION
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Summary
Page 1.0

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Gas Supply - Gas Purch. & LNG	\$29,920	\$28,888	\$1,032	\$0	\$0 Page 2.8, Line 46
2						
3	Gas Supply - Administration	0	0	0	0	0
4						
5	Transmission	322,178	322,178	0	0	0 Page 4.10, Line 32
6						
7	Distribution - Lower Mainland	798,111	317,012	(0)	481,099	0 Page 5.10, Line 32
8						
9	Distribution - Inland	245,734	59,109	(0)	186,625	0 Page 6.10, Line 32
10						
11	Distribution - Columbia	23,487	5,535	0	17,952	0 Page 7.10, Line 32
12						
13	Marketing	2,280	2,280	0	0	0 Page 8.0, Line 10
14						
15	Customer Accounting	438	0	0	438	0 Page 8.0, Line 14
16						
17	Direct Assignment	45,549	13,497	3,690	28,362	
18						
19						
20	Total	\$1,467,697	\$748,498	\$4,722	\$714,477	\$0
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

RATE BASE - CLASSIFY
- SUMMARY

TAB 2E
SECTION 2
PAGE 1.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

GAS SUPPLY - GAS PURCHASES & LNG
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Gas Supply
Page 2.8

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	TOTAL NET GAS PLANT IN SERVICE						
2	Gross Plant	\$31,167	\$31,167				
3	Accumulated Depreciation	(6,683)	(6,683)				
4							
5		24,485	24,485	0	0	0	
6							
7							
8	CONTRIBUTIONS IN AID OF CONSTRUCTION	(31)	(31)				
9							
10	ADJUSTMENT FOR 13 MONTH AVERAGING	16	16				
11							
12	CONSTRUCTION ADVANCES	0					
13							
14	WORK IN PROGRESS, NO AFUDC	33	33				
15							
16	UNAMORTIZED DEFERRED CHARGES						
17	179-008 Deferred Interest	51	51				
18	Preference Share Issue Cost	(7)	(7)				
19	179-053 Local Gas Development	3,945	3,945				
20	179-092 Fraser Valley Gas Exploration	593		593			
21	179-064 Integrated Resource Plan G-69-93	250	159	91	0	0	
22	Integrated Resource Plan G-60-94	195	124	71	0	0	
23	Integrated Resource Plan 1996 - 98	54	34	20	0	0	
24	179-062 Property Tax	(3)	(3)				
25	179-088 G.C.R.A.	(20,556)		(20,556)			
26	Core Market Hearing Costs Order F-9-95	3		3			
27	179-091/100 Buy-Sell Operating Costs	170		170			
28	179-120 Offsystem Sales Coordination Centre	42		42			
29	279-024 Revelstoke Propane Cost	(2)		(2)			
30	Coastal Facilities	69	69				
31							
32		(15,195)	4,374	(19,569)	0	0	
33							
34							
35	CASH WORKING CAPITAL	0					
36							
37	OTHER WORKING CAPITAL						
38	Inventories	12	12				
39	Transmission Line Pack Gas	0	0				
40	Gas in Storage	20,601		20,601			
41							
42							
43							
44	DEFERRED INCOME TAX	0	0				
45							
46	Total Rate Base	\$29,920	\$28,888	\$1,032	\$0	\$0	
47							

RATE BASE - CLASSIFY
- GAS SUPPLY

TAB 2E
SECTION 2
PAGE 2.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

TRANSMISSION
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Transmission

Page 4.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GROSS PLANT IN SERVICE	\$381,394	\$381,394	\$0	\$0	\$0	
2	ACCUMULATED DEPRECIATION	(61,377)	(61,377)	0	0	0	
3							
4	NET GAS PLANT IN SERVICE	320,017	320,017	0	0	0	
5							
6							
7	ADJUSTMENT FOR 13 MONTH AVERAGING	195	195	0	0	0	
8							
9	CONTRIBUTIONS IN AID OF CONSTRUCTION	(384)	(384)	0	0	0	
10							
11	CONSTRUCTION ADVANCES	0	0				
12							
13	WORK IN PROGRESS, NO AFUDC	638	638				
14							
15	UNAMORTIZED DEFERRED CHARGES	1,270	1,270				
16							
17	CASH WORKING CAPITAL	0	0				
18							
19	OTHER WORKING CAPITAL						
20	Inventories – Pipe	0	0				
21	– Fittings						
22	– Meters & Regulators						
23	– Supplies & Other	145	145				
24	Transmission Line Pack Gas	298	298				
25							
26	Total Other Working Capital	443	443	0	0	0	
27							
28							
29	DEFERRED INCOME TAX	0	0				
30							
31							
32	TOTAL RATE BASE	\$322,178	\$322,178	\$0	\$0	\$0	
33							

RATE BASE - CLASSIFY
- TRANSMISSION

TAB 2E
SECTION 2
PAGE 4.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Lower Mainland
Page 5.0

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	DISTRIBUTION PLANT						
2	470 Land	\$49	\$39		\$10		
3							
4	471 Land Rights	17	13		4		
5							
6	471 Land Rights – Byron Creek						
7	Gross Plant	0					
8	Accumulated Depreciation	0					
9							
10	Net Book Value	0	0	0	0	0	
11							
12	472 Structures and Improvements – Leasehold Alterations						
13	Gross Plant	0	0		0		
14	Accumulated Depreciation	0	0		0		
15							
16	Net Book Value	0	0	0	0	0	
17							
18	472 Structures and Improvements – Frame Buildings						
19	Gross Plant	1,062	840		222		
20	Accumulated Depreciation	(183)	(145)		(38)		
21							
22	Net Book Value	879	696	0	184	0	
23							
24	472 Structures and Improvements – Masonry Buildings						
25	Gross Plant	1	0		0		
26	Accumulated Depreciation	4	3		1		
27							
28	Net Book Value	5	4	0	1	0	
29							
30	472 Structures and Improvements – Byron Creek						
31	Gross Plant	0					
32	Accumulated Depreciation	0					
33							
34	Net Book Value	0	0	0	0	0	
35							
36	473 Services						
37	Gross Plant	257,717			257,717		
38	Accumulated Depreciation	(18,983)			(18,983)		
39							
40	Net Book Value	238,734	0	0	238,734	0	
41							
42							
43							
44							
45							
46							
47							

RATE BASE – CLASSIFY
– DISTRIBUTION-LM

TAB 2E
SECTION 2
PAGE 5.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Lower Mainland
Page 5.1

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	DISTRIBUTION PLANT						
2	474 House Regulators and Meter Installations						
3	Gross Plant	\$48,746			\$48,746		
4	Accumulated Depreciation	(5,330)			(5,330)		
5							
6	Net Book Value	43,417	0	0	43,417	0	
7							
8	475 Mains						
9	Gross Plant	396,479	313,615		82,864		
10	Accumulated Depreciation	(57,617)	(45,575)		(12,042)		
11							
12	Net Book Value	338,863	268,040	0	70,822	0	
13							
14	476 Compressor Equipment – Commercial Cardlock Station						
15	Gross Plant	0					
16	Accumulated Depreciation	0					
17							
18	Net Book Value	0	0	0	0	0	
19							
20	476 Compressor Equipment – Lower Mainland						
21	Gross Plant	0					
22	Accumulated Depreciation	0					
23							
24	Net Book Value	0	0	0	0	0	
25							
26	476 Compressor Equipment – All Other						
27	Gross Plant	0					
28	Accumulated Depreciation	0					
29							
30	Net Book Value	0	0	0	0	0	
31							
32	477–00 Measuring and Regulating Equipment						
33	Gross Plant	17,130	13,550		3,580		
34	Accumulated Depreciation	(2,042)	(1,615)		(427)		
35							
36	Net Book Value	15,088	11,935	0	3,153	0	
37							
38	477–10 Telemetry Equipment						
39	Gross Plant	417	330		87		
40	Accumulated Depreciation	(220)	(174)		(46)		
41							
42	Net Book Value	196	155	0	41	0	
43							
44							
45							
46							
47							

RATE BASE – CLASSIFY
– DISTRIBUTION-LM

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Lower Mainland
Page 5.2

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	DISTRIBUTION PLANT					
2	477-00 Byron Creek					
3	Gross Plant	\$0				
4	Accumulated Depreciation	0				
5						
6	Net Book Value	0	0	0	0	0
7						
8	478 Meters					
9	Gross Plant	\$78,887			78,887	
10	Accumulated Depreciation	(10,079)			(10,079)	
11						
12	Net Book Value	68,809	0	0	68,809	0
13						
14	479 Other Distribution Equipment					
15	Gross Plant	\$630	499		132	
16	Accumulated Depreciation	(23)	(18)		(5)	
17						
18	Net Book Value	607	480	0	127	0
19						
20						
21	TOTAL DISTRIBUTION PLANT					
22	Gross Plant	801,136	328,886	0	472,250	0
23	Accumulated Depreciation	(94,473)	(47,524)	0	(46,949)	0
24						
25	Net Book Value	706,663	281,362	0	425,301	0
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

RATE BASE - CLASSIFY
- DISTRIBUTION-LM

TAB 2E
SECTION 2
PAGE 5.2

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Lower Mainland
Page 5.3

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GENERAL PLANT						
2	480 Land	\$2,782	\$1,142	(\$0)	\$1,640	\$0	
3							
4	481 Land Rights	0					
5							
6	482 Structures and Improvements – Leasehold Alterations						
7	Gross Plant	4,837	1,986	(0)	2,851	0	
8	Accumulated Depreciation	(1,544)	(634)	0	(910)	0	
9							
10	Net Book Value	3,293	1,352	(0)	1,941	0	
11							
12	482 Structures and Improvements – Lochburn Admin. Warehouse						
13	Gross Plant	10,704	4,394	0	6,310	0	
14	Accumulated Depreciation	(73)	(30)	0	(43)	0	
15							
16	Net Book Value	10,631	4,364	0	6,267	0	
17							
18	482 Structures and Improvements – All Other						
19	Gross Plant	3,619	1,486	(0)	2,133	0	
20	Accumulated Depreciation	(939)	(385)	0	(553)	0	
21							
22	Net Book Value	2,680	1,100	(0)	1,580	0	
23							
24	483 Office Furniture and Equipment – Fraser Valley/ Lochburn/ LNG						
25	Gross Plant	7,402	3,039	0	4,363	0	
26	Accumulated Depreciation	(1,283)	(527)	0	(757)	0	
27							
28	Net Book Value	6,118	2,512	0	3,607	0	
29							
30	483 Office Furniture and Equipment – Computers Software/ LNG/ Misc.						
31	Gross Plant	19,919	8,177	(0)	11,742	0	
32	Accumulated Depreciation	(5,875)	(2,412)	0	(3,463)	0	
33							
34	Net Book Value	14,044	5,765	(0)	8,278	0	
35							
36	483 Office Furniture and Equipment – Computers Micro. Comp. System						
37	Gross Plant	35	14	0	20	0	
38	Accumulated Depreciation	(31)	(13)	0	(18)	0	
39							
40	Net Book Value	4	2	0	2	0	
41							
42	483 Office Furniture and Equipment – EDP Equipment						
43	Gross Plant	11,414	4,686	(0)	6,729	0	
44	Accumulated Depreciation	(6,657)	(2,733)	0	(3,924)	0	
45							
46	Net Book Value	4,757	1,953	(0)	2,804	0	
47							

RATE BASE – CLASSIFY
– DISTRIBUTION-LM

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Lower Mainland
Page 5.4

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	GENERAL PLANT					
2	483 Office Furniture and Equipment – Computers Assist Mapping					
3	Gross Plant	\$81	\$33	(\$0)	\$48	\$0
4	Accumulated Depreciation	(122)	(50)	0	(72)	0
5						
6	Net Book Value	(41)	(17)	0	(24)	0
7						
8	483 Office Furniture and Equipment – Training, Display & Documentation					
9	Gross Plant	0	0	0	0	0
10	Accumulated Depreciation	0	0	0	0	0
11						
12	Net Book Value	0	0	0	0	0
13						
14	484 Transportation Equipment					
15	Gross Plant	4,795	1,969	(0)	2,827	0
16	Accumulated Depreciation	(2,834)	(1,164)	0	(1,671)	0
17						
18	Net Book Value	1,961	805	(0)	1,156	0
19						
20	485 Heavy Work Equipment					
21	Gross Plant	1,126	462	(0)	664	0
22	Accumulated Depreciation	(60)	(25)	0	(35)	0
23						
24	Net Book Value	1,066	438	(0)	628	0
25						
26	486 Tools and Work Equipment					
27	Gross Plant	7,604	3,121	(0)	4,482	0
28	Accumulated Depreciation	(1,713)	(703)	0	(1,010)	0
29						
30	Net Book Value	5,891	2,418	(0)	3,473	0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

RATE BASE - CLASSIFY
- DISTRIBUTION-LM

TAB 2E
SECTION 2
PAGE 5.4

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Lower Mainland
Page 5.5

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	GENERAL PLANT					
2	487 Equipment on Customer's Premises					
3	Gross Plant	\$0				
4	Accumulated Depreciation	0				
5						
6	Net Book Value	0	0	0	0	0
7						
8	487 Equipment on Customer's Premises – VRA Compressor					
9	Gross Plant	0				
10	Accumulated Depreciation	0				
11						
12	Net Book Value	0	0	0	0	0
13						
14	487 Equipment on Customer's Premises – VRA Installation Cost					
15	Gross Plant	0				
16	Accumulated Depreciation	0				
17						
18	Net Book Value	0	0	0	0	0
19						
20	488 Communication Equipment – Structures & Equipment					
21	Gross Plant	2,968	1,219	0	1,750	0
22	Accumulated Depreciation	(551)	(226)	0	(325)	0
23						
24	Net Book Value	2,417	992	0	1,425	0
25						
26	488 Communication Equipment – Radios					
27	Gross Plant	3,045	1,250	(0)	1,795	0
28	Accumulated Depreciation	(1,019)	(418)	0	(601)	0
29						
30	Net Book Value	2,026	832	(0)	1,194	0
31						
32	489 Other General Equipment					
33	Gross Plant	161	66	(0)	95	0
34	Accumulated Depreciation	(4)	(2)	0	(2)	0
35						
36	Net Book Value	157	64	(0)	92	0
37						
38	TOTAL GENERAL EQUIPMENT					
39	Gross Plant	80,491	33,043	(0)	47,447	0
40	Accumulated Depreciation	(22,705)	(9,321)	0	(13,384)	0
41						
42	Net Book Value	57,786	23,723	(0)	34,063	0
43						
44						
45						
46						
47						

RATE BASE – CLASSIFY
– DISTRIBUTION-LM

TAB 2E
SECTION 2
PAGE 5.5

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Lower Mainland
Page 5.6

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GENERAL PLANT						
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							

RATE BASE - CLASSIFY
- DISTRIBUTION-LM

TAB 2E
SECTION 2
PAGE 5.6

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Lower Mainland
Page 5.7

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	INTANGIBLE PLANT					
2	172 Preliminary Survey and					
3	Investigation Charges					
4	Gross Plant	\$266	\$109	\$0	\$157	\$0
5	Accumulated Depreciation	0	0	0	0	0
6						
7	Net Book Value	266	109	0	157	0
8						
9	175 Unamortized					
10	Conversion Expense					
11	Gross Plant	59	24	0	35	0
12	Accumulated Depreciation	(20)	(8)	0	(12)	0
13						
14	Net Book Value	39	16	0	23	0
15						
16	178 Organization Expense					
17	Gross Plant	394	162	(0)	232	0
18	Accumulated Depreciation	(147)	(60)	0	(87)	0
19						
20	Net Book Value	247	101	(0)	146	0
21						
22	179 Other Deferred Charges					
23	Gross Plant	0				
24	Accumulated Depreciation	0				
25						
26	Net Book Value	0	0	0	0	0
27						
28	401 Franchise Consents					
29	Gross Plant	54	22	(0)	32	0
30	Accumulated Depreciation	(20)	(8)	0	(12)	0
31						
32	Net Book Value	34	14	(0)	20	0
33						
34	402 Other Intangible Plant					
35	Gross Plant	80	33	(0)	47	0
36	Accumulated Depreciation	(41)	(17)	0	(24)	0
37						
38	Net Book Value	39	16	(0)	23	0
39						
40	TOTAL INTANGIBLE PLANT					
41	Gross Plant	853	350	(0)	503	0
42	Accumulated Depreciation	(227)	(93)	0	(134)	0
43						
44	Net Book Value	625	257	(0)	369	0
45						
46						
47						

RATE BASE – CLASSIFY
– DISTRIBUTION-LM

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - LOWER MAINLAND
 FOR THE YEAR ENDED DECEMBER 31, 1996
 (\$000)

Classify
 Rate Base - Distribution
 Lower Mainland
 Page 5.8

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GAS PLANT HELD FOR FUTURE USE						
2	Gross Plant	\$5,006	\$2,055	\$0	\$2,951	\$0	
3							
4	OVERHEAD CHARGED TO CONSTRUCTION						
5	Gross Plant	28,964	11,890	(0)	17,074	0	
6	Accumulated Depreciation	(73)	(30)	0	(43)	0	
7							
8	Net Book Value	28,891	11,860	(0)	17,031	0	
9							
10							
11	1996 BUDGET REDUCTION	(1,968)	(808)	0	(1,160)	0	
12							
13							
14	RETIREMENT WORKIN PROGRESS	(2)	(1)	0	(1)	0	
15							
16	TOTAL NET GAS PLANT IN SERVICE						
17	Gross Plant	914,482	375,417	(0)	539,065	0	
18	Accumulated Depreciation	(117,480)	(56,969)	0	(60,511)	0	
19							
20	Net Book Value	\$797,002	\$318,448	(\$0)	\$478,554	\$0	
21							

RATE BASE - CLASSIFY
 - DISTRIBUTION-LM

TAB 2E
 SECTION 2
 PAGE 5.8

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Lower Mainland
Page 5.9

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	CONTRIBUTIONS IN AID OF CONSTRUCTION					
2	DSEP / PGEP					
3	Gross Grant	\$1,083	\$857	\$0	\$226	\$0
4	Amortization	(229)	(181)	(0)	(48)	0
5						
6	Net Grant	854	676	0	179	0
7						
8	Natural Gas Vehicle Conversion Grants					
9	Gross Grant	35	14	(0)	21	0
10	Amortization	(42)	(17)	0	(25)	0
11						
12	Net Grant	(6)	(3)	0	(4)	0
13						
14	Natural Gas Vehicle Station Grants					
15	Gross Grant	0				
16	Amortization	0				
17						
18	Net Grant	0	0	0	0	0
19						
20	Leasehold Alterations					
21	Gross Grant	0	0	0	0	0
22	Amortization	0	0	0	0	0
23						
24	Net Grant	0	0	0	0	0
25						
26	Furniture and Equipment					
27	Gross Grant	60	25	0	35	0
28	Amortization	(22)	(9)	0	(13)	0
29						
30	Net Grant	38	16	0	22	0
31						
32	Computer Software Tax Savings					
33	Gross Grant	888	365	0	523	0
34	Amortization	0	0	0	0	0
35						
36	Net Grant	888	365	0	524	0
37						
38	Other					
39	Gross Grant	5,134	4,061	0	1,073	0
40	Amortization	(609)	(482)	(0)	(127)	0
41						
42	Net Grant	4,525	3,579	0	946	0
43						
44	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION					
45	Gross Grant	7,200	5,321	0	1,879	0
46	Amortization	(902)	(689)	(0)	(213)	0
47						
48	Net Grant	\$6,299	\$4,632	\$0	\$1,666	\$0

RATE BASE - CLASSIFY
- DISTRIBUTION-LM

TAB 2E
SECTION 2
PAGE 5.9

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Lower Mainland
Page 5.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GROSS PLANT IN SERVICE	\$914,482	\$375,417	(\$0)	\$539,065	\$0	Page 5.8, Line 17
2	ACCUMULATED DEPRECIATION	(117,480)	(56,969)	0	(60,511)	0	Page 5.8, Line 18
3							
4	NET GAS PLANT IN SERVICE	797,002	318,448	(0)	478,554	0	
5							
6							
7	ADJUSTMENT FOR 13 MONTH AVERAGING	466	191	0	275	0	
8							
9	CONTRIBUTIONS IN AID OF CONSTRUCTION	(6,299)	(4,632)	(0)	(1,666)	0	Page 5.9, Line 48
10							
11	CONSTRUCTION ADVANCES	(1,606)			(1,606)		
12							
13	WORK IN PROGRESS, NO AFUDC	701	288	(0)	413	0	
14							
15	UNAMORTIZED DEFERRED CHARGES	3,239	1,254	0	1,985	0	
16							
17	CASH WORKING CAPITAL	0	0	0	0		
18							
19	OTHER WORKING CAPITAL						
20	Inventories – Pipe	1,576	1,247	0	329	0	
21	– Fittings	1,945	0	0	1,945	0	
22	– Meters & Regulators	560	0	0	560	0	
23	– Supplies & Other	346	142	(0)	204	0	
24	– Manufacturing Inventories	181	74	(0)	107	0	
25							
26	Total Other Working Capital	4,608	1,463	(0)	3,145	0	
27							
28							
29	DEFERRED INCOME TAX	0	0	0	0	0	
30							
31							
32	TOTAL RATE BASE	\$798,111	\$317,012	(\$0)	\$481,099	\$0	
33							

RATE BASE – CLASSIFY
– DISTRIBUTION-LM

TAB 2E
SECTION 2
PAGE 5.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Inland
Page 6.0

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	DISTRIBUTION PLANT						
2	470 Land	\$1,024	\$773		\$251		
3							
4	471 Land Rights	359	271		88		
5							
6	471 Land Rights – Byron Creek						
7	Gross Plant	0					
8	Accumulated Depreciation	0					
9							
10	Net Book Value	0	0	0	0	0	
11							
12	472 Structures and Improvements – Leasehold Alterations						
13	Gross Plant	0	0		0		
14	Accumulated Depreciation	0	0		0		
15							
16	Net Book Value	0	0	0	0	0	
17							
18	472 Structures and Improvements – Frame Buildings						
19	Gross Plant	2,433	1,837		596		
20	Accumulated Depreciation	(419)	(316)		(103)		
21							
22	Net Book Value	2,014	1,521	0	493	0	
23							
24	472 Structures and Improvements – Masonry Buildings						
25	Gross Plant	1	1		0		
26	Accumulated Depreciation	9	7		2		
27							
28	Net Book Value	11	8	0	3	0	
29							
30	472 Structures and Improvements – Byron Creek						
31	Gross Plant	0					
32	Accumulated Depreciation	0					
33							
34	Net Book Value	0	0	0	0	0	
35							
36	473 Services						
37	Gross Plant	97,570			97,570		
38	Accumulated Depreciation	(7,187)			(7,187)		
39							
40	Net Book Value	90,383	0	0	90,383	0	
41							
42							
43							
44							
45							
46							
47							

RATE BASE – CLASSIFY
– DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Inland
Page 6.1

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	DISTRIBUTION PLANT					
2	474 House Regulators and Meter Installations					
3	Gross Plant	26,061			\$26,061	
4	Accumulated Depreciation	(2,850)			(\$2,850)	
5						
6	Net Book Value	23,212	0	0	23,212	0
7						
8	475 Mains					
9	Gross Plant	111,443	84,140		27,304	
10	Accumulated Depreciation	(16,195)	(12,227)		(3,968)	
11						
12	Net Book Value	95,248	71,912	0	23,336	0
13						
14	476 Compressor Equipment – Commercial Cardlock Station					
15	Gross Plant	0				
16	Accumulated Depreciation	0				
17						
18	Net Book Value	0	0	0	0	0
19						
20	476 Compressor Equipment – Lower Mainland					
21	Gross Plant	0				
22	Accumulated Depreciation	0				
23						
24	Net Book Value	0	0	0	0	0
25						
26	476 Compressor Equipment – All Other					
27	Gross Plant	0				
28	Accumulated Depreciation	0				
29						
30	Net Book Value	0	0	0	0	0
31						
32	477–00 Measuring and Regulating Equipment					
33	Gross Plant	14,270			14,270	
34	Accumulated Depreciation	(1,701)			(1,701)	
35						
36	Net Book Value	12,569	0	0	12,569	0
37						
38	477–10 Telemetry Equipment					
39	Gross Plant	1,043			1,043	
40	Accumulated Depreciation	(552)			(552)	
41						
42	Net Book Value	491	0	0	491	0
43						
44						
45						
46						
47						

RATE BASE – CLASSIFY
– DISTRIBUTION–ING

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Inland
Page 6.2

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	DISTRIBUTION PLANT					
2	477-00 Byron Creek					
3	Gross Plant	\$0				
4	Accumulated Depreciation	0				
5						
6	Net Book Value	0	0	0	0	0
7						
8	478 Meters					
9	Gross Plant	\$26,891			26,891	
10	Accumulated Depreciation	(3,436)			(3,436)	
11						
12	Net Book Value	23,455	0	0	23,455	0
13						
14	479 Other Distribution Equipment					
15	Gross Plant	\$220	166		54	
16	Accumulated Depreciation	(8)	(6)		(2)	
17						
18	Net Book Value	212	160	0	52	0
19						
20						
21	TOTAL DISTRIBUTION PLANT					
22	Gross Plant	281,315	87,187	0	194,128	0
23	Accumulated Depreciation	(32,337)	(12,542)	0	(19,795)	0
24						
25	Net Book Value	248,978	74,645	0	174,333	0
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

RATE BASE - CLASSIFY
- DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.2

FDC

CLASSIFICATION OF RATE BASE

DISTRIBUTION - INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Inland
Page 6.3

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	GENERAL PLANT					
2	480 Land	\$977	\$303	\$0	\$674	\$0
3						
4	481 Land Rights	0				
5						
6	482 Structures and Improvements - Leasehold Alterations					
7	Gross Plant	1,698	526	0	1,172	0
8	Accumulated Depreciation	(542)	(168)	(0)	(374)	0
9						
10	Net Book Value	1,156	358	(0)	798	0
11						
12	482 Structures and Improvements - Lochburn Admin. Warehouse					
13	Gross Plant	3,759	1,165	0	2,594	0
14	Accumulated Depreciation	(25)	(8)	0	(18)	0
15						
16	Net Book Value	3,733	1,157	0	2,576	0
17						
18	482 Structures and Improvements - All Other					
19	Gross Plant	1,271	394	0	877	0
20	Accumulated Depreciation	(330)	(102)	0	(228)	0
21						
22	Net Book Value	941	292	0	649	0
23						
24	483 Office Furniture and Equipment - Fraser Valley/ Lochburn/ LNG					
25	Gross Plant	2,599	806	0	1,794	0
26	Accumulated Depreciation	(451)	(140)	0	(311)	0
27						
28	Net Book Value	2,148	666	0	1,483	0
29						
30	483 Office Furniture and Equipment - Computers Software/ LNG/ Misc.					
31	Gross Plant	6,994	2,168	0	4,827	0
32	Accumulated Depreciation	(2,063)	(639)	(0)	(1,424)	0
33						
34	Net Book Value	4,931	1,528	0	3,403	0
35						
36	483 Office Furniture and Equipment - Computers Micro. Comp. System					
37	Gross Plant	12	4	0	8	0
38	Accumulated Depreciation	(11)	(3)	0	(7)	0
39						
40	Net Book Value	1	0	0	1	0
41						
42	483 Office Furniture and Equipment - EDP Equipment					
43	Gross Plant	4,008	1,242	0	2,766	0
44	Accumulated Depreciation	(2,338)	(724)	(0)	(1,613)	0
45						
46	Net Book Value	1,670	518	(0)	1,153	0
47						

RATE BASE - CLASSIFY
- DISTRIBUTION-ING

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Inland
Page 6.4

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	GENERAL PLANT					
2	483 Office Furniture and Equipment – Computers Assist Mapping					
3	Gross Plant	\$28	\$9	\$0	\$20	\$0
4	Accumulated Depreciation	(43)	(13)	(0)	(30)	0
5						
6	Net Book Value	(15)	(5)	(0)	(10)	0
7						
8	483 Office Furniture and Equipment – Training, Display & Documentation					
9	Gross Plant	0	0	0	0	0
10	Accumulated Depreciation	0	0	0	0	0
11						
12	Net Book Value	0	0	0	0	0
13						
14	484 Transportation Equipment					
15	Gross Plant	1,684	522	0	1,162	0
16	Accumulated Depreciation	(995)	(308)	(0)	(687)	0
17						
18	Net Book Value	689	213	(0)	475	0
19						
20	485 Heavy Work Equipment					
21	Gross Plant	395	123	0	273	0
22	Accumulated Depreciation	(21)	(7)	(0)	(14)	0
23						
24	Net Book Value	374	116	(0)	258	0
25						
26	486 Tools and Work Equipment					
27	Gross Plant	2,670	828	0	1,842	0
28	Accumulated Depreciation	(601)	(186)	(0)	(415)	0
29						
30	Net Book Value	2,069	641	(0)	1,427	0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

RATE BASE – CLASSIFY
– DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.4

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Inland
Page 6.5

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GENERAL PLANT						
2	487 Equipment on Customer's Premises						
3	Gross Plant	\$0					
4	Accumulated Depreciation	0					
5							
6	Net Book Value	0	0	0	0	0	
7							
8	487 Equipment on Customer's Premises – VRA Compressor						
9	Gross Plant	0					
10	Accumulated Depreciation	0					
11							
12	Net Book Value	0	0	0	0	0	
13							
14	487 Equipment on Customer's Premises – VRA Installation Cost						
15	Gross Plant	0					
16	Accumulated Depreciation	0					
17							
18	Net Book Value	0	0	0	0	0	
19							
20	488 Communication Equipment – Structures & Equipment						
21	Gross Plant	1,042	323	0	719	0	
22	Accumulated Depreciation	(193)	(60)	(0)	(133)	0	
23							
24	Net Book Value	849	263	0	586	0	
25							
26	488 Communication Equipment – Radios						
27	Gross Plant	1,069	331	0	738	0	
28	Accumulated Depreciation	(358)	(111)	0	(247)	0	
29							
30	Net Book Value	711	220	0	491	0	
31							
32	489 Other General Equipment						
33	Gross Plant	56	17	0	39	0	
34	Accumulated Depreciation	(1)	(0)	(0)	(1)	0	
35							
36	Net Book Value	55	17	0	38	0	
37							
38	TOTAL GENERAL EQUIPMENT						
39	Gross Plant	28,264	8,760	0	19,504	0	
40	Accumulated Depreciation	(7,973)	(2,471)	(0)	(5,502)	0	
41							
42	Net Book Value	20,291	6,289	0	14,002	0	
43							

RATE BASE – CLASSIFY
– DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.5

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Inland
Page 6.6

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	GENERAL PLANT					
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

RATE BASE - CLASSIFY
- DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.6

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Inland
Page 6.7

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	INTANGIBLE PLANT						
2	172 Preliminary Survey and						
3	Investigation Charges						
4	Gross Plant	\$93	\$29	\$0	\$64	\$0	
5	Accumulated Depreciation	0	0	0	0	0	
6							
7	Net Book Value	93	29	0	64	0	
8							
9	175 Unamortized						
10	Conversion Expense						
11	Gross Plant	21	6	0	14	0	
12	Accumulated Depreciation	(7)	(2)	0	(5)	0	
13							
14	Net Book Value	14	4	0	10	0	
15							
16	178 Organization Expense						
17	Gross Plant	138	43	0	95	0	
18	Accumulated Depreciation	(52)	(16)	0	(36)	0	
19							
20	Net Book Value	87	27	0	60	0	
21							
22	179 Other Deferred Charges						
23	Gross Plant	0					
24	Accumulated Depreciation	0					
25							
26	Net Book Value	0	0	0	0	0	
27							
28	401 Franchise Consents						
29	Gross Plant	19	6	0	13	0	
30	Accumulated Depreciation	(7)	(2)	0	(5)	0	
31							
32	Net Book Value	12	4	0	8	0	
33							
34	402 Other Intangible Plant						
35	Gross Plant	28	9	0	19	0	
36	Accumulated Depreciation	(14)	(4)	0	(10)	0	
37							
38	Net Book Value	14	4	0	10	0	
39							
40	TOTAL INTANGIBLE PLANT						
41	Gross Plant	299	93	0	207	0	
42	Accumulated Depreciation	(80)	(25)	0	(55)	0	
43							
44	Net Book Value	220	68	0	152	0	
45							
46							
47							

RATE BASE – CLASSIFY
– DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.7

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Inland
Page 6.8

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GAS PLANT HELD FOR FUTURE USE						
2	Gross Plant	\$1,758	\$545	\$0	\$1,213	\$0	
3							
4	OVERHEAD CHARGED TO CONSTRUCTION						
5	Gross Plant	10,132	3,140	0	6,992	0	
6	Accumulated Depreciation	(25)	(8)	(0)	(17)	0	
7							
8	Net Book Value	10,107	3,132				
9							
10							
11	1996 BUDGET REDUCTION	(691)	(214)	0	(477)	0	
12							
13							
14	RETIREMENT WORKIN PROGRESS	(1)	(0)	(0)	(1)	0	
15							
16	TOTAL NET GAS PLANT IN SERVICE						
17	Gross Plant	321,077	99,511	0	221,567	0	
18	Accumulated Depreciation	(40,415)	(15,046)	(0)	(25,369)	0	
19							
20	Net Book Value	\$280,662	\$84,465	\$0	\$196,197	\$0	
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							

RATE BASE - CLASSIFY
- DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.8

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Inland
Page 6.9

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	DSEP / PGEP					
2	Gross Grant	\$10,705	\$8,082	\$0	\$2,623	\$0
3	Amortization	(2,264)	(1,710)	(0)	(555)	0
4						
5	Net Grant	8,441	6,373	0	2,068	0
6						
7	Natural Gas Vehicle Conversion Grants					
8	Gross Grant	12	4	0	9	0
9	Amortization	(15)	(5)	0	(10)	0
10						
11	Net Grant	(2)	(1)	0	(2)	0
12						
13	Natural Gas Vehicle Station Grants					
14	Gross Grant	0				
15	Amortization	0				
16						
17	Net Grant	0	0	0	0	0
18						
19	Leasehold Alterations					
20	Gross Grant	0	0	0	0	0
21	Amortization	0	0	0	0	0
22						
23	Net Grant	0	0	0	0	0
24						
25	Furniture and Equipment					
26	Gross Grant	21	7	0	15	0
27	Amortization	(8)	(2)	0	(5)	0
28						
29	Net Grant	13	4	0	9	0
30						
31	Computer Software Tax Savings					
32	Gross Grant	312	97	0	215	0
33	Amortization	0	0	0	0	0
34						
35	Net Grant	312	97	0	215	0
36						
37	Other					
38	Gross Grant	27,686	20,903	0	6,783	0
39	Amortization	(3,284)	(2,480)	(0)	(805)	0
40						
41	Net Grant	24,401	18,423	0	5,978	0
42						
43	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION					
44	Gross Grant	38,736	29,092	0	9,644	0
45	Amortization	(5,571)	(4,196)	(0)	(1,375)	0
46						
47	Net Grant	\$33,165	\$24,896	\$0	\$8,269	\$0

RATE BASE - CLASSIFY
- DISTRIBUTION-ING

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Inland
Page 6.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GROSS PLANT IN SERVICE	\$321,077	\$99,511	\$0	\$221,567	\$0 Page 6.8, Line 17
2	ACCUMULATED DEPRECIATION	(40,415)	(15,046)	(0)	(25,369)	0 Page 6.8, Line 18
3						
4	NET GAS PLANT IN SERVICE	280,662	84,465	0	196,197	0
5						
6						
7	ADJUSTMENT FOR 13 MONTH AVERAGING	164	51	0	113	
8						
9	CONTRIBUTIONS IN AID OF CONSTRUCTION	(33,165)	(24,896)	(0)	(8,269)	0 Page 6.9, Line 47
10						
11	CONSTRUCTION ADVANCES	(561)			(561)	
12						
13	WORK IN PROGRESS, NO AFUDC	306	95	0	211	0
14						
15	UNAMORTIZED DEFERRED CHARGES	1,111	295	0	816	0
16						
17	CASH WORKING CAPITAL	0	0	0	0	0
18						
19	OTHER WORKING CAPITAL					
20	Inventories - Pipe	551	416	0	135	0
21	- Fittings	680	0	0	680	0
22	- Meters & Regulators	236	0	0	236	0
23	- Supplies & Other	121	38	0	84	0
24	- Manufacturing Inventories	63	20	0	44	0
25						
26	Total Other Working Capital	1,651	473	0	1,178	0
27						
28						
29	DEFERRED INCOME TAX	(4,433)	(1,374)	0	(3,059)	0
30						
31						
32	TOTAL RATE BASE	\$245,734	\$59,109	(\$0)	\$186,625	\$0
33		=====	=====	=====	=====	=====

RATE BASE - CLASSIFY
- DISTRIBUTION-ING

TAB 2E
SECTION 2
PAGE 6.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Columbia
Page 7.0

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	DISTRIBUTION PLANT						
2	470 Land	\$202	\$147		\$56		
3							
4	471 Land Rights	71	51		19		
5							
6	471 Land Rights – Byron Creek						
7	Gross Plant	0					
8	Accumulated Depreciation	0					
9							
10	Net Book Value	0	0	0	0	0	
11							
12	472 Structures and Improvements – Leasehold Alterations						
13	Gross Plant	0	0		0		
14	Accumulated Depreciation	0	0		0		
15							
16	Net Book Value	0	0	0	0	0	
17							
18	472 Structures and Improvements – Frame Buildings						
19	Gross Plant	405	293		111		
20	Accumulated Depreciation	(70)	(50)		(19)		
21							
22	Net Book Value	335	243	0	92	0	
23							
24	472 Structures and Improvements – Masonry Buildings						
25	Gross Plant	0	0		0		
26	Accumulated Depreciation	2	1		0		
27							
28	Net Book Value	2	1	0	0	0	
29							
30	472 Structures and Improvements – Byron Creek						
31	Gross Plant	0					
32	Accumulated Depreciation	0					
33							
34	Net Book Value	0					
35							
36	473 Services						
37	Gross Plant	9,596			9,596		
38	Accumulated Depreciation	(707)			(707)		
39							
40	Net Book Value	8,890	0	0	8,890	0	
41							
42							
43							
44							
45							
46							
47							

RATE BASE – CLASSIFY
– DISTRIBUTION–CNG

TAB 2E
SECTION 2
PAGE 7.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.1

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Gas Plant in Service						
2	474 House Regulators and Meter Installations						
3	Gross Plant	\$2,457			\$2,457		
4	Accumulated Depreciation	(269)			(\$269)		
5							
6	Net Book Value	2,188	0	0	2,188	0	
7							
8	475 Mains						
9	Gross Plant	10,419	7,554		2,865		
10	Accumulated Depreciation	(1,514)	(1,098)		(416)		
11							
12	Net Book Value	8,905	6,456	0	2,449	0	
13							
14	476 Compressor Equipment – Commercial Cardlock Station						
15	Gross Plant	0					
16	Accumulated Depreciation	0					
17							
18	Net Book Value	0					
19							
20	476 Compressor Equipment – Lower Mainland						
21	Gross Plant	0					
22	Accumulated Depreciation	0					
23							
24	Net Book Value	0					
25							
26	476 Compressor Equipment – All Other						
27	Gross Plant	0					
28	Accumulated Depreciation	0					
29							
30	Net Book Value	0					
31							
32	477–00 Measuring and Regulating Equipment						
33	Gross Plant	1,817			1,817		
34	Accumulated Depreciation	(217)			(217)		
35							
36	Net Book Value	1,600	0	0	1,600	0	
37							
38	477–10 Telemetry Equipment						
39	Gross Plant	50			50		
40	Accumulated Depreciation	(27)			(27)		
41							
42	Net Book Value	24	0	0	24	0	
43							
44							
45							
46							
47							

RATE BASE - CLASSIFY
- DISTRIBUTION-CNG

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.2

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Gas Plant in Service						
2	477-00 Byron Creek						
3	Gross Plant	\$0					
4	Accumulated Depreciation	0					
5							
6	Net Book Value	0					
7							
8	478 Meters						
9	Gross Plant	1,742			1,742		
10	Accumulated Depreciation	(223)			(223)		
11							
12	Net Book Value	1,519	0	0	1,519	0	
13							
14	479 Other Distribution Equipment						
15	Gross Plant	21	15		6		
16	Accumulated Depreciation	(1)	(1)		(0)		
17							
18	Net Book Value	20	15	0	6	0	
19							
20							
21	TOTAL DISTRIBUTION PLANT						
22	Gross Plant	26,781	8,060	0	18,720	0	
23	Accumulated Depreciation	(3,024)	(1,148)	0	(1,877)	0	
24							
25	Net Book Value	23,756	6,913	0	16,843	0	
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							

RATE BASE - CLASSIFY
- DISTRIBUTION-CNG

TAB 2E
SECTION 2
PAGE 7.2

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.3

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Allocated General Plant					
2	480 Land	\$93	\$28	\$0	\$65	\$0
3						
4	481 Land Rights	0				
5						
6	482 Structures and Improvements - Leasehold Alterations					
7	Gross Plant	162	49	0	113	0
8	Accumulated Depreciation	(52)	(16)	(0)	(36)	0
9						
10	Net Book Value	110	33	0	77	0
11						
12	482 Structures and Improvements - Lochburn Admin. Warehouse					
13	Gross Plant	358	108	0	250	0
14	Accumulated Depreciation	(2)	(1)	(0)	(2)	0
15						
16	Net Book Value	355	107	0	248	0
17						
18	482 Structures and Improvements - All Other					
19	Gross Plant	121	36	0	85	0
20	Accumulated Depreciation	(31)	(9)	(0)	(22)	0
21						
22	Net Book Value	90	27	0	63	0
23						
24	483 Office Furniture and Equipment - Fraser Valley/ Lochburn/ LNG					
25	Gross Plant	247	74	0	173	0
26	Accumulated Depreciation	(43)	(13)	(0)	(30)	0
27						
28	Net Book Value	205	62	(0)	143	0
29						
30	483 Office Furniture and Equipment - Computers Software/ LNG/ Misc.					
31	Gross Plant	666	200	0	465	0
32	Accumulated Depreciation	(196)	(59)	(0)	(137)	0
33						
34	Net Book Value	469	141	0	328	0
35						
36	483 Office Furniture and Equipment - Computers Micro. Comp. System					
37	Gross Plant	1	0	0	1	0
38	Accumulated Depreciation	(1)	(0)	0	(1)	0
39						
40	Net Book Value	0	0	0	0	0
41						
42	483 Office Furniture and Equipment - EDP Equipment					
43	Gross Plant	382	115	0	267	0
44	Accumulated Depreciation	(223)	(67)	(0)	(156)	0
45						
46	Net Book Value	159	48	0	111	0
47						

RATE BASE - CLASSIFY
- DISTRIBUTION-CNG

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.4

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Allocated General Plant					
2	483 Office Furniture and Equipment - Computers Assist Mapping					
3	Gross Plant	\$3	\$1	\$0	\$2	\$0
4	Accumulated Depreciation	(4)	(1)	(0)	(3)	0
5						
6	Net Book Value	(1)	(0)	0	(1)	0
7						
8	483 Office Furniture and Equipment - Training, Display & Documentation					
9	Gross Plant	0	0	0	0	0
10	Accumulated Depreciation	0	0	0	0	0
11						
12	Net Book Value	0	0	0	0	0
13						
14	484 Transportation Equipment					
15	Gross Plant	160	48	0	112	0
16	Accumulated Depreciation	(95)	(29)	(0)	(66)	0
17						
18	Net Book Value	66	20	0	46	0
19						
20	485 Heavy Work Equipment					
21	Gross Plant	38	11	0	26	0
22	Accumulated Depreciation	(2)	(1)	(0)	(1)	0
23						
24	Net Book Value	36	11	0	25	0
25						
26	486 Tools and Work Equipment					
27	Gross Plant	254	77	0	178	0
28	Accumulated Depreciation	(57)	(17)	0	(40)	0
29						
30	Net Book Value	197	59	0	138	0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Columbia
Page 7.5

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	GENERAL PLANT					
2	487 Equipment on Customer's Premises					
3	Gross Plant	0				
4	Accumulated Depreciation	0				
5						
6	Net Book Value	0				
7						
8	487 Equipment on Customer's Premises – VRA Compressor					
9	Gross Plant	0				
10	Accumulated Depreciation	0				
11						
12	Net Book Value	0				
13						
14	487 Equipment on Customer's Premises – VRA Installation Cost					
15	Gross Plant	0				
16	Accumulated Depreciation	0				
17						
18	Net Book Value	0				
19						
20	488 Communication Equipment – Structures & Equipment					
21	Gross Plant	99	30	0	69	0
22	Accumulated Depreciation	(18)	(6)	(0)	(13)	0
23						
24	Net Book Value	81	24	0	56	0
25						
26	488 Communication Equipment – Radios					
27	Gross Plant	102	31	0	71	0
28	Accumulated Depreciation	(34)	(10)	(0)	(24)	0
29						
30	Net Book Value	68	20	0	47	0
31						
32	489 Other General Equipment					
33	Gross Plant	5	2	0	4	0
34	Accumulated Depreciation	(0)	(0)	(0)	(0)	0
35						
36	Net Book Value	5	2	0	4	0
37						
38	TOTAL GENERAL EQUIPMENT					
39	Gross Plant	2,691	810	0	1,881	0
40	Accumulated Depreciation	(759)	(228)	(0)	(531)	0
41						
42	Net Book Value	1,932	581	0	1,350	0
43						
44						
45						
46						
47						

RATE BASE – CLASSIFY
– DISTRIBUTION-CNG

TAB 2E
SECTION 2
PAGE 7.5

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.6

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	GENERAL PLANT					
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

RATE BASE - CLASSIFY
- DISTRIBUTION-CNG

TAB 2E
SECTION 2
PAGE 7.6

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION – COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base – Distribution
Columbia
Page 7.7

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	INTANGIBLE PLANT						
2	172 Preliminary Survey and						
3	Investigation Charges						
4	Gross Plant	\$9	\$3	\$0	\$6	\$0	
5	Accumulated Depreciation	0	0	0	0	0	
6							
7	Net Book Value	9	3	0	6	0	
8							
9	175 Unamortized						
10	Conversion Expense						
11	Gross Plant	2	1	0	1	0	
12	Accumulated Depreciation	(1)	(0)	(0)	(0)	0	
13							
14	Net Book Value	1	0	(0)	1	0	
15							
16	178 Organization Expense						
17	Gross Plant	13	4	0	9	0	
18	Accumulated Depreciation	(5)	(1)	(0)	(3)	0	
19							
20	Net Book Value	8	2	0	6	0	
21							
22	179 Other Deferred Charges						
23	Gross Plant	0					
24	Accumulated Depreciation	0					
25							
26	Net Book Value	0	0	0	0	0	
27							
28	401 Franchise Consents						
29	Gross Plant	2	1	0	1	0	
30	Accumulated Depreciation	(1)	(0)	(0)	(0)	0	
31							
32	Net Book Value	1	0	0	1	0	
33							
34	402 Other Intangible Plant						
35	Gross Plant	3	1	0	2	0	
36	Accumulated Depreciation	(1)	(0)	(0)	(1)	0	
37							
38	Net Book Value	1	0	0	1	0	
39							
40	TOTAL INTANGIBLE PLANT						
41	Gross Plant	29	9	0	20	0	
42	Accumulated Depreciation	(8)	(2)	(0)	(5)	0	
43							
44	Net Book Value	21	6	0	15	0	
45							
46							
47							

RATE BASE – CLASSIFY
– DISTRIBUTION-CNG

TAB 2E
SECTION 2
PAGE 7.7

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.8

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GAS PLANT HELD FOR FUTURE USE						
2	Gross Plant	\$167	\$50	\$0	\$117	\$0	
3							
4	OVERHEAD CHARGED TO CONSTRUCTION						
5	Gross Plant	958	288	0	670	0	
6	Accumulated Depreciation	(3)	(1)	(0)	(2)	0	
7							
8	Net Book Value	955	287	(0)	668	0	
9							
10							
11	1996 BUDGET REDUCTION	(66)	(20)	(0)	(46)	0	
12							
13							
14	RETIREMENT WORKIN PROGRESS	(0)	(0)	(0)	(0)	0	
15							
16	TOTAL NET GAS PLANT IN SERVICE						
17	Gross Plant	30,559	9,198	0	21,361	0	
18	Accumulated Depreciation	(3,794)	(1,379)	(0)	(2,415)	0	
19							
20	Net Book Value	26,765	7,819	0	18,947	0	
21							

RATE BASE - CLASSIFY
- DISTRIBUTION-CNG

TAB 2E
SECTION 2
PAGE 7.8

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.9

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	CONTRIBUTIONS IN AID OF CONSTRUCTION					
2	DSEP / PGEP					
3	Gross Grant	\$824	\$597	(\$0)	\$226	\$0
4	Amortization	(174)	(126)	0	(48)	0
5						
6	Net Grant	649	471	(0)	179	0
7						
8	Natural Gas Vehicle Conversion Grants					
9	Gross Grant	1	0	0	1	0
10	Amortization	(1)	(0)	(0)	(1)	0
11						
12	Net Grant	(0)	(0)	0	(0)	0
13						
14	Natural Gas Vehicle Station Grants					
15	Gross Grant	0				
16	Amortization	0				
17						
18	Net Grant	0				
19						
20	Leasehold Alterations					
21	Gross Grant	0	0	0	0	0
22	Amortization	0	0	0	0	0
23						
24	Net Grant	0	0	0	0	0
25						
26	Furniture and Equipment					
27	Gross Grant	2	1	0	1	0
28	Amortization	(1)	(0)	(0)	(1)	0
29						
30	Net Grant	1	0	0	1	0
31						
32	Computer Software Tax Savings					
33	Gross Grant	30	9	0	21	0
34	Amortization	0	0	0	0	0
35						
36	Net Grant	30	9	0	21	0
37						
38	Other					
39	Gross Grant	2,757	1,999	0	758	0
40	Amortization	(327)	(237)	0	(90)	0
41						
42	Net Grant	2,430	1,762	0	668	0
43						
44	TOTAL CONTRIBUTIONS IN AID OF CONSTRUCTION					
45	Gross Grant	3,614	2,606	(0)	1,008	0
46	Amortization	(503)	(364)	0	(139)	0
47						
48	Net Grant	\$3,110	\$2,242	(\$0)	\$868	\$0

RATE BASE - CLASSIFY
- DISTRIBUTION-CNG

TAB 2E
SECTION 2
PAGE 7.9

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DISTRIBUTION - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Distribution
Columbia
Page 7.10

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	GROSS PLANT IN SERVICE	\$30,559	\$9,198	\$0	\$21,361	\$0	Page 7.8, Line 17
2	ACCUMULATED DEPRECIATION	(3,794)	(1,379)	(0)	(2,415)	0	Page 7.8, Line 18
3							
4	NET GAS PLANT IN SERVICE	26,765	7,819	0	18,947	0	
5							
6							
7	ADJUSTMENT FOR 13 MONTH AVERAGING	16	5	0	11	0	
8							
9	CONTRIBUTIONS IN AID OF CONSTRUCTION	(3,110)	(2,242)	0	(868)	0	Page 7.9, Line 48
10							
11	CONSTRUCTION ADVANCES	(53)			(53)		
12							
13	WORK IN PROGRESS, NO AFUDC	32	10	0	22	0	
14							
15	UNAMORTIZED DEFERRED CHARGES	107	28	0	79	0	
16							
17	CASH WORKING CAPITAL	0	0	0	0	0	
18							
19	OTHER WORKING CAPITAL						
20	Inventories - Pipe	52	38	0	14	0	
21	- Fittings	64	0	0	64	0	
22	- Meters & Regulators	19	0	0	19	0	
23	- Supplies & Other	12	3	0	8	0	
24	- Manufacturing Inventories	6	2	0	4	0	
25							
26	Total Other Working Capital	153	43	0	110	0	
27							
28							
29	DEFERRED INCOME TAX	(422)	(127)	0	(295)	0	
30							
31							
32	TOTAL RATE BASE	\$23,487	\$5,535	\$0	\$17,952	\$0	
33		=====	=====	=====	=====	=====	

RATE BASE - CLASSIFY
- DISTRIBUTION-CNG

TAB 2E
SECTION 2
PAGE 7.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

MARKETING AND CUSTOMER ACCOUNTING
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Rate Base - Marketing
Page 8.00

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Marketing - Deferred Charges					
2	179-008 Deferred Interest	0				
3	Preference Share Issue Cost	0				
4	179-063 Demand Side Management G-69-93	95	95			
5	Demand Side Management G-60-94/G-9-95	1,619	1,619			
6	Demand Side Management 1996 - 98	566	566			
7	179-062 Property Tax	0				
8						
9						
10	Total Deferred Charges in Rate Base	\$2,280	\$2,280	\$0	\$0	\$0
11		=====	=====	=====	=====	=====
12						
13	Customer Accounting - Deferred Charges					
14	179-118 BC Hydro Service Agreement Incremental	\$438			\$438	
15		=====	=====	=====	=====	=====

RATE BASE - CLASSIFY
- MARKETING AND
CUSTOMER ACCOUNTING

TAB 2E
SECTION 2
PAGE 8.0

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
COST OF SERVICEFOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)Function
Cost of Service

Page 1.0

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Cost of Gas (including Gas Lost)	\$346,250	\$346,250								\$0	
2												
3	Operation and Maintenance	109,761	2,225	3,045	14,942	46,003	16,154	1,537	5,690	10,787	9,378	Page 2.2, Line 31
4	Vehicle / FIS Lease	2,309	42	0	522	1,250	439	42	0	0	14	
5	Core Market Costs	0	0									
6	Property Tax	27,365	214	0	7,093	8,239	3,965	332	7	1	7,514	Page 3.0, Line 12
7	Depreciation and Amortization	49,558	2,119	0	10,245	24,879	8,178	771	392	876	2,098	Page 4.4, Line 44
8	Other Operating Revenue	(7,156)	(0)	0	(6)	(3,134)	(1,101)	(105)	0	0	(2,812)	Page 5.0, Line 23
9												
10		181,835	4,599	3,045	32,797	77,236	27,634	2,577	6,089	11,664	16,192	
11												
12												
13	Income Taxes	26,459	1,054	15	5,602	16,108	4,610	444	449	806	(2,629)	Page 6.0, Line 27
14												
15	Earned Return	138,226	2,818	0	30,342	75,165	23,143	2,212	215	41	4,290	Line 29
16												
17	Total Cost of Service	692,770	354,720	3,060	68,741	168,510	55,387	5,233	6,753	12,512	17,853	
18												
19	Less: Cost of Gas	(346,250)	(346,250)	0	0	0	0	0	0	0	0	
20												
21	Gross Margin Cost of Service	\$346,520	\$8,470	\$3,060	\$68,741	\$168,510	\$55,387	\$5,233	\$6,753	\$12,512	\$17,853	
22												
23												
24	Rate Base x	\$1,467,697	\$29,920	\$0	\$322,178	\$798,111	\$245,734	\$23,487	\$2,280	\$438	\$45,549	Function Rate Base Page 1.0, Line 24
25												
26	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	9.42%	
27												
28												
29	Earned Return	\$138,226	\$2,818	\$0	\$30,342	\$75,165	\$23,143	\$2,212	\$215	\$41	\$4,290	
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

COS - FUNCTION
- SUMMARYTAB 2E
SECTION 3
PAGE 1.0

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
OPERATING AND MAINTENANCE EXPENSE

FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Cost of Service
O & M Expense
Page 2.0

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admn.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	639 Propane Air Plant - Manufact'd Gas	\$21			21							
2	640 Liquid Natural Gas - Supervision	115	115									
3	649 Liquid Natural Gas Operation - Plant	1,057	1,057									
4												
5		1,193	1,172	0	21	0	0	0	0	0	0	
6												
7	660 Transmission - Supervision	1,815	0	0	1,794	0	0	0	0	0	0	21
8	665 Transmission Mains	1,445	0	0	1,428	0	0	0	0	0	0	17
9	666 Transmission Compressors	958	0	0	947	0	0	0	0	0	0	11
10	667 Measuring and Regulating	78	0	0	77	0	0	0	0	0	0	1
11	668 Telemetry	142	0	0	140	0	0	0	0	0	0	2
12	669 Gas Load - Supervision	1,112	0	1,116	(4)	0	0	0	0	0	0	(0)
13	669.198 Charged to Capital	(376)	0	0	(372)	0	0	0	0	0	0	(4)
14	669.199 Cross Charges	(410)	0	0	(405)	0	0	0	0	0	0	(5)
15												
16		4,764	0	1,116	3,606	0	0	0	0	0	0	42
17												
18	670 Distribution - Supervision	26,473	0	0	0	19,118	6,713	639	0	0	0	3
19	671 Load Dispatching	670	0	652	0	13	5	0	0	0	0	0
20	673 Remove & Reset Meters & Regulators	3,551	0	0	0	2,564	900	86	0	0	0	0
21	674 Premise Calls	4,516	0	0	0	3,261	1,145	109	0	0	0	1
22	675 Mains and Services	2,236	0	0	0	1,615	567	54	0	0	0	0
23	677 Measuring and Regulating	2,750	0	0	0	1,986	697	66	0	0	0	0
24	679.001 Muster Points	251	0	0	0	181	64	6	0	0	0	0
25	679.198 Charged to Capital	(15,431)	0	0	0	(11,144)	(3,913)	(373)	0	0	0	(2)
26	679.199 Cross Charges	(556)	0	0	0	(402)	(141)	(13)	0	0	0	(0)
27												
28		24,460	0	652	0	17,193	6,037	575	0	0	0	3
29												
30	684 System Operation - Communication	189	3	0	43	102	36	3	0	0	0	1
31	685 System Operation & Engineering	16,233	295	0	3,673	8,787	3,065	294	0	0	0	98
32	688 General Operations	1,364	25	0	309	738	259	25	0	0	0	8
33	689.198 Charged to Capital	(5,740)	(104)	0	(1,299)	(3,107)	(1,091)	(104)	0	0	0	(35)
34	689.199 Cross Charges	(2,894)	(53)	0	(655)	(1,567)	(550)	(52)	0	0	0	(18)
35												
36		9,152	167	0	2,071	4,954	1,740	166	0	0	0	56
37												
38												
39	Total Operating Expenses	39,569	1,339	1,768	5,698	22,147	7,777	740	0	0	0	101
40												
41												
42												
43												
44												
45												
46												
47												

COS - FUNCTION
- O&M EXPENSES

TAB 2E
SECTION 3
PAGE 2.0

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
OPERATING AND MAINTENANCE EXPENSE

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
O & M Expense
Page 2.1

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	700 Marketing	\$3,282							\$2,624		\$658	
2	700.198 Charged to Capital	0							0			
3	701 Advertising	461							461			
4	702 Demonstration & Selling	2,424							2,424			
5	703 Merchandising Revenue	(6,682)									(6,682)	
6	704 Merchandising Cost of Goods	5,281									5,281	
7	709 Other Sales Promotion	181							181			
8												
9	Total Marketing	4,947	0	0	0	0	0	0	5,690	0	(743)	
10												
11	710 Customer Accounting	4,294								4,294		
12	711 Contracts and Orders	901								901		
13	712 Meter Reading	3,323								3,323		
14	713 Customer Billing & Accounting	2,269								2,269		
15	714 Credit and Collection	6,701									6,701	
16	718 Uncollectible Accounts	2,036									2,036	
17												
18	Total Customer Accounting	19,524	0	0	0	0	0	0	0	10,787	8,737	
19												
20	832 Manufactured Gas Production - Maint.	10			10							
21	840 Local Storage - Plant Maint.	0	0									
22	849 Liquefied Natural Gas - Plant Maint.	200	200									
23												
24		210	200	0	10	0	0	0	0	0	0	
25												
26	862 Trans. Struct. & Improvements - Mtnce.	16	0	0	16	0	0	0	0	0	0	
27	865 Transmission Mains - Maintenance	496	0	0	490	0	0	0	0	0	6	
28	866 Compressors - Maintenance	135	0	0	133	0	0	0	0	0	2	
29	867 Measuring and Regulating - Maintenance	10	0	0	10	0	0	0	0	0	0	
30	868 Telemetry - Maintenance	50	0	0	49	0	0	0	0	0	1	
31												
32		707	0	0	699	0	0	0	0	0	8	
33												
34	872 Distrib. Struct. & Improvements - Mtnce.	43	0	0	0	31	11	1	0	0	0	
35	875 Mains and Services - Maintenance	2,466	0	0	0	1,781	625	60	0	0	0	
36	877 Measuring and Regulating - Maintenance	199	0	0	0	144	50	5	0	0	0	
37	878 Meters - Maintenance	2,007	0	0	0	1,449	509	48	0	0	0	
38	879 Muster Points - Maintenance	41	0	0	0	30	10	1	0	0	0	
39												
40		4,756	0	0	0	3,435	1,206	115	0	0	1	
41												
42	884 Communication - Maintenance	85	2	0	19	46	16	2	0	0	1	
43	885 System Mtnce. - Eng./Bldgs./Yards	422	8	0	95	228	80	8	0	0	3	
44	888 General Operations	1,545	28	0	350	836	294	28	0	0	9	
45	889.199 Cross Charges	(91)	(2)	0	(21)	(49)	(17)	(2)	0	0	(1)	
46												
47		1,961	36	0	444	1,061	373	35	0	0	12	
48												
49	Total Maintenance	7,634	236	0	1,153	4,496	1,579	150	0	0	21	

COS - FUNCTION
- O&M EXPENSES

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
OPERATING AND MAINTENANCE EXPENSE

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
O & M Expense
Page 2.2

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	690 NGV Compressors	\$88									88	
2	790 NGV Operations	910									910	
3	790.198 Charged to Capital	(225)									(225)	
4	890 NGV Maintenance	250									250	
5												
6	Total NGV	1,023	0	0	0	0	0	0	0	0	1,023	
7												
8												
9	721 Administrative Expenses	48,733	863	1,277	10,731	25,674	9,015	858	0	0	314	
10	722 Special Services	778	14	0	176	421	148	14	0	0	5	
11	723 Insurance - General	1,295	24	0	293	701	246	23	0	0	9	
12	724 Injuries and Damages	206	4	0	47	111	39	4	0	0	1	
13	728 Other Administrative and General Expense	3,571	65	0	808	1,932	678	65	0	0	24	
14	729.198 Charges to Capital	(13,445)	(245)	0	(3,040)	(7,274)	(2,554)	(243)	0	0	(89)	
15	729.199 Cross Charges	(274)	(5)	0	(62)	(148)	(52)	(5)	0	0	(2)	
16												
17	Total Administrative Expenses	40,864	720	1,277	8,952	21,416	7,520	716	0	0	262	
18												
19	Subtotal	113,561	2,294	3,045	15,802	48,060	16,876	1,607	5,690	10,787	9,401	
20												
21	Less - Vehicle Depreciation Included Above	(531)	(10)	0	(120)	(287)	(101)	(10)	0	0	(3)	
22	Less - Leased Vehicle Interest											
23	Included Above	(977)	(18)	0	(221)	(529)	(186)	(18)	0	0	(6)	
24	Less - 1996 Budget Adjustments	(2,292)	(42)	0	(519)	(1,241)	(436)	(41)	0	0	(14)	
25												
26												
27												
28												
29												
30												
31	TOTAL OPERATION AND MAINTENANCE EXPENSES	\$109,761	\$2,225	\$3,045	\$14,942	\$46,003	\$16,154	\$1,537	\$5,690	\$10,787	\$9,378	
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

COS - FUNCTION
- O&M EXPENSES

TAB 2E
SECTION 3
PAGE 2.2

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
PROPERTY TAXES

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
Property Taxes
Page 3.0

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	1% in Lieu of General Municipal Tax	\$6,787									\$6,787	
2												
3	General, School & Other	17,151	132	0	6,757	6,346	3,544	286	0	0	86	
4												
5	Deferral Account	(1,244)	(13)	0	(689)	(647)	(361)	(29)	0	0	496	
6												
7	Property Taxes	22,694	119	0	6,068	5,699	3,183	257	0	0	7,369	
8												
9	Corporate Capital Tax	4,871	95	0	1,025	2,540	782	75	7	1	145	
10												
11												
12	Total Property Taxes	\$27,365	\$214	\$0	\$7,093	\$8,239	\$3,965	\$332	\$7	\$1	\$7,514	
13												
14												
15												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

COS - FUNCTION
PROPERTY TAXES

TAB 2E
SECTION 3
PAGE 3.0

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
DEPRECIATION AND AMORTIZATION

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
Dep'n. & Amort. Expense
Page 4.0

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	MANUFACTURED GAS / LOCAL STORAGE PLANT											
2	-----											
3	432 Manufact'd Gas - Struct. & Improvement											
4	- Frame Buildings	\$0			\$0							
5	- Masonry Buildings	5			5							
6	433 Manufacturing Equipment	0			0							
7	434 Gas Holders - Manufacturing	7			7							
8	437 Measuring & Regulating	10			10							
9	442-00 Structures and Improvements	70	70									
10	443-00 Gas Holders Storage	373	373									
11	449-00 Local Storage Equipment	562	562									
12												
13		1,027	1,005	0	22	0	0	0	0	0	0	
14												
15												
16	GAS PLANT HELD FOR FUTURE USE											
17	-----											
18	492-00 Structures & Improvements											
19	- Frame Buildings	1			1							
20	- Masonry Buildings	0			0							
21	492-00 Manufacturing Equipment	7			7							
22	492-00 Gas Holder	2			2							
23	492-00 Compressor Equip / Commun. Equip	2			2							
24												
25		12	0	0	12	0	0	0	0	0	0	
26												
27												
28	TRANSMISSION PLANT											
29	-----											
30	461 Land Rights - Byron Creek	1									1	
31	462-00 Structures and Improvements											
32	- Compressor Stations	204	0	0	204	0	0	0	0	0	0	
33	463-00 - Measuring & Regulating	60	0	0	60	0	0	0	0	0	0	
34	464-00 - Other	5	0	0	5	0	0	0	0	0	0	
35	465-00 Mains & Crossings	4,676	0	0	4,615	0	0	0	0	0	61	
36	465-00 Mains & Crossings - Byron Creek	34									34	
37	466-00 Compressor Equipment	1,092	0	0	1,092	0	0	0	0	0	0	
38	467-00 Measuring & Regulating	402	0	0	402	0	0	0	0	0	0	
39	467-10 Telemetry	425	0	0	425	0	0	0	0	0	0	
40	468-00 Communications Structures & Equip.	57	0	0	57	0	0	0	0	0	0	
41	469-00 Other Transmission Equipment	41	0	0	41	0	0	0	0	0	0	
42												
43		6,997	0	0	6,901	0	0	0	0	0	96	
44												
45												
46												
47												

1 - DEP'N & AMORTIZATION
COS - FUNCTION

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
DEPRECIATION AND AMORTIZATIONFOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)Function
Cost of Service
Dep'n. & Amort. Expense
Page 4.1

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	DISTRIBUTION PLANT											
2	-----											
3	471 Land Rights - Byron Creek	\$0									\$0	
4	472-00 Structures & Improvements											
5	-Leasehold Alterations	0				0	0	0				
6	-Frame Buildings	114				31	71	12				
7	-Masonry Buildings	0				0	0	0				
8	-Byron Creek	0									0	
9	473-00 Services	7,123				5,031	1,905	187				
10												
11	474-00 House Regulator & Meter Installation	2,201				1,389	742	70				
12	475-00 Mains	10,212				7,811	2,196	205				
13	476-00 Compressed Natural Gas											
14	-Commercial Cardlock Station	16									16	
15	-NGV Compressor Equipment	101									101	
16	-All Other	233									233	
17	477-00 Measuring & Regulating	930				480	400	51				
18	477-10 Telemetry	148				41	102	5				
19	477-00 Byron Creek	7									7	
20	478 Meters	3,079				2,259	770	50				
21	479 Other Distribution Equipment	22				16	6	1				
22												
23		24,186	0	0	0	17,057	6,191	581	0	0	357	
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

- DEP'N & AMORTIZATION
COS - FUNCTIONTAB 2E
SECTION 3
PAGE 4.1

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
DEPRECIATION AND AMORTIZATION

FOR THE YEAR ENDED DECEMBER 31, 1998
(\$000)

Function
Cost of Service
Dep'n. & Amort. Expense
Page 4.2

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	GENERAL PLANT											
2	-----											
3	482-00 Structures & Improvements											
4	-Leasehold Alterations	\$807	\$15	\$0	\$183	\$437	\$153	\$15	\$0	\$0	\$5	
5	-Lochburn Admin. Warehouse	274	5	0	62	148	52	5	0	0	2	
6	-Frame Buildings	203	4	0	46	110	39	4	0	0	1	
7	483-00 Office Furniture & Equipment											
8	-Fraser Valley / Lochburn / LNG	644	12	0	146	349	122	12	0	0	4	
9	-Computers - Software / LNG / Misc.	3,976	72	0	900	2,152	756	72	0	0	24	
10	-Computers Micro. Comp. System	8	0	0	2	4	2	0	0	0	0	
11	-Computer Hardware	3,979	72	0	900	2,154	756	72	0	0	24	
12	-Computers - Assist Mapping	19	0	0	4	10	4	0	0	0	0	
13	-Training, Display & Documentation											
14	Materials	0	0	0	0	0	0	0	0	0	0	
15	484-00 Transportation Equipment	1,232	22	0	279	667	234	22	0	0	7	
16	485-00 Maintenance & Repair Equipment	97	2	0	22	53	18	2	0	0	1	
17	486-00 Tools & Work Equipment	652	12	0	148	353	124	12	0	0	4	
18	487-00 Equipment on Customers' Premises	88									88	
19	487-XX - VRA Compressor	89									89	
20	487-XX - VRA Compressor Installation Cost	53									53	
21	488-00 Communication - Structures & Equip.	267	5	0	60	145	51	5	0	0	2	
22	488-00 Communication - Radios	542	10	0	123	293	103	10	0	0	3	
23	489-00 Other General Equipment											
24	-All Other	13	0	0	3	7	2	0	0	0	0	
25												
26		12,943	231	0	2,876	6,882	2,416	230	0	0	307	
27												
28												
29	INTANGIBLE PLANT											
30	-----											
31	117-00 Utility Plant Acquisition Adj.	0	0	0	0	0	0	0	0	0	0	
32	175-00 Unamortized Conversion Expense	1	0	0	0	1	0	0	0	0	0	
33	178-00 Organization Expense	7	0	0	2	4	1	0	0	0	0	
34	179-01 Other Deferred Charges	0	0	0	0	0	0	0	0	0	0	
35	401-00 Franchise and Consents	1	0	0	0	1	0	0	0	0	0	
36	402-00 Other Intangible Plant	3	0	0	1	2	1	0	0	0	0	
37												
38		12	0	0	3	6	2	0	0	0	0	
39												
40												
41	UNCLASSIFIED PLANT											
42	498-00 Expense Charged to Construction	778	20	0	164	423	148	14	0	0	9	
43												
44	TOTAL DEPRECIATION PROVISION	45,955	1,257	0	9,978	24,368	8,758	825	0	0	770	
45												
46												
47												

DEP'N & AMORTIZATION
COS - FUNCTION

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
DEPRECIATION AND AMORTIZATION

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
Dep'n. & Amort. Expense
Page 4.3

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	TOTAL DEPRECIATION PROVISION	\$45,955	\$1,257	\$0	\$9,978	\$24,368	\$8,758	\$825	\$0	\$0	\$770	
2												
3	AMORTIZATION OF CONTRIBUTIONS IN AID OF CONSTRUCTION											
4	- DSEP/GEAP	(277)				(24)	(236)	(18)				
5	- Natural Gas Vehicle - Conversion Grants	(10)	(0)	0	(2)	(5)	(2)	(0)	0	0	(0)	
6	- Natural Gas Vehicle - Station Grants	(36)									(36)	
7	- Leasehold Alterations	0										
8	- Furniture and Equipment	(6)	(0)	0	(1)	(3)	(1)	(0)	0	0	(0)	
9	- Computer Software Tax Recovery	0	0	0	0	0	0	0	0	0	0	
10	- All Other	(731)				(105)	(569)	(57)				
11												
12		(1,060)	(0)	0	(3)	(138)	(807)	(75)	0	0	(36)	
13												
14												
15	DEPRECIATION CHARGED TO CONSTRUCTION	(813)			(188)	(451)	(158)	(15)				
16												
17												
18	TOTAL DEPRECIATION EXPENSE	\$44,082	\$1,256	\$0	\$9,786	\$23,780	\$7,792	\$735	\$0	\$0	\$733	
19												
20												
21												
22												
23												
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

- DEP'N & AMORTIZATION
COS - FUNCTION

TAB 2E
SECTION 3
PAGE 4.3

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
DEPRECIATION AND AMORTIZATIONFOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)Function
Cost of Service
Dep'n. & Amort. Expense
Page 4.4

Line No.	B.C.U.C. Account	Total	----- Gas Supply -----			----- Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	TOTAL DEPRECIATION EXPENSE	\$44,082	\$1,256	\$0	\$9,788	\$23,780	\$7,792	\$735	\$0	\$0	\$733	Page 4.3, Line 18
2												
3	AMORTIZATION EXPENSE											
4	Deferred Interest	1,278	24	0	288	690	242	23	0	0	11	
5	Deferred Preference Share Cost	(147)	(3)	0	(33)	(79)	(28)	(3)	0	0	(1)	
6	Market Rebate Incentive:											
7	- Water Heater Grants	109									109	
8	- Commercial & Multi-Family	40									40	
9	NGV Conversion Grants	160									160	
10	NGV Conversion Grants 1996 - 98	0									0	
11	NGV Fuelling Probe	121									121	
12	Local Gas Development	598	598									
13	Fraser Valley Gas Exploration	91	91									
14	Rate Design Costs - Phase B	192									192	
15	Revenue Requirement Hearing - 1992	33									33	
16	Revenue Requirement Hearing - 1994 & 1995	156									156	
17	Revenue Requirement Hearing - 1996 - 98	111									111	
18	Demand Side Management G-69-93	33							33			
19	Demand Side Management G-60-94/G-9-95	359							359			
20	Demand Side Management 1996 - 98	0							0			
21	Integrated Resource Plan G-69-93	78	78									
22	Integrated Resource Plan G-60-94	43	43									
23	Integrated Resource Plan 1996 - 98	0	0									
24	Appliance Insurance Program	136									136	
25	Corporate Reorganization	25									25	
26	Residential Thermostat Program	8									8	
27	Westar Receivable	27									27	
28	Offsystem Sales Coordination Centre	10	10									
29	Core Market Hearing Costs	5	5									
30	BC Hydro Service Agreement Increase	876								876		
31	1993 Industrial Margin Shift	(99)									(99)	
32	T-Service Lost Margin	(67)									(67)	
33	Crestbrook, Elko Margin	31									31	
34	Recovery of Non-Utility Service	(14)									(14)	
35	NGV B.C. Transit Grants	159									159	
36	BC21 Power Smart Program	222									222	
37	Coastal Facilities Relocation	533	10	0	121	289	101	10	0	0	3	
38	Coastal Facilities Lochburn NBV Amort.	369	7	0	83	200	70	7	0	0	2	
39	Coastal Facilities Fraser Valley NBV Amort.	0	0	0	0	0	0	0	0	0	0	
40												
41	TOTAL AMORTIZATION EXPENSE	5,476	862	0	459	1,099	386	37	392	876	1,365	
42												
43												
44	TOTAL DEPRECIATION AND AMORTIZATION EXPENSE	\$49,558	\$2,119	\$0	\$10,245	\$24,879	\$8,178	\$771	\$392	\$876	\$2,098	
45												
46												
47												

COS - FUNCTION
DEP'N & AMORTIZATIONTAB 2E
SECTION 3
PAGE 4.4

FDC

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
OTHER REVENUE

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
Other Revenue
Page 5.0

Line No.	B.C.U.C. Account	Total	Gas Supply -----			Distribution -----				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Late Payment Charge	\$688									688	
2	Revenue from Service Work	4,321				3,121	1,096	104				
3	NGV Tank Rental	215									215	
4												
5	Miscellaneous	0										
6	Burrard - Interruptible Margin / Swing Gas											
7	Reservation Fee	0										
8	PCEC Wheeling Charge	0										
9	Furnace Repair Program	0										
10	Appliance Financing	1,880									1,880	
11												
12												
13	Other Miscellaneous	0										
14	Burrard Line Recovery	0										
15	Fort Nelson Administration Fee	25	0	0	6	14	5	0	0	0	0	
16	T-Service Loss Margin	0										
17	NSF Cheques	28									28	
18	S.S. Tax Commission	1									1	
19												
20	Total Other Miscellaneous	54	0	0	6	14	5	0	0	0	29	
21												
22												
23	TOTAL OTHER REVENUE	\$7,158	\$0	\$0	\$6	\$3,134	\$1,101	\$105	\$0	\$0	\$2,812	
24												
25												
26												
27												
28												
29												
30												
31												
32												
33												
34												
35												
36												
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

COS - FUNCTION
- OTHER REVENUE

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
INCOME TAX EXPENSE

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
Income Tax
Page 6.0

Line No.	B.C.U.C. Account	Total	Gas Supply -----			Distribution -----					Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing	Customer Accounting		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	CALCULATION OF INCOME TAXES											
2	Earned Return	\$138,228	\$2,818	\$0	\$30,342	\$75,165	\$23,143	\$2,212	\$215	\$41	\$4,290	Page 1.0, Line 29
3	Deduct - Interest on Debt	(74,916)	(1,527)	0	(16,445)	(40,738)	(12,543)	(1,199)	(116)	(22)	(2,325)	Line 36
4	Add- Non-Tax Ded. Expense (Net)	4,854	852	18	260	684	240	23	426	940	1,410	Page 6.1, Line 40
5												
6	Accounting Income After Tax	68,164	2,143	18	14,157	35,111	10,840	1,036	525	959	3,375	
7	Deduct - Timing Differences	(36,662)	(1,013)	0	(8,835)	(19,267)	(6,379)	(606)	1	0	(563)	Page 6.1, Line 51
8	Add - Large Corporation Tax	2,817	57	0	618	1,532	472	45	4	1	87	
9												
10	Taxable Income After Tax	\$34,319	\$1,188	\$18	\$5,940	\$17,376	\$4,933	\$475	\$530	\$960	\$2,900	
11												
12												
13	Income Tax Rate (Current Tax)	45.620%	45.62%	45.62%	45.62%	45.62%	45.62%	45.62%	45.62%	45.62%	45.62%	
14	1 - Current Income Tax Rate	54.380%	54.38%	54.38%	54.38%	54.38%	54.38%	54.38%	54.38%	54.38%	54.38%	
15												
16	Taxable Income (L10 : L14)	\$63,110	\$2,184	\$33	\$10,924	\$31,952	\$9,071	\$873	\$975	\$1,766	\$5,332	
17	Add Amount Required to Provide for											
18	Deferred Income Tax	(5,149)									(5,149)	
19												
20		\$57,961	\$2,184	\$33	\$10,924	\$31,952	\$9,071	\$873	\$975	\$1,766	\$183	
21												
22												
23	Income Tax- Current (L21 x L13)	\$26,442	\$996	\$15	\$4,984	\$14,577	\$4,138	\$398	\$445	\$805	\$84	
24	- Deferred Income Tax (L18 x L14)	(2,800)	0	0	0	0	0	0	0	0	(2,800)	
25	- Large Corporation Tax	2,817	57	0	618	1,532	472	45	4	1	87	
26												
27	Total	\$26,459	\$1,054	\$15	\$5,602	\$16,108	\$4,610	\$444	\$449	\$806	(\$2,629)	
28												
29												
30												
31	Rate Base x	\$1,467,697	\$29,920	\$0	\$322,178	\$798,111	\$245,734	\$23,487	\$2,280	\$438	\$45,549	
32												
33	Cost Component of Debt	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	5.10%	
34												
35												
36	Utility Interest Expense	\$74,916	\$1,527	\$0	\$16,445	\$40,738	\$12,543	\$1,199	\$116	\$22	\$2,325	
37												
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												

BC GAS UTILITY LTD.

FUNCTIONALIZATION OF
INCOME TAX EXPENSE
PERMANENT AND TIMING DIFFERENCES
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Function
Cost of Service
Income Tax
Page 6.1

Line No.	B.C.U.C. Account	Total	Gas Supply			Distribution				Customer Accounting	Direct Assignment	COMMENTS
			Gas Purch./ LNG	Admin.	Transmission	Lower Mainland	Inland	Columbia	Marketing			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	ITEMS OF A PERMANENT NATURE INCREASING TAXABLE INCOME											
2	Amort. of Preference Share Costs	(\$147)	(3)	0	(33)	(79)	(28)	(3)	0	0	(1)	
3	Amort. of Water Heater Grant	109									109	
4	Amort. of Comm. & Multi-Family Incent	40									40	
5	Amort. of NGV Conversion Grants	160									160	
6	Amort. of NGV Fuelling Probe	121									121	
7	Amort. of Local Gas Development Costs	598	598									
8	Amort. of Fraser Valley Gas Exploration	91	91									
9	Amort. of Rate Design Costs - Phase B	192									192	
10	Amort. of Rev. Require. Hearing - 1992	33									33	
11	Amort. of Rev. Require. Hearing - 94/95	156									156	
12	Amort. of Rev. Require. Hearing - 1996 - 98	111									111	
13	Amort. of DSM G-69-93	33										
14	Amort. of DSM G-60-94/G-9-95	359							33			
15	Amort. of DSM 1996 - 98	0							359			
16	Amort. of IRP Costs G-69-93	78	78						0			
17	Amort. of IRP Costs G-60-94	43	43									
18	Amort. of IRP Costs 1996 - 98	0	0									
19	Amort. of Appliance Insurance Program	136									136	
20	Amort. of Corporate Reorganization	25									25	
21	Amort. of Residential Thermostat Program	8									8	
22	Amort. of Westar Receivable	27									27	
23	Amort. of Offsystem Sales Coordination Centre	10	10									
24	Amort. of Core Market Hearing Costs	5	5									
25	Amort. of BC Hydro Service Agreement Increase	876								876		
26	Amort. of 1993 Industrial Margin	(99)									(99)	
27	Amort. of T-Service Lost Margin	(67)									(67)	
28	Amort. of Cresbrook, Elko Margin	31									31	
29	Amort. of Recovery of Non-Utility Service	(14)									(14)	
30	Amort. of NGV BC Transit Grants	159									159	
31	Amort. of BC21 Power Smart Program	222									222	
32	Amort. of Coastal Facilities Relocation	533	10	0	121	289	101	10	0	0	3	
33	Amort. of Coastal Facilities Lochburn & FV NBV	369	7	0	83	200	70	7	0	0	2	
34	Non-Tax Deductible Expenses	656	13	18	89	275	97	9	34	64	56	
35	ITEMS OF A PERMANENT NATURE DECREASING TAXABLE INCOME											
36	Amortization of non-tax deductible											
37	financing expense	0										
38	Plant removal costs	0	0	0	0	0	0	0	0	0	0	
39												
40	Total permanent differences	\$4,854	\$852	\$18	\$260	\$684	\$240	\$23	\$426	\$940	\$1,410	
41												
42	TIMING DIFFERENCE ADJUSTMENTS											
43	Depreciation	\$44,895	\$1,256	\$0	\$9,974	\$24,231	\$7,950	\$750	\$0	\$0	\$733	
44	Less: Dep'n Chg'd to Const'n	(813)	0	0	(188)	(451)	(159)	(15)	0	0	0	
45	Amortization of debt issue expense	1,484	30	0	326	807	248	24	2	0	46	
46	Debt issue costs	(868)	(18)	0	(191)	(472)	(145)	(14)	(1)	(0)	(27)	
47	Capital cost allowance	(80,375)	(2,249)	0	(17,857)	(43,380)	(14,234)	(1,342)	0	0	(1,313)	
48	Cumulative eligible capital allowance	(985)	(32)	0	(899)	(2)	(41)	(8)	0	0	(3)	
49	O'd expenses cap'd for Tax Purposes	0	0	0	0	0	0	0	0	0	0	
50												
51	Total timing differences	(\$36,662)	(\$1,013)	\$0	(\$8,835)	(\$19,267)	(\$6,379)	(\$606)	\$1	\$0	(\$563)	

Page 4.3, Line 15

COS - FUNCTION
- INCOME TAX

TAB 2E
SECTION 3
PAGE 6.1

FDC

BC GAS UTILITY LTD.

CLASSIFICATION - COST OF SERVICE

Classify
Cost of Service

Page 1.00

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Cost of Gas (including Gas Lost)	\$346,250	\$220,326	\$125,924	\$0	\$0 Function, COS, Page 1.0
2						
3	Operation and Maintenance	109,761	49,943	3,045	56,773	0
4	Vehicle / FIS Lease	2,309	1,240	0	1,069	0
5	Core Market Costs	0	0	0	0	0
6	Property Tax	27,365	15,742	7,307	4,315	0
7	Depreciation and Amortization	49,558	25,643	545	23,370	0
8	Other Operating Revenue	(7,158)	(4,334)	0	(2,824)	0
9						
10		181,835	88,235	10,897	82,703	0
11						
12						
13	Income Taxes	26,458	13,204	662	12,592	0
14						
15	Earned Return	138,226	70,493	445	67,288	0
16						
17	Total Cost of Service	692,769	392,258	137,927	162,583	0
18						
19	Less: Cost of Gas	(346,250)	(220,326)	(125,924)	0	0
20						
21	Gross Margin Cost of Service	\$346,519	\$171,932	\$12,003	\$162,583	\$0
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

COS - CLASSIFY
- SUMMARYTAB 2E
SECTION 4
PAGE 1.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION – COST OF SERVICE

Classify
Cost of Service

Page 1.01

FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Gross Margin Cost of Service					
2						
3	Gas Supply – G.P./LNG	\$8,470	\$8,052	\$418	\$0	\$0 Page 2.10, Line 37
4						
5	Gas Supply – Admin.	3,060	0	3,060	0	0 Page 3.10, Line 21
6						
7	Transmission	68,742	68,742	0	0	0 Page 4.10, Line 21
8						
9	Distribution – Lower Mainland	168,510	73,761	(0)	94,749	0 Page 5.10, Line 21
10						
11	Distribution – Inland	55,387	17,371	(0)	38,016	0 Page 6.10, Line 21
12						
13	Distribution – Columbia	5,233	1,567	0	3,665	0 Page 7.10, Line 21
14						
15	Marketing	6,753	1,034	0	5,719	0 Page 8.10, Line 21
16						
17	Customer Accounting	12,512	0	0	12,512	0 Page 9.10, Line 21
18						
19	Direct Assignment	17,852	1,404	8,525	7,923	0 Direct Assignment
20						
21	Gross Margin Cost of Service	346,519	171,932	12,003	162,583	0
22						
23	Cost of Gas					
24						
25	Gas Supply	346,250	220,326	125,924	0	0 Page 2.10, Line 16
26						
27	Direct Assignment	0	0	0	0	0
28						
29	Cost of Gas	346,250	220,326	125,924	0	0
30						
31						
32	Total Cost of Service	\$692,769	\$392,258	\$137,927	\$162,583	\$0
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

COS – CLASSIFY
– SUMMARYTAB 2E
SECTION 4
PAGE 1.01

FDC

BC GAS UTILITY LTD.

CLASSIFICATION - COST OF SERVICE

GAS SUPPLY - GAS PURCHASES & LNG
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Gas Supply - Gas Purch.
Page 2.10

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Cost of Gas						
2	Fixed Costs	\$220,326	\$220,326				
3	VIA Credits Amortization	0	0				
4	Industrial Buyouts	0	0				
5							
6	Total Fixed Costs	220,326	220,326	0	0		
7							
8							
9	Commodity Cost of Gas	125,924		125,924			
10	Schedule 10 GCRA Cr.	0		0			
11	T-Service / Burrard UAF	0		0			
12							
13	Total Commodity Cost	125,924	0	125,924	0		
14							
15							
16	Total Cost of Gas	346,250	220,326	125,924	0	0	
17							
18							
19	Operation and Maintenance	2,225	2,225	0	0	0	
20	Vehicle / FIS Lease	42	42				
21	Core Market Costs	0		0			
22	Property Tax	214	210	3	0	0	
23	Depreciation and Amortization	2,119	1,969	150	0	0	
24	Other Operating Revenue	(0)	(0)	0	0	0	
25							
26		4,599	4,445	153	0	0	
27							
28							
29	Income Taxes	1,054	886	167	0	0	
30							
31	Earned Return	2,818	2,721	97	0	0	Line 45
32							
33	Total Cost of Service	354,720	228,378	126,342	0	0	
34							
35	Less: Cost of Gas	(346,250)	(220,326)	(125,924)	0	0	Line 16
36							
37	Gross Margin Cost of Service	\$8,470	\$8,052	\$418	\$0	\$0	
38							
39							
40							See Classify -- Rate Base
41	Rate Base x	\$29,920	\$28,888	\$1,032	\$0	\$0	Page 2.8, Line 46
42							
43	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	
44							
45	Earned Return	\$2,818	\$2,721	\$97	\$0	\$0	
46							
47							

GAS SUPPLY - PURCHASES/LNG
COS - CLASSIFY

TAB 2E
SECTION 4
PAGE 2.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION – COST OF SERVICE

GAS SUPPLY – ADMINISTRATION
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Gas Supply – Admin.
Page 3.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Cost of Gas (including Gas Lost)	\$0	\$0	\$0	\$0	\$0
2						
3	Operation and Maintenance	3,045	0	3,045	0	0
4	Vehicle / FIS Lease	0				
5	Core Market Costs	0				
6	Property Tax	0	0	0	0	0
7	Depreciation and Amortization	0	0	0	0	0
8	Other Operating Revenue	0	0	0	0	0
9						
10		3,045	0	3,045	0	0
11						
12						
13	Income Taxes	15	0	15	0	0
14						
15	Earned Return	0	0	0	0	0 Line 30
16						
17	Total Cost of Service	3,060	0	3,060	0	0
18						
19	Less: Cost of Gas	0	0	0	0	0 Line 1
20						
21	Gross Margin Cost of Service	\$3,060	\$0	\$3,060	\$0	\$0
22						
23						
24						
25	Rate Base x	\$0	\$0	\$0	\$0	\$0
26						
27	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%
28						
29						
30	Earned Return	\$0	\$0	\$0	\$0	\$0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

- GAS SUPPLY ADMINISTRATION
COS - CLASSIFY

TAB 2E
SECTION 4
PAGE 3.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION – COST OF SERVICE

TRANSMISSION
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Transmission

Page 4.10

Line No.	Particulars	Total	Demand	Commodity	Customer		COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1	Cost of Gas (including Gas Lost)	\$0	\$0	\$0	\$0	\$0	
2							
3	Operation and Maintenance	14,942	14,942	0	0	0	
4	Vehicle / FIS Lease	522	522				
5	Core Market Costs	0					
6	Property Tax	7,093	7,093	0	0	0	
7	Depreciation and Amortization	10,245	10,245	0	0	0	
8	Other Operating Revenue	(6)	(6)	0	0	0	
9							
10		32,797	32,797	0	0	0	
11							
12							
13	Income Taxes	5,602	5,602	0	0	0	
14							
15	Earned Return	30,342	30,342	0	0	0	Line 30
16							
17	Total Cost of Service	68,742	68,742	0	0	0	
18							
19	Less: Cost of Gas	0	0	0	0	0	Line 1
20							
21	Gross Margin Cost of Service	\$68,742	\$68,742	\$0	\$0	\$0	
22							
23							
24							Classify – Rate Base
25	Rate Base x	\$322,178	\$322,178	\$0	\$0	\$0	Page 4.10, Line 32
26							
27	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%	
28							
29							
30	Earned Return	\$30,342	\$30,342	\$0	\$0	\$0	
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							

COS - CLASSIFY
- TRANSMISSION

TAB 2E
SECTION 4
PAGE 4.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION – COST OF SERVICE

DISTRIBUTION – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Distribution
– Lower Mainland
Page 5.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Cost of Gas (including Gas Lost)	\$0	\$0	\$0	\$0	\$0
2						
3	Operation and Maintenance	46,003	24,679	0	21,325	0
4	Vehicle / FIS Lease	1,250	513	0	737	
5	Core Market Costs					
6	Property Tax	8,239	5,517	(0)	2,722	0
7	Depreciation and Amortization	24,879	9,901	(0)	14,978	0
8	Other Operating Revenue	(3,134)	(3,126)	0	(8)	0
9						
10		77,236	37,483	(0)	39,753	0
11						
12						
13	Income Taxes	16,108	6,422	(0)	9,686	0
14						
15	Earned Return	75,165	29,856	(0)	45,309	0 Line 30
16						
17	Total Cost of Service	168,510	73,761	(0)	94,749	0
18						
19	Less: Cost of Gas	0	0	0	0	0 Line 1
20						
21	Gross Margin Cost of Service	\$168,510	\$73,761	(\$0)	\$94,749	\$0
22						
23						
24						
25	Rate Base x	\$798,111	\$317,012	(\$0)	\$481,099	\$0
26						
27	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%
28						
29						
30	Earned Return	\$75,165	\$29,856	(\$0)	\$45,309	\$0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

Classify – Rate Base
Page 5.10, Line 32

COS – CLASSIFY
- DISTRIBUTION-LM

TAB 2E
SECTION 4
PAGE 5.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION – COST OF SERVICE

DISTRIBUTION – INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Distribution
– Inland
Page 6.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Cost of Gas (including Gas Lost)	\$0	\$0	\$0	\$0	\$0
2						
3	Operation and Maintenance	16,154	7,088	0	9,065	0
4	Vehicle / FIS Lease	439	136	0	303	
5	Core Market Costs	0				
6	Property Tax	3,965	2,591	(0)	1,374	0
7	Depreciation and Amortization	8,178	1,975	0	6,203	0
8	Other Operating Revenue	(1,101)	(1,097)	0	(3)	0
9						
10		27,634	10,692	(0)	16,942	0
11						
12						
13	Income Taxes	4,610	1,112	(0)	3,498	0
14						
15	Earned Return	23,143	5,567	(0)	17,576	0
16						Line 30
17	Total Cost of Service	55,387	17,371	(0)	38,016	0
18						
19	Less: Cost of Gas	0	0	0	0	0
20						Line 1
21	Gross Margin Cost of Service	\$55,387	\$17,371	(\$0)	\$38,016	\$0
22		=====	=====	=====	=====	=====
23						
24						
25	Rate Base x	\$245,734	\$59,109	(\$0)	\$186,625	\$0
26						Classify – Rate Base Page 6.10, Line 32
27	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%
28						
29						
30	Earned Return	\$23,143	\$5,567	(\$0)	\$17,576	\$0
31		=====	=====	=====	=====	=====
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

– CLASSIFY
DISTRIBUTION-ING

TAB 2E
SECTION 4
PAGE 6.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION – COST OF SERVICE

DISTRIBUTION – COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Distribution
– Columbia
Page 7.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Cost of Gas (including Gas Lost)	\$0	\$0	\$0	\$0	\$0
2						
3	Operation and Maintenance	1,537	648	0	889	0
4	Vehicle / FIS Lease	42	13	0	29	0
5	Core Market Costs	0				
6	Property Tax	332	204	0	128	0
7	Depreciation and Amortization	771	184	0	588	0
8	Other Operating Revenue	(105)	(104)	0	(0)	0
9						
10		2,577	944	0	1,633	0
11						
12						
13	Income Taxes	444	102	0	341	0
14						
15	Earned Return	2,212	521	0	1,691	0 Line 30
16						
17	Total Cost of Service	5,233	1,567	0	3,665	0
18						
19	Less: Cost of Gas	0	0	0	0	0 Line 1
20						
21	Gross Margin, Cost of Service	\$5,233	\$1,567	\$0	\$3,665	\$0
22						
23						
24						
25	Rate Base x	\$23,487	\$5,535	\$0	\$17,952	\$0
26						
27	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%
28						
29						
30	Earned Return	\$2,212	\$521	\$0	\$1,691	\$0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

Classify – Rate Base
Page 7.10, Line 32

COS – CLASSIFY
- DISTRIBUTION-CNG

TAB 2E
SECTION 4
PAGE 7.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION – COST OF SERVICE

MARKETING
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Marketing
Page 8.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Cost of Gas (including Gas Lost)	\$0	\$0	\$0	\$0	\$0
2						
3	Operation and Maintenance	5,690	0	0	5,690	0
4	Vehicle / FIS Lease	0				
5	Core Market Costs	0				
6	Property Tax	7	7	0	0	0
7	Depreciation and Amortization	392	392	0	0	0
8	Other Operating Revenue	0	0	0	0	0
9						
10		6,089	399	0	5,690	0
11						
12						
13	Income Taxes	449	420	0	29	0
14						
15	Earned Return	215	215	0	0	0
16						
17	Total Cost of Service	6,753	1,034	0	5,719	0
18						
19	Less: Cost of Gas	0	0	0	0	0
20						
21	Gross Margin Cost of Service	\$6,753	\$1,034	\$0	\$5,719	\$0
22						
23						
24						
25	Rate Base x	\$2,280	\$2,280	\$0	\$0	\$0
26						
27	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%
28						
29						
30	Earned Return	\$215	\$215	\$0	\$0	\$0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

Classify – Rate Base
Page 8.0, Line 10

COS – CLASSIFY
– MARKETING

TAB 2E
SECTION 4
PAGE 8.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION - COST OF SERVICE

CUSTOMER ACCOUNTING
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Classify
Cost of Service
Customer Accounting
Page 9.10

Line No.	Particulars	Total	Demand	Commodity	Customer	COMMENTS
	(1)	(2)	(3)	(4)	(5)	(6)
1	Cost of Gas (including Gas Lost)	\$0	\$0	\$0	\$0	\$0
2						
3	Operation and Maintenance	10,787	0	0	10,787	0
4	Vehicle / FIS Lease	0				
5	Core Market Costs	0				
6	Property Tax	1	0	0	1	0
7	Depreciation and Amortization	876	0	0	876	0
8	Other Operating Revenue	0	0	0	0	0
9						
10		11,664	0	0	11,664	0
11						
12						
13	Income Taxes	807	0	0	806	0
14						
15	Earned Return	41	0	0	41	0 Line 30
16						
17	Total Cost of Service	12,512	0	0	12,512	0
18						
19	Less: Cost of Gas	0	0	0	0	0 Line 1
20						
21	Gross Margin Cost of Service	\$12,512	\$0	\$0	\$12,512	\$0
22						
23						
24						
25	Rate Base x	\$438	\$0	\$0	\$438	\$0
26						
27	Allowed Return on Rate Base	9.42%	9.42%	9.42%	9.42%	9.42%
28						
29						
30	Earned Return	\$41	\$0	\$0	\$41	\$0
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						
47						

Classify - Rate Base
Page 8.0, Line 14

COS - CLASSIFY
- CUSTOMER ACCOUNTING

TAB 2E
SECTION 4
PAGE 9.10

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DIRECT ASSIGNMENT – LOWER MAINLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

L. Mainland
Classify
Rate Base – Dir. Assign.
Allocation

Page 1

		(\$000)				Firm	Interruptible					
Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	S. Indust. S. T-Serv Captive	S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Interruptible L T-Serv. - Captive	Interruptible L T-Serv. -Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Demand											
2	Net Gas Plant in Service	\$8,451	\$0	\$0	\$0	\$0	\$0	\$5,078	\$0	\$0	\$0	\$3,373
3	Contributions in Aid of Construction	(92)	0	0	0	0	0	(90)	0	0	0	(3)
4	Adjustment for 13 Month Averaging	3	0	0	0	0	0	1	0	0	0	2
5	Gas Plant under Construction not attracting AFUDC	5	0	0	0	0	0	3	0	0	0	2
6	Unamortized Deferred Charges	628	600	0	0	0	0	18	0	0	0	10
7	Cash Working Capital	0	0	0	0	0	0	0	0	0	0	0
8	Other Working Capital	741	0	0	0	0	0	737	0	0	0	4
9	Deferred Income Tax	0	0	0	0	0	0	0	0	0	0	0
10												
11	Total Rate Base - Demand	\$9,736	\$600	\$0	\$0	\$0	\$0	\$5,748	\$0	\$0	\$0	\$3,388
12		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
13	Commodity											
14	Net Gas Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	Contributions in Aid of Construction	0	0	0	0	0	0	0	0	0	0	0
16	Adjustment for 13 Month Averaging	0	0	0	0	0	0	0	0	0	0	0
17	Construction Advances	0	0	0	0	0	0	0	0	0	0	0
18	Unamortized Deferred Charges	2,693	1,440	399	614	11	35	2	(0)	68	5	118
19	Cash Working Capital	0	0	0	0	0	0	0	0	0	0	0
20	Other Working Capital	0	0	0	0	0	0	0	0	0	0	0
21	Deferred Income Tax	0	0	0	0	0	0	0	0	0	0	0
22												
23	Total Rate Base - Commodity	\$2,693	\$1,440	\$399	\$614	\$11	\$35	\$2	(\$0)	\$68	\$5	\$118
24		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
25												
26	Customer											
27	Net Gas Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	Contributions in Aid of Construction	0	0	0	0	0	0	0	0	0	0	0
29	Adjustment for 13 Month Averaging	0	0	0	0	0	0	0	0	0	0	0
30	Construction Advances	0	0	0	0	0	0	0	0	0	0	0
31	Unamortized Deferred Charges	1,968	465	104	11	0	0	1,387	0	0	0	0
32	Cash Working Capital	7,073	3,905	1,016	1,320	141	150	46	7	103	14	372
33	Other Working Capital	10,068	9,959	0	0	0	0	109	0	0	0	0
34	Deferred Income Tax	0	0	0	0	0	0	0	0	0	0	0
35												
36	Total Rate Base - Customer	\$19,109	\$14,329	\$1,120	\$1,331	\$141	\$150	\$1,543	\$7	\$103	\$14	\$372
37		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

DIRECT ASSIGNMENT-LM
- RATE BASE

TAB 2E
SECTION 5
PAGE 1.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE – LOWER MAINLAND
DIRECT ASSIGNMENT – DEMAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

L. Mainland
Classify
COS – Dir. Assign.
Allocation
Demand
Page 2.0

		(\$000)				Firm	Interruptible					
Line	Particulars	Total	Residential	Small	Large	S. Indust.	S. Indust.	NGV/VRA	Seasonal	Interruptible	Interruptible	
No.				Commercial	Commercial	S. T-Serv	S. T-Serv			L T-Serv.	L T-Serv.	Other
						Captive	Captive			- Captive	-Non-Captive	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Cost of Service – Demand											
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Operation & Maintenance Expense	209	0	0	0	0	0	66	0	0	0	143
4	Vehicle / FIS Lease	8	0	0	0	0	0	3	0	0	0	5
5	Property Taxes	94	2	0	0	0	0	18	0	0	0	74
6	Depreciation and Amortization	609	170	0	0	0	0	345	0	0	0	93
7	Other Revenue	0	0	0	0	0	0	0	0	0	0	0
8												
9	Subtotal	920	172	0	0	0	0	433	0	0	0	315
10												
11	Income Taxes	250	167	0	0	0	0	7	0	0	0	77
12	Earned Return	917	56	0	0	0	0	541	0	0	0	319
13												
14	Total Cost of Service	2,087	395	0	0	0	0	981	0	0	0	711
15												
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0	0
17												
18	Gross Margin Cost of Service	\$2,087	\$395	\$0	\$0	\$0	\$0	\$981	\$0	\$0	\$0	\$711
19												

DIRECT ASSIGNMENT-LM
- COST OF SERVICE

TAB 2E
SECTION 5
PAGE 2.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE – LOWER MAINLAND
DIRECT ASSIGNMENT – COMMODITY
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

L. Mainland
Classify
COS – Dir. Assign.
Allocation
Commodity
Page 2.1

Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T–Serv Captive	Interruptible S. Indust. S. T–Serv Captive	NGV/VRA	Seasonal	Interruptible L. T–Serv. – Captive	Interruptible L. T–Serv. – Non–Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Cost of Service – Commodity											
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3												
4	Operation & Maintenance Expense	0	0	0	0	0	0	0	0	0	0	0
5	Property Taxes	5,607	3,019	785	1,021	113	138	36	7	94	13	381
6	Depreciation and Amortization	238	100	28	43	(11)	(16)	1	(1)	(30)	5	118
7	Other Revenue	0	0	0	0	0	0	0	0	0	0	0
8												
9	Subtotal	5,844	3,119	813	1,063	102	122	37	6	64	18	499
10												
11	Income Taxes	307	142	39	60	(9)	(12)	1	(1)	(23)	5	104
12	Earned Return	254	136	38	58	1	3	0	(0)	6	0	11
13												
14	Total Cost of Service	6,405	3,397	890	1,182	94	113	39	5	48	23	614
15												
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0	0
17												
18	Gross Margin Cost of Service	\$6,405	\$3,397	\$890	\$1,182	\$94	\$113	\$39	\$5	\$48	\$23	\$614
19												

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE – LOWER MAINLAND
DIRECT ASSIGNMENT – CUSTOMER
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

L. Mainland
Classify
COS – Dir. Assign.
Allocation
Customer
Page 2.2

Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	Interruptible S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Interruptible L. T-Serv. – Captive	Interruptible L. T-Serv. –Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1	Cost of Service – Customer											
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3												
4	Operation & Maintenance Expense	7,819	4,148	1,079	1,402	102	147	861	0	76	4	0
5	Property Taxes	61	46	4	4	0	0	5	0	0	0	1
6	Depreciation and Amortization	637	213	26	3	0	0	396	0	0	0	0
7	Other Revenue	(1,509)	(1,319)	0	0	0	0	(190)	0	0	0	0
8												
9	Subtotal	7,008	3,087	1,109	1,409	102	147	1,072	0	76	4	1
10												
11	Income Taxes	1,339	773	72	63	6	7	398	0	4	1	15
12	Earned Return	1,800	1,350	105	125	13	14	145	1	10	1	35
13												
14	Total Cost of Service	10,147	5,209	1,287	1,597	122	168	1,615	1	90	6	50
15												
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0	0
17												
18	Gross Margin Cost of Service	\$10,147	\$5,209	\$1,287	\$1,597	\$122	\$168	\$1,615	\$1	\$90	\$6	\$50
19												

DIRECT ASSIGNMENT-LM
- COST OF SERVICE

TAB 2E
SECTION 5
PAGE 2.2

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DIRECT ASSIGNMENT - INLAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Inland
Classify
Rate Base - Dir. Assign.
Allocation

Page 1

FOR THE YEAR ENDED DECEMBER 31, 1998														Page 1
(\$000)														
Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	Interruptible S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Firm S. T-Serv. S. Sales Non-Captive	Firm/ Interruptible L. T-Serv. L. Sales - Captive	Firm/ Interruptible L. T-Serv. L. Sales -Non-Captive	Other	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1	Demand													
2	Net Gas Plant in Service	\$2,374	\$0	\$0	\$0	\$0	\$0	\$2,374	\$0	\$0	\$0	\$0	\$0	
3	Contributions in Aid of Construction	(151)	0	0	0	0	0	(151)	0	0	0	0	0	
4	Adjustment for 13 Month Averaging	2	0	0	0	0	0	2	0	0	0	0	0	
5	Gas Plant under Construction not attracting AFUDC	2	0	0	0	0	0	2	0	0	0	0	0	
6	Unamortized Deferred Charges	203	190	0	0	0	0	13	0	0	0	0	0	
7	Cash Working Capital	0	0	0	0	0	0	0	0	0	0	0	0	
8	Other Working Capital	1,074	0	0	0	0	0	1,074	0	0	0	0	0	
9	Deferred Income Tax	(198)	0	0	0	0	0	(198)	0	0	0	0	0	
10														
11	Total Rate Base -- Demand	\$3,305	\$190	\$0	\$0	\$0	\$0	\$3,115	\$0	\$0	\$0	\$0	\$0	
12														
13	Commodity													
14	Net Gas Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
15	Contributions in Aid of Construction	0	0	0	0	0	0	0	0	0	0	0	0	
16	Adjustment for 13 Month Averaging	0	0	0	0	0	0	0	0	0	0	0	0	
17	Construction Advances	0	0	0	0	0	0	0	0	0	0	0	0	
18	Unamortized Deferred Charges	875	471	147	111	25	1	0	0	3	80	35	0	
19	Cash Working Capital	0	0	0	0	0	0	0	0	0	0	0	0	
20	Other Working Capital	0	0	0	0	0	0	0	0	0	0	0	0	
21	Deferred Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	
22														
23	Total Rate Base -- Commodity	\$875	\$471	\$147	\$111	\$25	\$1	\$0	\$0	\$3	\$80	\$35	\$0	
24														
25														
26	Customer													
27	Net Gas Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
28	Contributions in Aid of Construction	0	0	0	0	0	0	0	0	0	0	0	0	
29	Adjustment for 13 Month Averaging	0	0	0	0	0	0	0	0	0	0	0	0	
30	Construction Advances	0	0	0	0	0	0	0	0	0	0	0	0	
31	Unamortized Deferred Charges	317	153	38	2	0	0	124	0	0	0	0	0	
32	Cash Working Capital	2,891	1,776	509	328	151	4	14	9	14	59	27	0	
33	Other Working Capital	5,228	5,228	0	0	0	0	0	0	0	0	0	0	
34	Deferred Income Tax	0	0	0	0	0	0	0	0	0	0	0	0	
35														
36	Total Rate Base -- Customer	\$8,436	\$7,157	\$546	\$330	\$151	\$4	\$139	\$9	\$14	\$59	\$27	\$0	
37														

DIRECT ASSIGNMENT-ING
- RATE BASE

TAB 2E
SECTION 6
PAGE 1.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE -- INLAND
DIRECT ASSIGNMENT -- DEMAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Inland
Classify
COS -- Dir. Assign.
Allocation
Demand
Page 2.0

FOR THE YEAR ENDED DECEMBER 31, 1998 (\$000)													Demand Page 2.0
Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	Interruptible S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Firm S. T-Serv. S. Sales Non-Captive	Firm/ Interruptible L. T-Serv. L. Sales - Captive	Firm/ Interruptible L. T-Serv. L. Sales -Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Cost of Service – Demand												
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Operation & Maintenance Expense	115	0	0	0	0	0	115	0	0	0	0	0
4	Vehicle / FIS Lease	6	0	0	0	0	0	6	0	0	0	0	0
5	Property Taxes	11	1	0	0	0	0	10	0	0	0	0	0
6	Depreciation and Amortization	318	54	0	0	0	0	264	0	0	0	0	0
7	Other Revenue	0	0	0	0	0	0	0	0	0	0	0	0
8													
9	Subtotal	450	54	0	0	0	0	395	0	0	0	0	0
10													
11	Income Taxes	(1,427)	(861)	(218)	(126)	(96)	(2)	(49)	(3)	0	(73)	0	0
12	Earned Return	311	18	0	0	0	0	293	0	0	0	0	0
13													
14	Total Cost of Service	(666)	(789)	(218)	(126)	(96)	(2)	640	(3)	0	(73)	0	0
15													
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0	0	0
17													
18	Gross Margin Cost of Service	(\$666)	(\$789)	(\$218)	(\$126)	(\$96)	(\$2)	\$640	(\$3)	\$0	(\$73)	\$0	\$0
19													

DIRECT ASSIGNMENT-ING
- COST OF SERVICE

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE -- INLAND
DIRECT ASSIGNMENT -- COMMODITY
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Inland
Classify
COS -- Dir. Assign.
Allocation
Commodity
Page 2.1

Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	Interruptible S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Firm S. T-Serv. S. Sales Non-Captive	Firm/ Interruptible L. T-Serv. L. Sales - Captive	Firm/ Interruptible L. T-Serv. L. Sales -Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Cost of Service -- Commodity												
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3													
4	Operation & Maintenance Expense	0	0	0	0	0	0	0	0	0	0	0	0
5	Property Taxes	1,521	938	269	173	71	2	5	4	7	36	16	0
6	Depreciation and Amortization	138	43	13	10	9	0	0	0	3	24	35	0
7	Other Revenue	0	0	0	0	0	0	0	0	0	0	0	0
8													
9	Subtotal	1,659	981	282	183	80	2	5	5	10	59	51	0
10													
11	Income Taxes	151	55	17	13	9	0	0	0	3	23	31	0
12	Earned Return	82	44	14	10	2	0	0	0	0	8	3	0
13													
14	Total Cost of Service	1,892	1,080	313	207	91	2	5	5	13	90	85	0
15													
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0	0	0
17													
18	Gross Margin Cost of Service	\$1,892	\$1,080	\$313	\$207	\$91	\$2	\$5	\$5	\$13	\$90	\$85	\$0
19													

DIRECT ASSIGNMENT-ING
- COST OF SERVICE

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE - INLAND
DIRECT ASSIGNMENT - CUSTOMER
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Inland
Classify
COS - Dir. Assign.
Allocation
Customer
Page 2.2

Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	Interruptible S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Firm S. T-Serv. S. Sales Non-Captive	Firm/ Interruptible L. T-Serv. L. Sales - Captive	Firm/ Interruptible L. T-Serv. L. Sales -Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Cost of Service - Customer												
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3													
4	Operation & Maintenance Expense	1,058	18	369	238	95	4	157	0	30	85	62	0
5	Property Taxes	27	23	2	1	0	0	0	0	0	0	0	0
6	Depreciation and Amortization	83	29	9	1	0	0	43	0	0	0	0	0
7	Other Revenue	(1,179)	(947)	(126)	(81)	0	0	(25)	0	0	0	0	0
8													
9	Subtotal	(11)	(877)	255	159	95	4	176	0	30	85	62	0
10													
11	Income Taxes	(2,782)	(1,723)	(454)	(267)	(207)	(3)	36	(7)	1	(159)	1	0
12	Earned Return	795	674	51	31	14	0	13	1	1	6	3	0
13													
14	Total Cost of Service	(1,998)	(1,926)	(148)	(77)	(98)	1	225	(6)	32	(68)	66	0
15													
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0	0	0
17													
18	Gross Margin Cost of Service	(\$1,998)	(\$1,926)	(\$148)	(\$77)	(\$98)	\$1	\$225	(\$6)	\$32	(\$68)	\$66	\$0
19													

DIRECT ASSIGNMENT-ING
- COST OF SERVICE

BC GAS UTILITY LTD.

CLASSIFICATION OF RATE BASE

DIRECT ASSIGNMENT - COLUMBIA
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Columbia
Classify
Rate Base - Dir. Assign.
Allocation

Page 1

FOR THE YEAR ENDED DECEMBER 31, 1996										Page 1	
(\$000)											
Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Firm/ Interruptible L. T-Serv. L. Sales - Captive	Firm/ Interruptible L. T-Serv. L. Sales -Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Demand										
2	Net Gas Plant in Service	\$424	\$0	\$0	\$0	\$0	\$26	\$0	\$0	\$0	\$398
3	Contributions in Aid of Construction	(2)	0	0	0	0	(2)	0	0	0	0
4	Adjustment for 13 Month Averaging	0	0	0	0	0	0	0	0	0	0
5	Gas Plant under Construction not attracting AFUDC	0	0	0	0	0	0	0	0	0	0
6	Unamortized Deferred Charges	23	22	0	0	0	0	0	0	0	1
7	Cash Working Capital	0	0	0	0	0	0	0	0	0	0
8	Other Working Capital	12	0	0	0	0	12	0	0	0	0
9	Deferred Income Tax	(2)	0	0	0	0	(2)	0	0	0	0
10											
11	Total Rate Base - Demand	\$456	\$22	\$0	\$0	\$0	\$34	\$0	\$0	\$0	\$400
12		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
13	Commodity										
14	Net Gas Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
15	Contributions in Aid of Construction	0	0	0	0	0	0	0	0	0	0
16	Adjustment for 13 Month Averaging	0	0	0	0	0	0	0	0	0	0
17	Construction Advances	0	0	0	0	0	0	0	0	0	0
18	Unamortized Deferred Charges	123	53	20	11	2	0	0	36	1	0
19	Cash Working Capital	0	0	0	0	0	0	0	0	0	0
20	Other Working Capital	0	0	0	0	0	0	0	0	0	0
21	Deferred Income Tax	0	0	0	0	0	0	0	0	0	0
22											
23	Total Rate Base - Commodity	\$123	\$53	\$20	\$11	\$2	\$0	\$0	\$36	\$1	\$0
24		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====
25											
26	Customer										
27	Net Gas Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
28	Contributions in Aid of Construction	0	0	0	0	0	0	0	0	0	0
29	Adjustment for 13 Month Averaging	0	0	0	0	0	0	0	0	0	0
30	Construction Advances	0	0	0	0	0	0	0	0	0	0
31	Unamortized Deferred Charges	23	16	4	0	0	3	0	0	0	0
32	Cash Working Capital	259	149	51	23	8	0	0	24	1	3
33	Other Working Capital	534	534	0	0	0	0	0	0	0	0
34	Deferred Income Tax	0	0	0	0	0	0	0	0	0	0
35											
36	Total Rate Base - Customer	\$816	\$699	\$55	\$24	\$8	\$4	\$0	\$24	\$1	\$3
37		=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

DIRECT ASSIGNMENT - CNG
- RATE BASE

TAB 2E
SECTION 7
PAGE 1.0

FDC

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE - COLUMBIA
DIRECT ASSIGNMENT - DEMAND
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Columbia
Classify
COS - Dir. Assign.
Allocation
Demand
Page 2.0

Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Firm/ Interruptible L. T-Serv. L. Sales - Captive	Firm/ Interruptible L. T-Serv. L. Sales -Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Cost of Service - Demand										
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3	Operation & Maintenance Expense	36	0	0	0	0	1	0	0	0	35
4	Vehicle / FIS Lease	0	0	0	0	0	0	0	0	0	0
5	Property Taxes	15	0	0	0	0	0	0	0	0	15
6	Depreciation and Amortization	52	6	0	0	0	3	0	0	0	43
7	Other Revenue	0	0	0	0	0	0	0	0	0	0
8											
9	Subtotal	103	6	0	0	0	4	0	0	0	93
10											
11	Income Taxes	(163)	(83)	(24)	(13)	(6)	(0)	0	(25)	0	(12)
12	Earned Return	43	2	0	0	0	3	0	0	0	38
13											
14	Total Cost of Service	(17)	(75)	(24)	(13)	(6)	7	0	(25)	0	118
15											
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0
17											
18	Gross Margin Cost of Service	(\$17)	(\$75)	(\$24)	(\$13)	(\$6)	\$7	\$0	(\$25)	\$0	\$118
19											

DIRECT ASSIGNMENT-CNG
- COST OF SERVICE

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE – COLUMBIA
DIRECT ASSIGNMENT – COMMODITY
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Columbia
Classify
COS – Dir. Assign.
Allocation
Commodity
Page 2.1

Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T–Serv Captive	NGV/VRA	Seasonal	Firm/ Interruptible L. T–Serv. L. Sales – Captive	Firm/ Interruptible L. T–Serv. L. Sales – Non–Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Cost of Service – Commodity										
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3											
4	Operation & Maintenance Expense	0	0	0	0	0	0	0	0	0	0
5	Property Taxes	176	103	35	16	5	0	0	14	1	2
6	Depreciation and Amortization	19	5	2	1	1	0	0	11	1	0
7	Other Revenue	0	0	0	0	0	0	0	0	0	0
8											
9	Subtotal	195	108	37	17	6	0	0	25	1	2
10											
11	Income Taxes	21	6	2	1	1	0	0	10	0	0
12	Earned Return	12	5	2	1	0	0	0	3	0	0
13											
14	Total Cost of Service	228	119	41	19	7	0	0	38	2	2
15											
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0
17											
18	Gross Margin Cost of Service	\$228	\$119	\$41	\$19	\$7	\$0	\$0	\$38	\$2	\$2
19											

DIRECT ASSIGNMENT-CNG
– COST OF SERVICE

BC GAS UTILITY LTD.

CLASSIFICATION OF
COST OF SERVICE - COLUMBIA
DIRECT ASSIGNMENT - CUSTOMER
FOR THE YEAR ENDED DECEMBER 31, 1996
(\$000)

Columbia
Classify
COS - Dir. Assign.
Allocation
Customer
Page 2.2

Line No.	Particulars	Total	Residential	Small Commercial	Large Commercial	Firm S. Indust. S. T-Serv Captive	NGV/VRA	Seasonal	Firm/ Interruptible L. T-Serv. L. Sales - Captive	Firm/ Interruptible L. T-Serv. L. Sales - Non-Captive	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Cost of Service - Customer										
2	Cost of Gas	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
3											
4	Operation & Maintenance Expense	140	12	48	22	13	4	0	34	6	0
5	Property Taxes	3	2	0	0	0	0	0	0	0	0
6	Depreciation and Amortization	5	3	1	0	0	1	0	0	0	0
7	Other Revenue	(124)	(100)	(16)	(8)	0	(0)	0	0	0	0
8											
9	Subtotal	23	(83)	33	15	13	5	0	34	6	0
10											
11	Income Taxes	(326)	(176)	(52)	(29)	(13)	1	0	(57)	0	0
12	Earned Return	77	66	5	2	1	0	0	2	0	0
13											
14	Total Cost of Service	(226)	(194)	(14)	(12)	1	7	0	(21)	6	0
15											
16	Less Cost of Gas	0	0	0	0	0	0	0	0	0	0
17											
18	Gross Margin Cost of Service	(\$226)	(\$194)	(\$14)	(\$12)	\$1	\$7	\$0	(\$21)	\$6	\$0
19											

DIRECT ASSIGNMENT-CNG
- COST OF SERVICE

BC GAS UTILITY LTD.

FULLY DISTRIBUTED COST OF SERVICE

ALLOCATION FACTORS – COINCIDENT PEAK (CP), NON-COINCIDENT PEAK (NCP), AND AVERAGE AND EXCESS (A&E)
FOR THE YEAR ENDED DECEMBER 31, 1998Lower Mainland
Allocation
Page 1

Line No.	Description	Total Service	Total Lower Mainland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S/T-Service Captive Sched 5/25	Interruptible S. Indust. S/T-Service Captive Sched 7/27	NGV / VFA Sched 6/6A	Seasonal Sched 4	Interruptible L. Indust. T-Service Captive Sched 22	Interruptible L. Indust. T-Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1	Coincident Peak – 10 ³ m ³												
2	Coincident Peak – Throughput	35,702.94	25,439.70	13,161.29	3,941.33	4,990.59	474.92	0.00	56.52	11.74	24.01	0.00	2,779.30
3	Coincident Peak Factor DE1G	100.00%	71.25%	36.86%	11.04%	13.98%	1.33%	0.00%	0.16%	0.03%	0.07%	0.00%	7.78%
4	Coincident Peak – Transmission	35,702.30	25,439.70	13,161.29	3,941.33	4,990.59	474.92	0.00	56.52	11.74	24.01	0.00	2,779.30
5	Coincident Peak Factor DE1T	100.00%	71.26%	36.86%	11.04%	13.98%	1.33%	0.00%	0.16%	0.03%	0.07%	0.00%	7.78%
6	Coincident Peak – Distribution	30,581.17	22,660.40	13,161.29	3,941.33	4,990.59	474.92	0.00	56.52	11.74	24.01	0.00	0.00
7	Coincident Peak Factor DE1D	100.00%	100.00%	58.08%	17.39%	22.02%	2.10%	0.00%	0.25%	0.05%	0.11%	0.00%	0.00%
8	Coincident Peak – Sales	29,790.99	22,423.09	13,161.29	3,941.33	4,990.59	261.62	0.00	56.52	11.74	0.00	0.00	0.00
9	Coincident Peak Factor DE1S	100.00%	75.27%	44.16%	13.23%	16.75%	0.88%	0.00%	0.19%	0.04%	0.00%	0.00%	0.00%
10													
11	Non-Coincident Peak – 10 ³ m ³												
12	Non-Coincident Peak – Throughput	42,362.83	31,154.78	13,161.29	3,941.33	4,990.59	498.89	698.21	56.52	17.60	1,251.13	224.30	6,314.90
13	Non-Coincident Factor DE2G	100.00%	73.54%	31.07%	9.30%	11.78%	1.18%	1.85%	0.13%	0.04%	2.95%	0.53%	14.91%
14	Non-Coincident Peak – Transmission	42,363.29	31,154.78	13,161.29	3,941.33	4,990.59	498.89	698.21	56.52	17.60	1,251.13	224.30	6,314.90
15	Non-Coincident Factor DE2T	100.00%	73.54%	31.07%	9.30%	11.78%	1.18%	1.85%	0.13%	0.04%	2.95%	0.53%	14.91%
16	Non-Coincident Peak – Distribution	32,741.45	24,839.88	13,161.29	3,941.33	4,990.59	498.89	698.21	56.52	17.60	1,251.13	224.30	0.00
17	Non-Coincident Factor DE2D	100.00%	100.00%	52.98%	15.87%	20.09%	2.01%	2.81%	0.23%	0.07%	5.04%	0.90%	0.00%
18	Non-Coincident Peak – Sales	29,801.14	22,428.98	13,161.29	3,941.33	4,990.59	261.62	0.00	56.52	17.60	0.00	0.00	0.00
19	Non-Coincident Factor DE2S	100.00%	75.26%	44.16%	13.23%	16.75%	0.88%	0.00%	0.19%	0.06%	0.00%	0.00%	0.00%
20													
21	Average & Excess – Throughput												
22	Aver. Load, Annual GJ/(365 * 38.60)	16,724.72	12,064.62	3,962.86	1,099.16	1,690.91	312.41	437.57	56.52	17.60	847.64	154.21	3,485.73
23	Aver. Load as a % of Total	100.00%	72.14%	23.69%	6.57%	10.11%	1.87%	2.62%	0.34%	0.11%	5.07%	0.92%	20.84%
24	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
25	Average Load % * System Load Factor %	46.84%	33.79%	11.10%	3.08%	4.74%	0.88%	1.23%	0.16%	0.05%	2.37%	0.43%	9.76%
26	Excess Demand (Line 12 – Line 22)	25,638.11	19,090.15	9,198.42	2,842.17	3,299.68	186.48	260.64	0.00	0.00	403.49	70.09	2,829.17
27	Percent of Total	100.00%	74.46%	35.88%	11.09%	12.87%	0.73%	1.02%	0.00%	0.00%	1.57%	0.27%	11.03%
28	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
29	% of Excess Demand (Line 27 x Line 28)	53.16%	39.58%	19.07%	5.89%	6.84%	0.39%	0.54%	0.00%	0.00%	0.84%	0.15%	5.87%
30	A&E Factor (Line 25 + Line 29) DE3G	100.00%	73.37%	30.17%	8.97%	11.58%	1.26%	1.77%	0.16%	0.05%	3.21%	0.58%	15.63%
31													
32	Average & Excess Demand – Transmission												
33	Aver. Load, Annual GJ/(365 * 38.60)	16,717.39	12,064.62	3,962.86	1,099.16	1,690.91	312.41	437.57	56.52	17.60	847.64	154.21	3,485.73
34	Aver. Load as a % of Total	100.00%	72.17%	23.71%	6.57%	10.11%	1.87%	2.62%	0.34%	0.11%	5.07%	0.92%	20.85%
35	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
36	Average Load % * System Load Factor %	46.84%	33.81%	11.10%	3.08%	4.74%	0.88%	1.23%	0.16%	0.05%	2.38%	0.43%	9.77%
37	Excess Demand (Line 14 – Line 33)	25,645.90	19,090.15	9,198.42	2,842.17	3,299.68	186.48	260.64	0.00	0.00	403.49	70.09	2,829.17
38	Percent of Total	100.00%	74.44%	35.87%	11.08%	12.87%	0.73%	1.02%	0.00%	0.00%	1.57%	0.27%	11.03%
39	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
40	% of Excess Demand (Line 38 x Line 39)	53.16%	39.57%	19.07%	5.89%	6.84%	0.39%	0.54%	0.00%	0.00%	0.84%	0.15%	5.86%
41	A&E Factor (Line 36 + Line 40) DE3T	100.00%	73.37%	30.17%	8.97%	11.58%	1.26%	1.77%	0.16%	0.05%	3.21%	0.58%	15.63%
42													
43	Average & Excess – Distribution												
44	Aver. Load, Annual GJ/(365 * 38.60)	11,172.53	8,578.90	3,962.86	1,099.16	1,690.91	312.41	437.57	56.52	17.60	847.64	154.21	0.00
45	Aver. Load as a % of Total	100.00%	100.00%	46.19%	12.81%	19.71%	3.64%	5.10%	0.66%	0.21%	9.88%	1.80%	0.00%
46	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
47	Average Load % * System Load Factor %	140.53%	46.84%	21.64%	6.00%	9.23%	1.71%	2.39%	0.31%	0.10%	4.63%	0.84%	0.00%
48	Excess Demand (Line 16 – Line 44)	21,568.92	16,260.98	9,198.42	2,842.17	3,299.68	186.48	260.64	0.00	0.00	403.49	70.09	0.00
49	Percent of Total	100.00%	100.00%	58.57%	17.48%	20.29%	1.15%	1.80%	0.00%	0.00%	2.48%	0.43%	0.00%
50	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
51	% of Excess Demand (Line 49 x Line 50)	159.47%	53.16%	30.07%	9.29%	10.79%	0.61%	0.85%	0.00%	0.00%	1.32%	0.23%	0.00%
52	A&E Factor (Line 47 + Line 51) DE3D	100.00%	100.00%	51.71%	15.29%	20.02%	2.32%	3.24%	0.31%	0.10%	5.95%	1.07%	0.00%
53													
54	Average & Excess – Sales												
55	Aver. Load, Annual GJ/(365 * 38.60)	9,277.21	6,997.11	3,962.86	1,099.16	1,690.91	170.05	0.00	56.52	17.60	0.00	0.00	0.00
56	Aver. Load as a % of Total	100.00%	75.42%	42.72%	11.85%	18.23%	1.83%	0.00%	0.81%	0.19%	0.00%	0.00%	0.00%
57	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
58	Average Load % * System Load Factor %	46.84%	35.33%	20.01%	5.55%	8.54%	0.86%	0.00%	0.29%	0.09%	0.00%	0.00%	0.00%
59	Excess Demand (Line 18 – Line 55)	20,523.92	15,431.84	9,198.42	2,842.17	3,299.68	91.57	0.00	0.00	0.00	0.00	0.00	0.00
60	Percent of Total	100.00%	75.19%	44.82%	13.85%	16.08%	0.45%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
61	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
62	% of Excess Demand (Line 60 x Line 61)	53.16%	39.97%	23.82%	7.36%	8.55%	0.24%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
63	A&E Factor (Line 58 + Line 62) DE3S	100.00%	75.30%	43.83%	12.91%	17.08%	1.10%	0.00%	0.29%	0.09%	0.00%	0.00%	0.00%

ALLOCATION FACTORS-LM
- DEMANDTAB 2E
SECTION 8
PAGE 1

FDC

BC GAS UTILITY LTD.

FULLY DISTRIBUTED COST OF SERVICE

ALLOCATION FACTORS - COMMODITY AND CUSTOMER
FOR THE YEAR ENDED DECEMBER 31, 1996Lower Mainland
Allocation
Page 2

Line No.	Description	Total Service	Total Lower Mainland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T-Service Captive Sched 5/25	Interruptible S. Indust. S / T-Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4	Interruptible L. Indust. T-Service Captive Sched 22	Interruptible L. Indust. T-Service Non-Captive Sched 22	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1	Commodity												
2	Sales & T-Service Throughput GJ	232,442,700	167,208,300	54,524,200	15,123,100	23,264,900	4,325,600	6,103,900	777,700	242,200	11,824,200	2,151,100	48,871,400
3	Commodity Factor Throughput CO1G	100.00%	71.94%	23.46%	6.51%	10.01%	1.86%	2.63%	0.33%	0.10%	5.09%	0.93%	21.03%
4	Sales & T-Service Throughput excl. L. Industrial GJ	154,680,800	118,336,900	54,524,200	15,123,100	23,264,900	4,325,600	6,103,900	777,700	242,200	11,824,200	2,151,100	0
5	Commodity Factor Throughput excl. L. Industrial CO2D	100.00%	76.50%	35.25%	9.78%	15.04%	2.80%	3.95%	0.50%	0.16%	7.64%	1.39%	0.00%
6	Sales Throughput GJ	155,811,700	123,799,900	54,524,200	15,123,100	23,264,900	2,339,700	3,626,700	777,700	242,200	0	0	23,899,400
7	Commodity Factor Throughput CO3S	100.00%	79.45%	34.99%	9.71%	14.93%	1.50%	2.33%	0.50%	0.16%	0.00%	0.00%	15.34%
8	Sales Throughput GJ (excl. Burrard)	128,216,200	96,271,800	54,524,200	15,123,100	23,264,900	2,339,700	0	777,700	242,200	0	0	0
9	Commodity Factor Throughput CO3S(a)	100.00%	75.09%	42.53%	11.79%	18.15%	1.82%	0.00%	0.61%	0.19%	0.00%	0.00%	0.00%
10													
11	Customer												
12	Average # of Customers	704,316	495,983	443,083	47,286	5,073	174	96	197	51	20	1	2
13	Weighting Factor			1.00	1.23	3.40	9.92	21.54	4.98	6.22	37.58	41.81	1,802.47
14	Weighted Customers	754,450	527,984	443,083	58,162	17,248	1,727	2,068	980	317	752	42	3,605
15	Customer Factor CU1G	100.00%	69.98%	58.73%	7.71%	2.29%	0.23%	0.27%	0.13%	0.04%	0.10%	0.01%	0.48%
16	Weighted Customers Distribution	744,235	524,379	443,083	58,162	17,248	1,727	2,068	980	317	752	42	0
17	Customer Factor CU2D	100.00%	70.46%	59.54%	7.81%	2.32%	0.23%	0.28%	0.13%	0.04%	0.10%	0.01%	0.00%
18													
19	Revenue \$000's	\$774,131	\$594,310	\$320,031	\$83,255	\$108,154	\$11,980	\$14,589	\$3,802	\$701	\$9,997	\$1,395	\$40,406
20	Revenue Factor %	100.00%	76.77%	41.34%	10.75%	13.97%	1.55%	1.88%	0.49%	0.09%	1.29%	0.18%	5.22%
21	Residential and Commercial Revenue \$000's	\$674,090	\$511,440	\$320,031	\$83,255	\$108,154							
22	Residential and Commercial Factor	100.00%	75.87%	47.48%	12.35%	16.04%							

ALLOCATION FACTORS-LM
- COMMODITY & CUSTOMERTAB 2E
SECTION 8
PAGE 2

FDC

BC GAS UTILITY LTD.

FULLY DISTRIBUTED COST OF SERVICE

ALLOCATION FACTORS - COINCIDENT PEAK (CP), NON-COINCIDENT PEAK (NCP), AND AVERAGE AND EXCESS (A&E)
FOR THE YEAR ENDED DECEMBER 31, 1996Inland
Allocation
Page 1

Line No.	Description	Total Inland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S/T-Service Captive Sched 5/25	Interruptible S. Indust. S/T-Service Captive Sched 7/27	NGV / VFA Sched 6/6A	Seasonal Sched 4	Firm S. Indust. T-Service Non-Captive Sched 25	Interruptible L. Indust. S/T-Service Captive Sched 22A	Interruptible L. Indust. S/T-Service Non-Captive Sched 22A	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(13)
1	Coincident Peak – 10 ³ m ³												
2	Coincident Peak – Throughput	8,848.55	4,169.54	1,403.46	874.88	459.81	0.00	5.46	8.56	159.77	768.57	998.49	0.00
3	Coincident Peak Factor DE1G	24.78%	11.68%	3.93%	2.45%	1.29%	0.00%	0.02%	0.02%	0.45%	2.15%	2.80%	0.00%
4	Coincident Peak – Transmission	8,847.91	4,169.54	1,403.46	874.88	610.17	0.00	5.46	8.56	9.59	1,642.43	123.81	0.00
5	Coincident Peak Factor DE1T	24.78%	11.68%	3.93%	2.45%	1.71%	0.00%	0.02%	0.02%	0.03%	4.60%	0.35%	0.00%
6	Coincident Peak – Distribution	7,081.49	4,169.54	1,403.46	874.88	459.81	0.00	5.46	8.56	159.77	0.00	0.00	0.00
7	Coincident Peak Factor DE1D	100.00%	58.88%	19.82%	12.35%	6.48%	0.00%	0.08%	0.12%	2.26%	0.00%	0.00%	0.00%
8	Coincident Peak – Sales	6,588.52	4,169.54	1,403.46	874.88	126.61	0.00	5.46	8.56	0.00	0.00	0.00	0.00%
9	Coincident Peak Factor DE1S	22.12%	14.00%	4.71%	2.94%	0.43%	0.00%	0.02%	0.03%	0.00%	0.00%	0.00%	0.00%
10													
11	Non-Coincident Peak – 10 ³ m ³												
12	Non-Coincident Peak – Throughput	9,788.23	4,169.54	1,403.46	874.88	445.23	7.65	5.46	12.84	172.31	1,093.27	1,603.59	0.00
13	Non-Coincident Factor DE2G	23.11%	9.84%	3.31%	2.07%	1.05%	0.02%	0.01%	0.03%	0.41%	2.58%	3.79%	0.00%
14	Non-Coincident Peak – Transmission	9,788.68	4,169.54	1,403.46	874.88	606.40	7.65	5.46	12.84	11.20	2,487.18	210.07	0.00
15	Non-Coincident Factor DE2T	23.11%	9.84%	3.31%	2.07%	1.43%	0.02%	0.01%	0.03%	0.03%	5.87%	0.50%	0.00%
16	Non-Coincident Peak – Distribution	7,091.37	4,169.54	1,403.46	874.88	445.23	7.65	5.46	12.84	172.31	0.00	0.00	0.00
17	Non-Coincident Factor DE2D	100.00%	58.80%	19.79%	12.34%	6.28%	0.11%	0.08%	0.18%	2.43%	0.00%	0.00%	0.00%
18	Non-Coincident Peak – Sales	6,592.80	4,169.54	1,403.46	874.88	126.61	0.00	5.46	12.84	0.00	0.00	0.00	0.00
19	Non-Coincident Factor DE2S	22.12%	13.99%	4.71%	2.94%	0.42%	0.00%	0.02%	0.04%	0.00%	0.00%	0.00%	0.00%
20													
21	Average & Excess – Throughput												
22	Aver. Load, Annual GJ/(365 * 38.60)	4,067.46	1,255.45	391.40	296.43	273.47	4.79	5.46	12.84	99.08	694.22	1,034.32	0.00
23	Aver. Load as a % of Total	24.32%	7.51%	2.34%	1.77%	1.64%	0.03%	0.03%	0.08%	0.59%	4.15%	6.18%	0.00%
24	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
25	Average Load % * System Load Factor %	11.39%	3.52%	1.10%	0.83%	0.77%	0.01%	0.02%	0.04%	0.28%	1.94%	2.90%	0.00%
26	Excess Demand (Line 12 – Line 22)	5,720.77	2,914.09	1,012.07	578.45	171.76	2.86	0.00	0.00	73.23	399.04	589.28	0.00
27	Percent of Total	22.31%	11.37%	3.95%	2.26%	0.67%	0.01%	0.00%	0.00%	0.29%	1.56%	2.22%	0.00%
28	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
29	% of Excess Demand (Line 27 x Line 28)	11.86%	6.04%	2.10%	1.20%	0.36%	0.01%	0.00%	0.00%	0.15%	0.83%	1.18%	0.00%
30	A&E Factor (Line 25 + Line 29) DE3G	23.25%	9.56%	3.19%	2.03%	1.12%	0.02%	0.02%	0.04%	0.43%	2.77%	4.08%	0.00%
31													
32	Average & Excess Demand – Transmission												
33	Aver. Load, Annual GJ/(365 * 38.60)	4,060.13	1,255.45	391.40	296.43	372.46	4.79	5.46	12.84	6.44	1,579.36	135.50	0.00
34	Aver. Load as a % of Total	24.29%	7.51%	2.34%	1.77%	2.23%	0.03%	0.03%	0.08%	0.04%	9.45%	0.81%	0.00%
35	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
36	Average Load % * System Load Factor %	11.38%	3.52%	1.10%	0.83%	1.04%	0.01%	0.02%	0.04%	0.02%	4.43%	0.38%	0.00%
37	Excess Demand (Line 14 – Line 33)	5,728.56	2,914.09	1,012.07	578.45	233.94	2.86	0.00	0.00	4.76	907.82	74.58	0.00
38	Percent of Total	22.34%	11.36%	3.95%	2.26%	0.91%	0.01%	0.00%	0.00%	0.02%	3.54%	0.29%	0.00%
39	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
40	% of Excess Demand (Line 38 x Line 39)	11.87%	6.04%	2.10%	1.20%	0.48%	0.01%	0.00%	0.00%	0.01%	1.88%	0.15%	0.00%
41	A&E Factor (Line 36 + Line 40) DE3T	23.25%	9.56%	3.19%	2.03%	1.53%	0.02%	0.02%	0.04%	0.03%	6.31%	0.53%	0.00%
42													
43	Average & Excess – Distribution												
44	Aver. Load, Annual GJ/(365 * 38.60)	2,338.92	1,255.45	391.40	296.43	273.47	4.79	5.46	12.84	99.08	0.00	0.00	0.00
45	Aver. Load as a % of Total	100.00%	53.68%	16.73%	12.67%	11.69%	0.20%	0.23%	0.55%	0.00%	0.00%	0.00%	0.00%
46	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
47	Average Load % * System Load Factor %	46.84%	25.14%	7.84%	5.94%	5.48%	0.10%	0.11%	0.26%	1.98%	0.00%	0.00%	0.00%
48	Excess Demand (Line 16 – Line 44)	4,752.45	2,914.09	1,012.07	578.45	171.76	2.86	0.00	0.00	73.23	0.00	0.00	0.00
49	Percent of Total	100.00%	61.32%	21.30%	12.17%	3.61%	0.06%	0.00%	0.00%	1.54%	0.00%	0.00%	0.00%
50	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
51	% of Excess Demand (Line 49 x Line 50)	53.16%	32.59%	11.32%	6.47%	1.92%	0.03%	0.00%	0.00%	0.82%	0.00%	0.00%	0.00%
52	A&E Factor (Line 47 + Line 51) DE3D	100.00%	57.74%	19.16%	12.41%	7.40%	0.13%	0.11%	0.26%	2.80%	0.00%	0.00%	0.00%
53													
54	Average & Excess – Sales												
55	Aver. Load, Annual GJ/(365 * 38.60)	2,043.88	1,255.45	391.40	296.43	82.30	0.00	5.46	12.84	0.00	0.00	0.00	0.00
56	Aver. Load as a % of Total	22.03%	13.53%	4.22%	3.20%	0.89%	0.00%	0.06%	0.14%	0.00%	0.00%	0.00%	0.00%
57	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%
58	Average Load % * System Load Factor %	10.32%	6.34%	1.98%	1.50%	0.42%	0.00%	0.03%	0.06%	0.00%	0.00%	0.00%	0.00%
59	Excess Demand (Line 18 – Line 55)	4,548.92	2,914.09	1,012.07	578.45	44.31	0.00	0.00	0.00	0.00	0.00	0.00	0.00
60	Percent of Total	22.16%	14.20%	4.83%	2.82%	0.22%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
61	100% – Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%
62	% of Excess Demand (Line 60 x Line 61)	11.78%	7.55%	2.62%	1.50%	0.11%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
63	A&E Factor (Line 58 + Line 62) DE3S	22.10%	13.89%	4.60%	2.99%	0.53%	0.00%	0.03%	0.06%	0.00%	0.00%	0.00%	0.00%

ALLOCATION FACTORS-ING
- DEMANDTAB 2E
SECTION 9
PAGE 1

FDC

BC GAS UTILITY LTD.

FULLY DISTRIBUTED COST OF SERVICE

ALLOCATION FACTORS – COMMODITY AND CUSTOMER
FOR THE YEAR ENDED DECEMBER 31, 1996Inland
Allocation
Page 2

Line No.	Description	Total Inland	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T–Service Captive Sched 5/25	Interruptible S. Indust. S / T–Service Captive Sched 7/27	NGV / VRA Sched 6/6A	Seasonal Sched 4	Firm S. Indust. T–Service Non–Captive Sched 25	Firm / Interruptible L. Indust. S / T–Service Captive Sched 22A	Firm / Interruptible L. Indust. S / T–Service Non–Captive Sched 22A	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1	Commodity												
2	Sales & T–Service Throughput GJ	57,192,000	17,652,700	5,503,400	4,168,000	3,845,200	67,400	76,800	180,600	1,393,100	9,761,400	14,543,400	0
3	Commodity Factor Throughput CO1G	24.60%	7.59%	2.37%	1.79%	1.65%	0.03%	0.03%	0.08%	0.60%	4.20%	6.26%	0.00%
4	Sales & T–Service Throughput excl. L. Industrial GJ	32,887,200	17,652,700	5,503,400	4,168,000	3,845,200	67,400	76,800	180,600	1,393,100	0	0	0
5	Commodity Factor Throughput excl. L. Industrial CO2D	21.26%	11.41%	3.56%	2.69%	2.49%	0.04%	0.05%	0.12%	0.90%	0.00%	0.00%	0.00%
6	Sales Throughput GJ	28,806,100	17,652,700	5,503,400	4,168,000	1,157,200	67,400	76,800	180,600	0	0	0	0
7	Commodity Factor Throughput CO3S	18.49%	11.33%	3.53%	2.68%	0.74%	0.04%	0.05%	0.12%	0.00%	0.00%	0.00%	0.00%
8	Sales Throughput GJ (excl. Burrard)	28,738,700	17,652,700	5,503,400	4,168,000	1,157,200	0	76,800	180,600	0	0	0	0
9	Commodity Factor Throughput CO3S(a)	22.41%	13.77%	4.29%	3.25%	0.90%	0.00%	0.06%	0.14%	0.00%	0.00%	0.00%	0.00%
10													
11	Customer												
12	Average # of Customers	188,944	170,796	17,053	945	70	2	36	15	8	11	8	0
13	Weighting Factor		1.00	1.25	5.23	20.06	47.61	7.69	25.08	35.60	241.73	267.67	0.00
14	Weighted Customers	204,292	170,796	21,316	4,942	1,404	95	277	376	285	2,659	2,141	0
15	Customer Factor CU1G	27.08%	22.64%	2.83%	0.66%	0.19%	0.01%	0.04%	0.05%	0.04%	0.35%	0.28%	0.00%
16	Weighted Customers Distribution	199,492	170,796	21,316	4,942	1,404	95	277	376	285	0	0	0
17	Customer Factor CU2D	26.80%	22.95%	2.86%	0.66%	0.19%	0.01%	0.04%	0.05%	0.04%	0.00%	0.00%	0.00%
18													
19	Revenue \$000's	\$161,180	\$99,456	\$28,484	\$18,350	\$7,522	\$221	\$502	\$449	\$719	\$3,783	\$1,694	\$0
20	Revenue Factor %	20.82%	12.85%	3.68%	2.37%	0.97%	0.03%	0.06%	0.06%	0.09%	0.49%	0.22%	0.00%
21	Residential and Commercial Revenue \$000's	\$146,290	\$99,456	\$28,484	\$18,350								
22	Residential and Commercial Factor	21.70%	14.75%	4.23%	2.72%								

ALLOCATION FACTORS-ING
- COMMODITY & CUSTOMERTAB 2E
SECTION 9
PAGE 2

FDC

BC GAS UTILITY LTD.

FULLY DISTRIBUTED COST OF SERVICE

ALLOCATION FACTORS - COINCIDENT PEAK (CP), NON-COINCIDENT PEAK (NCP), AND AVERAGE AND EXCESS (A&E)
FOR THE YEAR ENDED DECEMBER 31, 1996Columbia
Allocation
Page 1

Line No.	Description	Total Columbia	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S/T-Service Captive Sched 5/25	NGV Sched 6	Seasonal Sched 4	Firm / Interruptible L. Indust. S/T-Service Captive Sched 22B	Firm / Interruptible L. Indust. S/T-Service Non-Captive Sched 22	Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
1	Coincident Peak - 10 ³ m ³										
2	Coincident Peak - Throughput	1,414.69	488.81	196.09	87.02	67.31	0.06	0.00	549.07	26.34	0.00
3	Coincident Peak Factor DE1G	3.96%	1.37%	0.55%	0.24%	0.19%	0.00%	0.00%	1.54%	0.07%	0.00%
4	Coincident Peak - Transmission	1,414.69	488.81	196.09	87.02	67.31	0.06	0.00	549.07	26.34	0.00
5	Coincident Peak Factor DE1T	3.96%	1.37%	0.55%	0.24%	0.19%	0.00%	0.00%	1.54%	0.07%	0.00%
6	Coincident Peak - Distribution	839.28	488.81	196.09	87.02	67.31	0.06	0.00	0.00	0.00	0.00
7	Coincident Peak Factor DE1D	100.00%	58.24%	23.36%	10.37%	8.02%	0.01%	0.00%	0.00%	0.00%	0.00%
8	Coincident Peak - Sales	779.38	488.81	196.09	87.02	7.41	0.06	0.00	0.00	0.00	0.00
9	Coincident Peak Factor DE1S	2.62%	1.64%	0.66%	0.29%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%
10											
11	Non-Coincident Peak - 10 ³ m ³										
12	Non-Coincident Peak - Throughput	1,419.83	488.81	196.09	87.02	38.24	0.06	0.00	583.34	26.28	0.00
13	Non-Coincident Peak Factor DE2G	3.35%	1.15%	0.46%	0.21%	0.09%	0.00%	0.00%	1.38%	0.06%	0.00%
14	Non-Coincident Peak - Transmission	1,419.83	488.81	196.09	87.02	38.24	0.06	0.00	583.34	26.28	0.00
15	Non-Coincident Peak Factor DE2T	3.35%	1.15%	0.46%	0.21%	0.09%	0.00%	0.00%	1.38%	0.06%	0.00%
16	Non-Coincident Peak - Distribution	810.21	488.81	196.09	87.02	38.24	0.06	0.00	0.00	0.00	0.00
17	Non-Coincident Peak Factor DE2D	100.00%	60.33%	24.20%	10.74%	4.72%	0.01%	0.00%	0.00%	0.00%	0.00%
18	Non-Coincident Peak - Sales	779.38	488.81	196.09	87.02	7.41	0.06	0.00	0.00	0.00	0.00
19	Non-Coincident Peak Factor DE2S	2.62%	1.64%	0.66%	0.29%	0.02%	0.00%	0.00%	0.00%	0.00%	0.00%
20											
21	Average & Excess - Throughput										
22	Aver. Load, Annual GJ/(365 * 37.70)	592.64	147.18	54.68	29.48	23.32	0.06	0.00	320.84	17.08	
23	Aver. Load as a % of Total	3.54%	0.88%	0.33%	0.18%	0.14%	0.00%	0.00%	1.92%	0.10%	
24	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	
25	Average Load % * System Load Factor %	1.66%	0.41%	0.15%	0.08%	0.07%	0.00%	0.00%	0.90%	0.05%	
26	Excess Demand (Line 12 - Line 22)	827.19	341.63	141.40	57.53	14.93	0.00	0.00	262.50	9.20	
27	Percent of Total	3.23%	1.33%	0.55%	0.22%	0.06%	0.00%	0.00%	1.02%	0.04%	
28	100% - Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	
29	% of Excess Demand (Line 27 x Line 28)	1.72%	0.71%	0.29%	0.12%	0.03%	0.00%	0.00%	0.54%	0.02%	
30	A&E Factor (Line 25 + Line 29) DE3G	3.37%	1.12%	0.45%	0.20%	0.10%	0.00%	0.00%	1.44%	0.07%	
31											
32	Average & Excess Demand - Transmission										
33	Aver. Load, Annual GJ/(365 * 37.70)	592.64	147.18	54.68	29.48	23.32	0.06	0.00	320.84	17.08	
34	Aver. Load as a % of Total	3.55%	0.88%	0.33%	0.18%	0.14%	0.00%	0.00%	1.92%	0.10%	
35	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	
36	Average Load % * System Load Factor %	1.66%	0.41%	0.15%	0.08%	0.07%	0.00%	0.00%	0.90%	0.05%	
37	Excess Demand (Line 14 - Line 33)	827.19	341.63	141.40	57.53	14.93	0.00	0.00	262.50	9.20	
38	Percent of Total	3.23%	1.33%	0.55%	0.22%	0.06%	0.00%	0.00%	1.02%	0.04%	
39	100% - Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	
40	% of Excess Demand (Line 38 x Line 39)	1.71%	0.71%	0.29%	0.12%	0.03%	0.00%	0.00%	0.54%	0.02%	
41	A&E Factor (Line 36 + Line 40) DE3T	3.38%	1.12%	0.45%	0.20%	0.10%	0.00%	0.00%	1.44%	0.07%	
42											
43	Average & Excess - Distribution										
44	Aver. Load, Annual GJ/(365 * 37.70)	254.72	147.18	54.68	29.48	23.32	0.06	0.00	0.00	0.00	
45	Aver. Load as a % of Total	100.00%	57.78%	21.47%	11.57%	9.15%	0.02%	0.00%	0.00%	0.00%	
46	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	
47	Average Load % * System Load Factor %	46.84%	27.07%	10.06%	5.42%	4.29%	0.01%	0.00%	0.00%	0.00%	
48	Excess Demand (Line 16 - Line 44)	555.49	341.63	141.40	57.53	14.93	0.00	0.00	0.00	0.00	
49	Percent of Total	100.00%	61.50%	25.46%	10.36%	2.69%	0.00%	0.00%	0.00%	0.00%	
50	100% - Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	
51	% of Excess Demand (Line 49 x Line 50)	53.16%	32.89%	13.53%	5.51%	1.43%	0.00%	0.00%	0.00%	0.00%	
52	A&E Factor (Line 47 + Line 51) DE3D	100.00%	59.76%	23.59%	10.93%	5.72%	0.01%	0.00%	0.00%	0.00%	
53											
54	Average & Excess - Sales										
55	Aver. Load, Annual GJ/(365 * 37.70)	236.23	147.18	54.68	29.48	4.82	0.06	0.00	0.00	0.00	
56	Aver. Load as a % of Total	2.55%	1.59%	0.59%	0.32%	0.05%	0.00%	0.00%	0.00%	0.00%	
57	Annual System Load Factor	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	46.84%	
58	Average Load % * System Load Factor %	1.19%	0.74%	0.28%	0.15%	0.02%	0.00%	0.00%	0.00%	0.00%	
59	Excess Demand (Line 18 - Line 55)	543.16	341.63	141.40	57.53	2.59	0.00	0.00	0.00	0.00	
60	Percent of Total	2.65%	1.66%	0.69%	0.28%	0.01%	0.00%	0.00%	0.00%	0.00%	
61	100% - Annual System L.F. %	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	53.16%	
62	% of Excess Demand (Line 60 x Line 61)	1.41%	0.88%	0.37%	0.15%	0.01%	0.00%	0.00%	0.00%	0.00%	
63	A&E Factor (Line 58 + Line 62) DE3S	2.60%	1.63%	0.64%	0.30%	0.03%	0.00%	0.00%	0.00%	0.00%	

ALLOCATION FACTORS - CNG
- DEMANDTAB 2E
SECTION 10
PAGE 1

FDC

BC GAS UTILITY LTD.

FULLY DISTRIBUTED COST OF SERVICE

ALLOCATION FACTORS – COMMODITY AND CUSTOMER
FOR THE YEAR ENDED DECEMBER 31, 1996Columbia
Allocation
Page 2

Line No.	Description	Total Columbia	Residential Sched 1	Small Commercial Sched 2	Large Commercial Sched 3	Firm S. Indust. S / T–Service Captive Sched 5/25	NGV Sched 6	Seasonal Sched 4	Firm / Interruptible L. Indust. S / T–Service Captive Sched 22B	Firm / Interruptible L. Indust. S / T–Service Non–Captive Sched 22	Other
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Commodity										
2	Sales & T–Service Throughput GJ	8,042,400	1,997,300	742,100	400,100	316,400	800	0	4,353,900	231,800	
3	Commodity Factor Throughput CO1G	3.46%	0.86%	0.32%	0.17%	0.14%	0.00%	0.00%	1.87%	0.10%	
4	Sales & T–Service Throughput excl. L. Industrial GJ	3,456,700	1,997,300	742,100	400,100	316,400	800	0	0	0	
5	Commodity Factor Throughput excl. L. Industrial CO2D	2.23%	1.29%	0.48%	0.26%	0.20%	0.00%	0.00%	0.00%	0.00%	
6	Sales Throughput GJ	3,205,700	1,997,300	742,100	400,100	65,400	800	0	0	0	
7	Commodity Factor Throughput CO3S	2.06%	1.28%	0.48%	0.26%	0.04%	0.00%	0.00%	0.00%	0.00%	
8	Sales Throughput GJ (excl. Burrard)	3,205,700	1,997,300	742,100	400,100	65,400	800	0	0	0	
9	Commodity Factor Throughput CO3S(a)	2.50%	1.56%	0.58%	0.31%	0.05%	0.00%	0.00%	0.00%	0.00%	
10											
11	Customer										
12	Average # of Customers	19,389	17,436	1,850	89	6	1	0	6	1	1
13	Weighting Factor		1.00	1.30	4.65	17.66	3.43		247.35	325.58	
14	Weighted Customers	22,174	17,436	2,405	414	106	3	0	1,484	326	
15	Customer Factor CU1G	2.94%	2.31%	0.32%	0.05%	0.01%	0.00%	0.00%	0.20%	0.04%	
16	Weighted Customers Distribution	20,364	17,436	2,405	414	106	3	0	0	0	
17	Customer Factor CU2D	2.74%	2.34%	0.32%	0.06%	0.01%	0.00%	0.00%	0.00%	0.00%	
18											
19	Revenue \$000's	\$18,641	\$10,935	\$3,711	\$1,714	\$529	\$7	\$0	\$1,505	\$73	\$167
20	Revenue Factor %	2.41%	1.41%	0.48%	0.22%	0.07%	0.00%	0.00%	0.19%	0.01%	0.02%
21	Residential and Commercial Revenue \$000's	\$16,360	\$10,935	\$3,711	\$1,714						
22	Residential and Commercial Factor	2.43%	1.62%	0.55%	0.25%						

ALLOCATION FACTORS–CNG
– COMMODITY & CUSTOMERTAB 2E
SECTION 10
PAGE 2

FDC

COMPETITIVE ENERGY PRICES AND ENERGY MARKET SHARES

1 The material under this tab presents data on historical and
2 current energy prices in British Columbia and surrounding
3 areas. It also briefly discusses some historical trends in
4 fuel consumption choices in the B.C. residential energy
5 market. This data is both useful in assessing the current
6 competitive position of natural gas and in assisting the
7 design of rates within the BC Gas service area.

8
9 A similar study was prepared for the BC Gas 1993 Rate Design
10 Application (Rate Design Phase B, Vol. 2, Application, Tab 4,
11 April 1993). Thus the opportunity is presented to estimate
12 how energy prices have changed over this time. This
13 information is also presented in this Tab.

14
15 Appendix A lists the data sources and Appendix B shows the
16 conversion factors used to derive prices based upon energy
17 content.

1.0 COMPETITIVE ENERGY PRICE ASSESSMENT

1.1 INTRODUCTION

22
23 This section presents various data pertaining to current
24 natural gas and other fuel prices in B.C. Also presented are
25 comparisons of the natural gas rates charged by BC Gas and
26 other neighbouring gas utilities in B.C., Alberta and
27 Washington state.

28
29 The prices contained herein were obtained from four sources:

- 30
31 - a telephone survey of fuel oil and propane distributors
32 conducted by BC Gas regional office staff;

- 1 - fuel oil and propane posted price lists from dealer head
2 offices for various cities in the province;
3
- 4 - the electricity rate schedules of B.C. Hydro and West
5 Kootenay Power (WKP) and the natural gas rate schedules
6 of BC Gas, Pacific Northern Gas (PNG), Canadian Western
7 Natural Gas (CWNG), Northwestern Utilities Limited (NUL),
8 Cascade Natural Gas (Cascade), Washington Natural Gas
9 (WNG) and Washington Water Power (WWP); and
10
- 11 - public data from Statistics Canada and Natural Resources
12 Canada.
13

14 **1.2 RESIDENTIAL ENERGY PRICE SURVEY RESULTS**

15

16 A retail energy price survey was undertaken by BC Gas staff
17 during April of this year. The regions of the province
18 surveyed by telephone correspond to the service area of
19 BC Gas. Thus certain areas which are not part of the BC Gas
20 service area, such as Vancouver Island and the service
21 territories of Pacific Northern Gas and Centra Gas (Ft. St.
22 John), were not part of the survey.
23

24 Generally, a minimum of one local oil distributor and one
25 local propane dealer were contacted in various towns and
26 cities throughout the service area of BC Gas. Because the
27 price range shown for each BC Gas sales region in the
28 accompanying tables consists of at least two communities, with
29 the exception of the Fort Nelson area, and because the survey
30 data is augmented in most cases with dealer list prices, there
31 is a reasonably high likelihood that the data shown here are
32 accurate depictions of energy prices prevailing in the
33 province at the time the survey was undertaken.
34

35 Table 1 lists the communities surveyed and shows the
36 organization of the survey data to follow. The four BC Gas

1 sales regions have been arranged into eight sales districts.
2 Seventeen communities were surveyed within these eight
3 districts. Table 2 below provides a summary of the survey
4 results and Table 3 compares the prices obtained in the
5 current survey with the results of January 1993 survey.

6
7 Table 2 summarizes the results of the residential energy price
8 survey. The fuel oil and propane price ranges reflect the
9 highest and lowest price observations obtained in each region.
10 As the table shows, residential furnace oil and propane prices
11 vary not only by region but, according to our survey, can vary
12 somewhat even within the same region.

13
14 Regional differences are explained in part by the degree of
15 competition from other fuels, regional transportation costs
16 and the size of the local market. For example, propane prices
17 are relatively low in the East Kootenay region because of its
18 proximity to Lethbridge, Alberta. Alberta dealers are able to
19 deliver propane into Cranbrook and surrounding areas at a very
20 competitive price.

21
22 Transportation costs also influence fuel oil and propane
23 prices. The proximity of gas processing plants in
24 northeastern B.C. helps to moderate propane prices in some
25 parts of the interior, but fuel oil prices are quite high due
26 to the cost of transportation from refineries in Edmonton.
27 However, in general, regional variation in fuel oil prices
28 does not appear that significant, ranging from 38 to 43.5
29 cents per litre according to our survey, excluding Fort
30 Nelson. Propane price variability is more conspicuous, with
31 the low end of the price range reflecting competition from
32 Alberta suppliers in the eastern region of B.C. and the
33 availability of local supply in some other areas.

Table 1

BC Gas Utility Ltd. Competitive Energy Price Survey
Summary of Regions and Communities Surveyed

Sales Region	Sales District	Cities Surveyed
Lower Mainland	Greater Vancouver	Vancouver, Burnaby, Surrey
	Fraser Valley	Abbotsford, Chilliwack
Inland	Okanagan	Kelowna, Penticton, Vernon
	Central	Kamloops, 100 Mile House
	North	Prince George, Williams Lake
	West Kootenay	Castlegar, Trail
Columbia	East Kootenay	Cranbrook, Fernie
Fort Nelson		Fort Nelson

Table 2 also shows typical residential gas and electricity rates in these regions. Gas and electricity rates are, of course, quite uniform across the province because the entire area surveyed is served by BC Gas and either by B.C. Hydro or West Kootenay Power. Natural gas rates, in fact, show more consistency across regions than during the January 1993 survey. Starting in 1994, uniform basic and distribution charges were established in the Lower Mainland, Inland and Columbia regions of the BC Gas service area.

1 The top half of Table 2 shows current retail prices.
2 Differences in unit pricing and heat content make relative
3 cost comparisons difficult. In the bottom half, survey prices
4 are converted to dollars per gigajoule and adjusted for
5 typical space heating efficiencies. On this basis, natural
6 gas prices are still significantly below the cost of competing
7 fuels. However, the comparison does not consider capital and
8 maintenance costs over the life of energy-using appliances.
9

10 Table 3 shows a comparison of the 1993 and 1996 survey results
11 for selected cities. Apart from Fort Nelson, where fuel oil
12 prices have risen sharply over the interval, fuel oil prices
13 appear to have risen only moderately in most regions. This
14 stability is largely explained by flat crude oil prices over
15 the past few years and plant rationalization and efficiency
16 gains in the petroleum refinery business.
17

18 Propane price changes have also been region specific - with
19 noticeable increases in Vancouver, the Fraser Valley and
20 Prince George, but steady or even falling prices in some other
21 parts of the province.
22

23 Changes in gas feedstock costs do not appear to be a major
24 influence on local propane prices. The ability of local
25 propane dealers to pass on feedstock increases is constrained
26 by market factors. Competition from Alberta propane
27 distributors and local fuel oil dealers play a large role in
28 determining what price local propane producers can charge.

Table 2
Summary of Residential Energy Price Survey
Within BC Gas Service Area

(a)	(b)	(c)	(d)	(e)
Sales District	Furnace Oil cts/litre ^a	Propane cts/litre ^a	Natural Gas \$/GJ ^{b,d}	Electricity cts/Kwh ^{c,e}
Vancouver	37.9-38.9	40.9-42.9	4.87-5.37	5.77
Fraser Valley	37.9-40.2	40.9-42.9	4.87-5.37	5.77
Okanagan	38.5-42.9	37.9-43.0	4.85-5.07	5.77 4.61 ^f
Central	40.9-40.9	39.9-40.5	4.85-5.07	5.77
North	39.5-43.3	36.6-39.4	4.85-5.07	5.77
W. Kootenay	39.5-41.1	36.9-38.5	4.85-5.07	4.61 ^f
E. Kootenay	41.9-43.5	29.8-30.8	4.70-5.08	5.77
Ft. Nelson	54.0-54.0	31.0-31.0	3.42-3.59	5.77

Summary of Residential Energy Survey (Efficiency Adjusted)
Within BC Gas Service Area
\$ per Gigajoule

Sales District	Furnace Oil @65% Efficiency ^a	Propane @80% Efficiency ^a	Natural Gas @80% Efficiency ^{b,d}	Electricity @100% Efficiency ^{c,e}
Vancouver	15.1 - 15.5	20.0 - 21.0	6.09-6.71	16.03
Fraser Valley	15.1-16.0	17.6-19.0	6.09-6.71	16.03
Okanagan	15.3-17.1	16.6-19.5	6.06-6.34	16.03 12.80 ^f
Central	16.3-16.3	19.5-19.8	6.06-6.34	16.03
North	15.7-16.4	18.9-19.3	6.06-6.34	16.03
W. Kootenay	15.7-16.3	18.1-18.9	6.06-6.34	12.80 ^f
E. Kootenay	16.7-17.3	14.6-15.1	5.88-6.35	16.03
Ft. Nelson	21.5-21.5	15.2-15.2	4.28-4.49	16.03

- Range represents high and low prices obtained in survey.
- Range based on typical average monthly winter and summer consumption levels.
- Rate based on relevant energy charge (excludes fixed charge).
- Natural gas rates based on BC Gas, Rate Schedule 1, effective January 1, 1996. Vancouver and Fraser Valley prices reflect Lower Mainland; Okanagan, Central, North and West Kootenay prices reflect Inland; East Kootenay prices reflect Columbia sales area. Fort Nelson prices from the Fort Nelson sales area, Domestic Rate, effective January 1, 1996.
- Rates based on B.C. Hydro Rate 1101, effective April 1, 1994.
- Rates based on West Kootenay Power, Rate 1, Residential Service, interim rate effective January 1, 1996. Rate includes 10% discount.

Table 3

Residential Energy Price Survey Comparison, 1993 - 1996

City	Furnace Oil		Propane		Electricity	
	cents/litre		cents/litre		cents/kwh	
	Jan. 93 ^a	Apr. 96 ^b	Jan. 93 ^a	Apr. 96 ^b	Jan. 93 ^c	Apr. 96 ^c
Vancouver	36.6 - 40.0	37.0 - 38.9	33.0 - 36.0	40.9 - 42.9	4.98	5.77
Abbotsford	35.5 - 38.6	37.9 - 40.2	36.2 - 37.7	40.9 - 42.9	4.98	5.77
Kelowna	37.9 - 41.9	39.7 - 40.0	37.4 - 37.4	37.9 - 38.4	4.98 3.60 ^d	5.77 4.61 ^d
Pr. George	36.6 - 42.1	43.1 - 43.3	28.0 - 33.5	38.5 - 39.4	4.98	5.77
Cranbrook	38.5 - 38.5	41.9 - 43.5	35.0 - 35.0	29.8 - 30.8	4.98	5.77
Castlegar	38.5 - 38.5	39.9 - 41.4	36.9 - 36.9	36.9 - 36.9	3.60 ^d	4.61 ^d
Ft. Nelson	39.0 - 43.1	54.0 - 54.0	31.5 - 31.5	31.0 - 31.0	4.98	5.77

- a. Based on BC Gas telephone survey conducted January 1993.
b. Based on BC Gas telephone survey conducted April 1996.
c. Rates based on B.C. Hydro Rate 1101; 1993 rates effective Aug. 1, 1992; 1996 rates effective April 1, 1994.
d. Rates based on West Kootenay Power; 1993 Schedule 4 rate effective January 1, 1993; 1996 rate based on Schedule 1, Residential Service, interim rate effective January 1, 1996. 1996 rate includes 10% discount.

1 The electricity rates shown in Table 2 are calculated at the
2 margin - that is, at the cost of the last unit of energy
3 consumed by a typical space heating customer. The electric
4 marginal rate increased almost 16 percent over this three year
5 period. However, increases at the margin do not tell the
6 whole story. The B.C. Hydro residential tariff has evolved
7 over the past few years from a declining block structure to a
8 uniform rate. Consequently, the trailing block rate has
9 risen, but the average rate, including basic charge, has
10 remained nearly unchanged over this period.

11 12 1.3 COMMERCIAL MARKET ENERGY PRICES

13
14 Commercial fuel oil and propane prices were not obtained by
15 direct survey methods but instead were derived from the
16 residential survey prices. Generally, fuel oil and propane
17 dealers do not offer a commercial price but instead may offer
18 discounts to large volume customers. Since local dealers are
19 generally reluctant to provide information regarding
20 discounts, a telephone survey was not feasible.

21
22 However, according to some dealer price lists, the discount
23 off the residential furnace oil posted price is consistently
24 around 13.5 percent. Further, discussions with BC Gas
25 marketing staff suggest that an appropriate volume discount
26 for propane is 10 percent. In order to infer larger volume
27 commercial fuel oil and propane prices, the high end of the
28 range shown in Table 2 was discounted by 13.5 percent and 10
29 percent respectively. Only the high price was used on the
30 assumption that some of the lower prices may already contain
31 discounts based on customer pick-up, larger tank size, etc.
32 The results of applying these discounts are shown in Table 4
33 and Table 5. Also shown are commercial natural gas and
34 electricity prices based on the appropriate commercial rate
35 schedules. In the case of small commercial energy consumers,
36 oil and propane prices are compared to BC Gas Rate 2 and

Table 4
Summary of Small Commercial Energy Price Survey
Within BC Gas Service Area

(a)	(b)	(c)	(d)	(e)
Sales District	Furnace Oil cts/litre ^a	Propane cts/litre ^a	Natural Gas \$/GJ ^{b,c}	Electricity cts/Kwh ^d
Vancouver	33.6	38.6	4.55 - 4.98	5.87 - 6.50
Abbotsford	34.8	38.6	4.55 - 4.98	5.87 - 6.50
Kelowna	34.6	34.6	4.34 - 4.63	5.87 - 6.50 4.32 - 5.97 ^e
Pr. George	37.5	35.5	4.34 - 4.63	5.87 - 6.50
Cranbrook	37.6	27.7	4.17 - 4.63	5.87 - 6.50
Castlegar	35.8	33.2	4.34 - 4.63	4.32 - 5.97 ^e
Ft. Nelson	46.7	27.9	3.14 - 3.36	5.87 - 6.50

Summary of Small Commercial Energy Survey (Efficiency Adjusted)
Within BC Gas Service Area
\$ per Gigajoule

Sales District	Furnace Oil @ 80% Efficiency ^a	Propane @ 80% Efficiency ^a	Natural Gas @ 80% Efficiency ^{b,c}	Electricity @ 100% Efficiency ^d
Vancouver	10.86	18.90	5.69-6.22	16.31-18.06
Abbotsford	11.25	18.90	5.69-6.22	16.31-18.06
Kelowna	11.18	16.94	5.43-5.79	16.31-18.06 12.00-16.58 ^e
Pr. George	12.12	17.38	5.43-5.79	16.31-18.06
Cranbrook	12.15	13.56	5.22-5.79	16.31-18.06
Castlegar	11.57	16.26	5.43-5.79	12.00-16.58 ^e
Ft. Nelson	15.09	13.66	3.92-4.19	16.31-18.06

- a. Prices are estimates by BC Gas based on assumed large volume discounts.
b. The low price assumes summer consumption and the high price assumes winter consumption.
c. Natural gas rates based on BC Gas, Rate Schedule 2, effective Jan. 1, 1996. Vancouver and Fraser Valley prices reflect Lower Mainland; Okanagan, Central, North and West Kootenay prices reflect Inland and East Kootenay prices reflect Columbia sales area. Fort Nelson prices based on Fort Nelson sales area, Schedule 2.1, effective January 1, 1996.
d. Energy charge(excludes fixed charge) based on B.C. Hydro Rate 1220, effective April 1, 1995. Range reflects typical summer/winter average consumption.
e. Energy charge(excludes fixed charge) based on West Kootenay Power, Schedule 20, interim rate effective January 1, 1996. Certain discounts may apply that are not shown here. Range reflects typical summer/winter average consumption.
Note: Prices exclude GST.

Table 5

**Summary of Large Commercial Energy Price Survey
Within BC Gas Service Area**

(a)	(b)	(c)	(d)	(e)
Sales District	Furnace Oil cts/litre ^a	Propane cts/litre ^a	Natural Gas \$/GJ ^{b,c}	Electricity cts/Kwh ^d
Vancouver	33.6	38.6	3.43 - 4.36	3.12
Abbotsford	34.8	38.6	3.43 - 4.36	3.12
Kelowna	34.6	34.6	3.17 - 4.10	3.12 3.29 - 4.16 ^e
Pr. George	37.5	35.5	3.17 - 4.10	3.12
Cranbrook	37.6	27.7	3.18 - 4.11	3.12
Castlegar	35.8	33.2	3.17 - 4.10	3.29 - 4.16 ^e
Ft. Nelson	46.7	27.9	2.81 - 2.85	3.12

**Summary of Large Commercial Energy Survey (Efficiency Adjusted)
Within BC Gas Service Area
\$ per Gigajoule**

Sales District	Furnace Oil @ 80% Efficiency ^a	Propane @ 80% Efficiency ^a	Natural Gas @ 80% Efficiency ^{b,c}	Electricity @ 100% Efficiency ^d
Vancouver	10.86	18.90	4.28-5.45	8.67
Abbotsford	11.25	18.90	4.28-5.45	8.67
Kelowna	11.18	16.94	3.96-5.12	8.67 9.13-11.56 ^e
Pr. George	12.12	17.38	3.96-5.12	8.67
Cranbrook	12.15	13.56	3.98-5.14	8.67
Castlegar	11.57	16.26	3.96-5.12	9.13-11.56 ^e
Ft. Nelson	15.09	13.66	3.51-3.56	8.67

- a. Prices are estimates by BC Gas based on assumed large volume discounts.
b. The low price assumes summer consumption and the high price assumes winter consumption.
c. Natural gas rates based on BC Gas, Rate Schedule 3, effective Jan. 1, 1996. Vancouver and Fraser Valley prices reflect Lower Mainland; Okanagan, Central, North and West Kootenay prices reflect Inland and East Kootenay prices reflect Columbia sales area. Fort Nelson prices based on Fort Nelson sales area, Schedule 2.2, effective January 1, 1996.
d. Energy charge(excludes fixed charge) based on B.C. Hydro Rate 1200, effective April 1, 1995.
e. Energy charge(excludes fixed charge) based on West Kootenay Power, Schedule 21, interim rate effective January 1, 1996. Certain discounts may apply that are not shown here. Range reflects typical average summer/winter consumption.
Note: Prices exclude GST.

1 B.C. Hydro rate 1220. For large commercial energy customers,
2 fossil fuel prices are compared to BC Gas Rate 3 and
3 B.C. Hydro Rate 1200. As before, the energy charge component
4 of the electric tariff schedule is used for comparison
5 purposes. Unlike the residential tariff, B.C. Hydro
6 commercial rates have preserved a declining block structure.
7 The range of prices shown for electricity reflects the
8 different energy charges that apply to typical winter and
9 summer consumption levels.

10
11 In the Vancouver residential market, natural gas holds a cost
12 advantage over electricity of almost 60 percent, after
13 adjusting for fuel efficiency. About the same ratio is
14 maintained in the small commercial market. In the large
15 commercial customer category, the cost advantage of natural
16 gas appears to be smaller - possibly 40 percent or less
17 depending upon specific circumstances.

18 19 **1.4 INDUSTRIAL MARKET ENERGY PRICES**

20
21 Industrial market energy prices are discussed briefly for the
22 Lower Mainland. Energy prices for industrial applications in
23 the province's interior are difficult to obtain. Also, the
24 use of such fuels, with the exception of electricity and wood
25 waste, is relatively small in total and often very site-
26 specific. For example, the mines in the East Kootenay region
27 often use "coal dust" for steam heat generation. Some pulp
28 mills, Canadian Forest Products and Northwood, for example,
29 use "tall oil", a by-product from B.C. Chemicals, as a back-up
30 fuel. Hog fuel and wood chip use is, of course, also prevalent
31 in some regions. An accurate hog fuel/wood chip price is
32 difficult to obtain.

33
34 Most pulp and paper mills use No. 2 or No. 6 oil as a back-up
35 fuel when gas supply is interrupted. Propane and light fuel
36 oil are used as back-up fuels by some Lower Mainland hospitals

1 and manufacturing plants.

2
3 In the Lower Mainland, hospitals, food processing, chemical
4 and agricultural firms have for the most part abandoned #6
5 fuel oil in favour of the lighter #2 fuel oil or #2 diesel
6 fuel for environmental reasons, even though the lighter grade
7 fuel is more expensive. A recent survey by BC Gas suggests
8 that large volume #2 oil can retail between 24 to 35 cents per
9 litre and #2 diesel between 22 to 34 cents per litre.

10
11 Industrial propane prices probably vary as much as fuel oil
12 prices, depending upon the time of season, volume discounts
13 and delivery arrangements. A range of 15 to 25 cents per
14 litre may be typical. For long term use, companies usually
15 have to invest in a tank and ancillary equipment, which can
16 cost \$100,000 or more.

17
18 Coal use is relatively rare in the Lower Mainland, but is
19 consumed by some cement producers. Some reports suggest that
20 thermal grade coal delivered to the site is around the \$38 to
21 \$40 per ton range, which works out to \$1.55 to 1.60 per GJ.
22 Delivered costs in the interior are likely somewhat more or
23 less than this range depending upon transportation costs from
24 the production site.

25 26 **1.5 NATURAL GAS RATES IN NEIGHBOURING SERVICE TERRITORIES**

27
28 The price data presented in Tables 1 to 5 compared natural gas
29 prices with the cost of other energy. In Table 6, residential
30 natural gas rates in neighbouring gas distribution service
31 areas are shown. Tables 7 through 9 present similar
32 comparisons for commercial and industrial customer gas rates.

33
34 To a large extent, differences in the rates charged by gas
35 distributors are explained by the cost of transporting natural
36 gas from the wellhead to the city gate. For example, the

1 relatively low rates charged by the Alberta distributors, CWNG
2 and NUL, are due largely to their proximity to supply sources.

3
4 Residential and commercial rates among gas utilities also show
5 divergence in rate structure. For example, BC Gas and the
6 Alberta utilities offer different rates according to the
7 season, while PNG and the Washington utilities do not. Also,
8 basic charges for residential customers are substantially
9 higher in Alberta compared to B.C. and Washington.

10
11 Significant differences in natural gas rates also occur in the
12 large commercial and industrial rate categories. There are a
13 number of reasons for this. Some utilities may be more likely
14 to customize rates according to the energy consumption levels
15 among commercial and industrial customers in their service
16 region, depending upon the size of the market and competition
17 from other fuels. For example, BC Gas offers both small and
18 large commercial rates, whereas many other utilities do not.
19 On the other hand, BC Gas only offers one firm service
20 industrial rate option while other utilities offer general
21 service and high load factor firm service rates.

22
23 Rates may also differ depending upon the availability of other
24 fuels, including bypass options, and the ability of customers
25 to utilize substitute fuels. Finally, variations in
26 industrial rate categories may reflect different attitudes
27 among regulatory agencies about cross subsidization between
28 different rate categories.

Table 6

Natural Gas Residential Rate Comparison
\$Cdn. per Gigajoule

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
Monthly Volume GJ's	BC Gas Utility						PNG	CWNG		NUL		Cascade Bellingham	WWP Spokane	WNG Seattle
	Lower Winter	Mainland Summer	Inland Winter	Inland Summer	Columbia Winter	Columbia Summer		Winter	Summer	Winter	Summer			
1	\$11.30	\$10.12	\$10.95	\$9.76	\$10.99	\$9.81	\$6.57	\$16.36	\$16.35	\$16.49	\$16.29	\$9.18	\$9.18	\$12.43
2	8.14	6.96	7.79	6.60	7.83	6.65	6.07	9.36	9.35	9.49	9.29	8.17	6.98	9.37
5	6.24	5.06	5.89	4.71	5.94	4.76	5.77	5.16	5.15	5.29	5.09	7.56	5.65	7.54
10	5.61	4.43	5.26	4.08	5.31	4.12	5.67	3.76	3.75	3.89	3.69	7.35	5.21	6.93
15	5.40	4.22	5.05	3.87	5.10	3.91	5.52	3.29	3.28	3.42	3.23	7.28	5.07	6.73
20	5.30	4.11	4.94	3.76	4.99	3.81	5.42	3.06	3.05	3.19	2.99	7.25	4.99	6.63
25	5.23	4.05	4.88	3.70	4.93	3.74	5.36	2.92	2.91	3.05	2.85	7.23	4.95	6.57
30	5.19	4.01	4.84	3.65	4.88	3.70	5.32	2.83	2.81	2.95	2.76	7.22	4.92	6.53

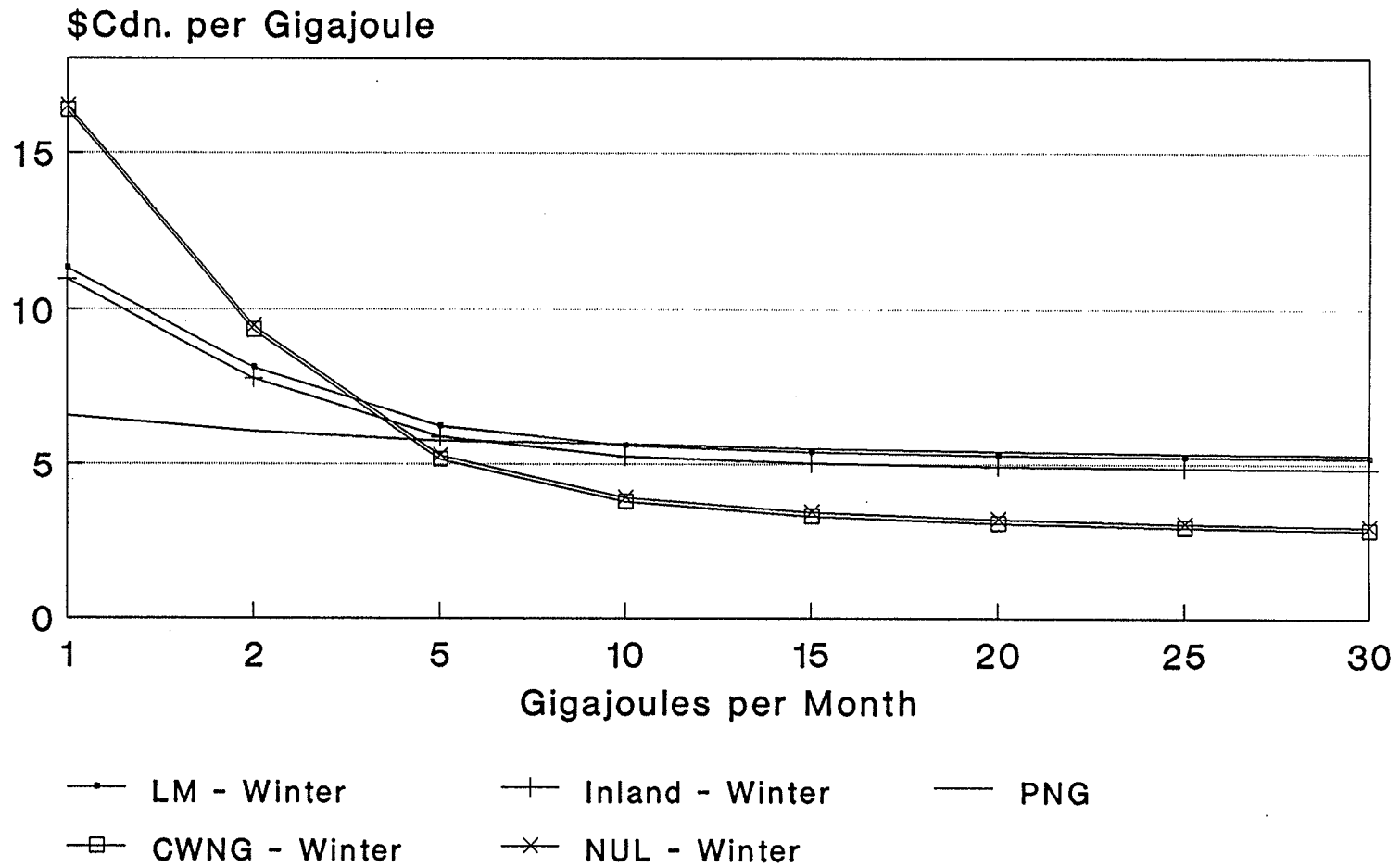
Notes: Lower Mainland – BC Gas Utility Ltd., Rate Schedule 1, Residential Service, effective January 1, 1996.
 Inland – BC Gas Utility Ltd., Rate Schedule 1, Residential Service (excluding franchise fees), effective January 1, 1996.
 Columbia – BC Gas Utility Ltd., Rate Schedule 1, Residential Service (excluding franchise fees), effective January 1, 1996.
 PNG – Pacific Northern Gas Ltd., Rate Schedule 1, Residential Service, effective January 1, 1995.
 CWNG – Canadian Western Natural Gas Company, Rate No. 1, General Sales Service, effective November 1, 1995.
 NUL – Northwestern Utilities Ltd., Rate No. 1, General Sales Service, effective November 1, 1995.
 Cascade – Cascade Natural Gas Corporation, Rate Schedule 501, General Residential Service, effective December 18, 1995.
 WWP – Washington Water Power Company, Rate Schedule 101, General Service, effective December 22, 1995.
 WNG – Washington Natural Gas, Rate Schedule 23, Residential General Service, effective May 15, 1995.

Cdn./U.S. exchange rate is \$1.3564 Cdn. per \$U.S.

Comparisons are approximate because heat content varies by region.

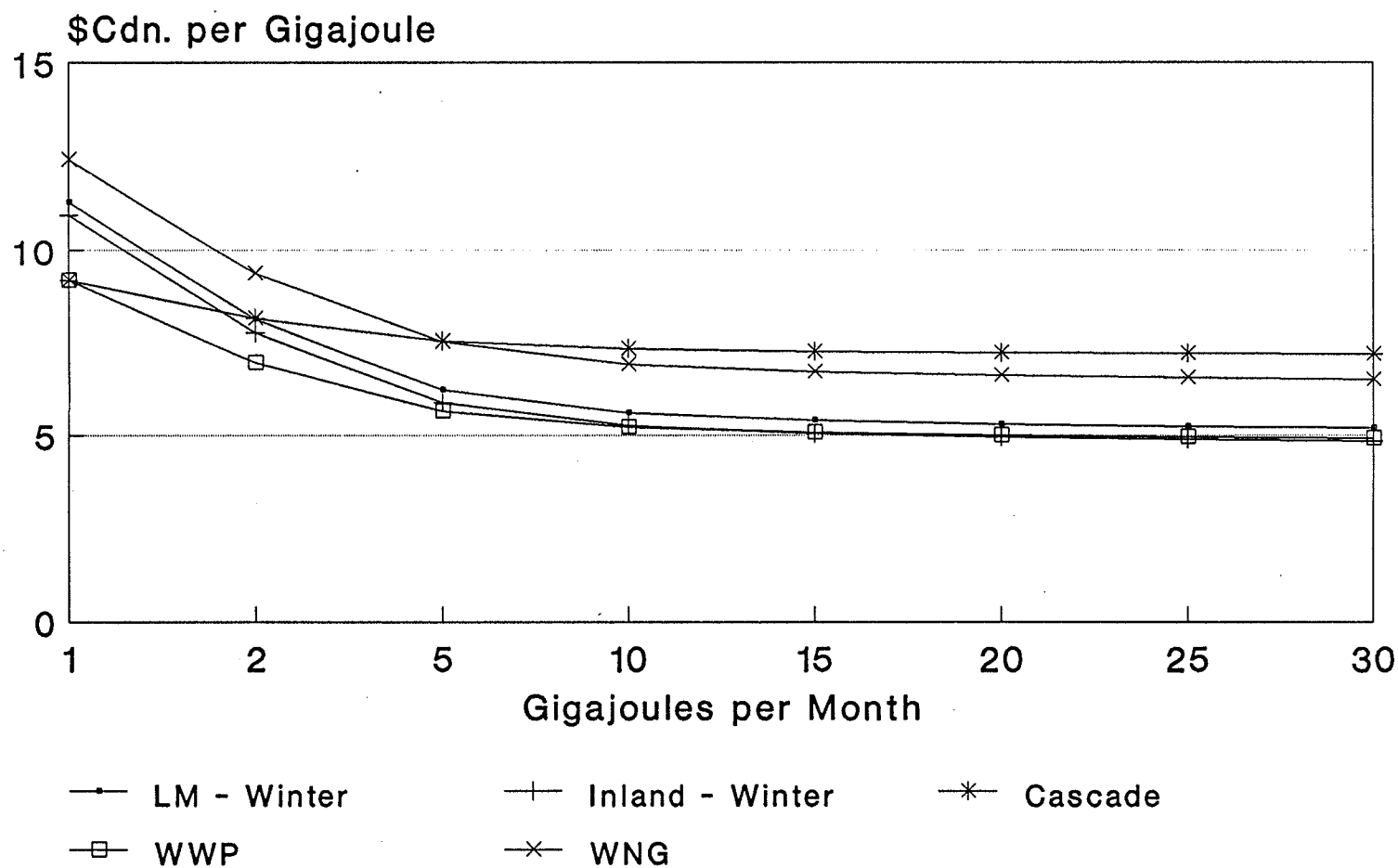
Provincial sales taxes, GST and Municipal taxes are excluded.

Figure 1A
Natural Gas Residential Rate Comparison



Source: Table 6

Figure 1B
Natural Gas Residential Rate Comparison



Source: Table 6

Table 7

Natural Gas Small Commercial Rate Comparison
\$ Cdn. per Gigajoule

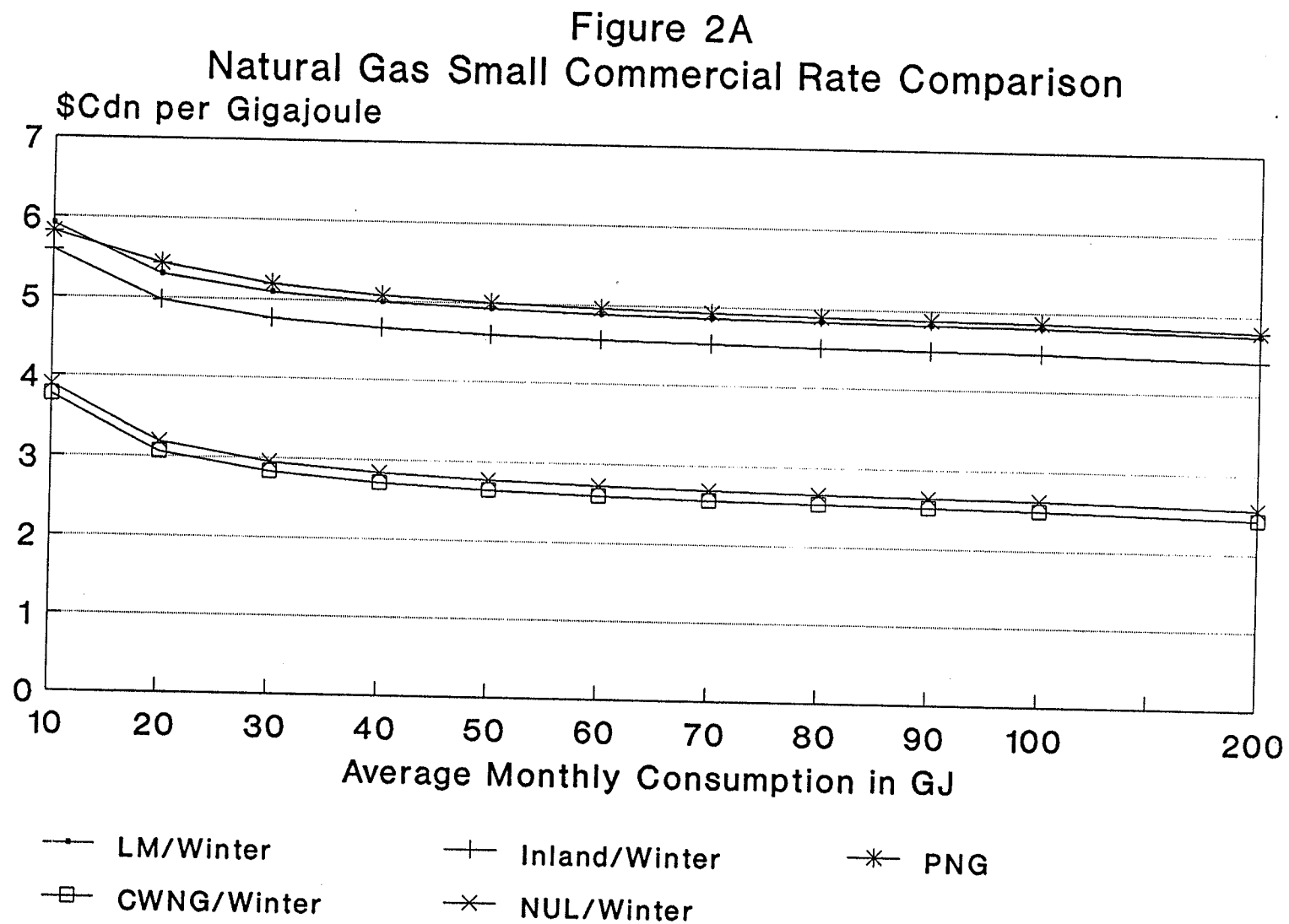
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(L)	(M)	(N)	(O)
Monthly Volume GJ's	BC Gas Utility						PNG	CWNG		NUL		Cascade Bellingham	WWP Spokane	WNG Seattle
	Lower Mainland Winter	Mainland Summer	Inland Winter	Inland Summer	Columbia Winter	Columbia Summer		Winter	Summer	Winter	Summer			
10	\$5.913	\$4.952	\$5.585	\$4.624	\$5.635	\$4.674	\$5.817	\$3.761	\$3.745	\$3.887	\$3.693	\$7.196	\$14.465	\$28.484
20	5.296	4.335	4.968	4.007	5.018	4.057	5.427	3.061	3.045	3.187	2.993	6.884	9.558	14.242
30	5.090	4.129	4.762	3.801	4.812	3.851	5.191	2.828	2.812	2.954	2.760	6.779	7.865	9.495
40	4.988	4.027	4.660	3.699	4.710	3.749	5.073	2.711	2.695	2.837	2.643	6.727	7.013	7.121
50	4.926	3.965	4.598	3.637	4.648	3.687	5.002	2.641	2.625	2.767	2.573	6.696	6.502	5.697
60	4.885	3.924	4.557	3.596	4.607	3.646	4.955	2.594	2.578	2.720	2.526	6.675	6.161	5.396
70	4.855	3.894	4.527	3.566	4.577	3.616	4.921	2.561	2.545	2.687	2.493	6.661	5.918	5.391
80	4.833	3.872	4.505	3.544	4.555	3.594	4.895	2.536	2.520	2.662	2.468	6.649	5.736	5.388
90	4.816	3.855	4.488	3.527	4.538	3.577	4.876	2.517	2.501	2.643	2.449	6.641	5.594	5.385
100	4.802	3.841	4.474	3.513	4.524	3.563	4.860	2.501	2.485	2.627	2.433	6.634	5.480	5.383
200	4.741	3.780	4.413	3.452	4.463	3.502	4.789	2.431	2.415	2.557	2.363	6.603	4.813	5.374

Notes: Lower Mainland – BC Gas Utility Ltd., Rate Schedule 2, Small Commercial Service, effective January 1, 1996.
 Inland – BC Gas Utility Ltd., Rate Schedule 2, Small Commercial Service, effective January 1, 1996.
 Columbia – BC Gas Utility Ltd., Rate Schedule 2, Small Commercial Service, effective January 1, 1996.
 PNG – Pacific Northern Gas Ltd., Rate Schedule 2, General Service, effective January 1, 1995.
 CWNG – Canadian Western Natural Gas Company, Rate No. 1, General Sales Service, effective November 1, 1995.
 NUL – Northwestern Utilities Ltd., Rate No. 1, General Sales Service, effective November 1, 1995.
 Cascade – Cascade Natural Gas Corporation, Rate Schedule 504, General Commercial Service, effective December 18, 1995.
 WWP – Washington Water Power Company, Rate Schedule 111, Large General Service, effective December 22, 1995.
 WNG – Washington Natural Gas, Rate Schedule 41, Large Volume High Load Factor Gas Service, effective May 15, 1995.

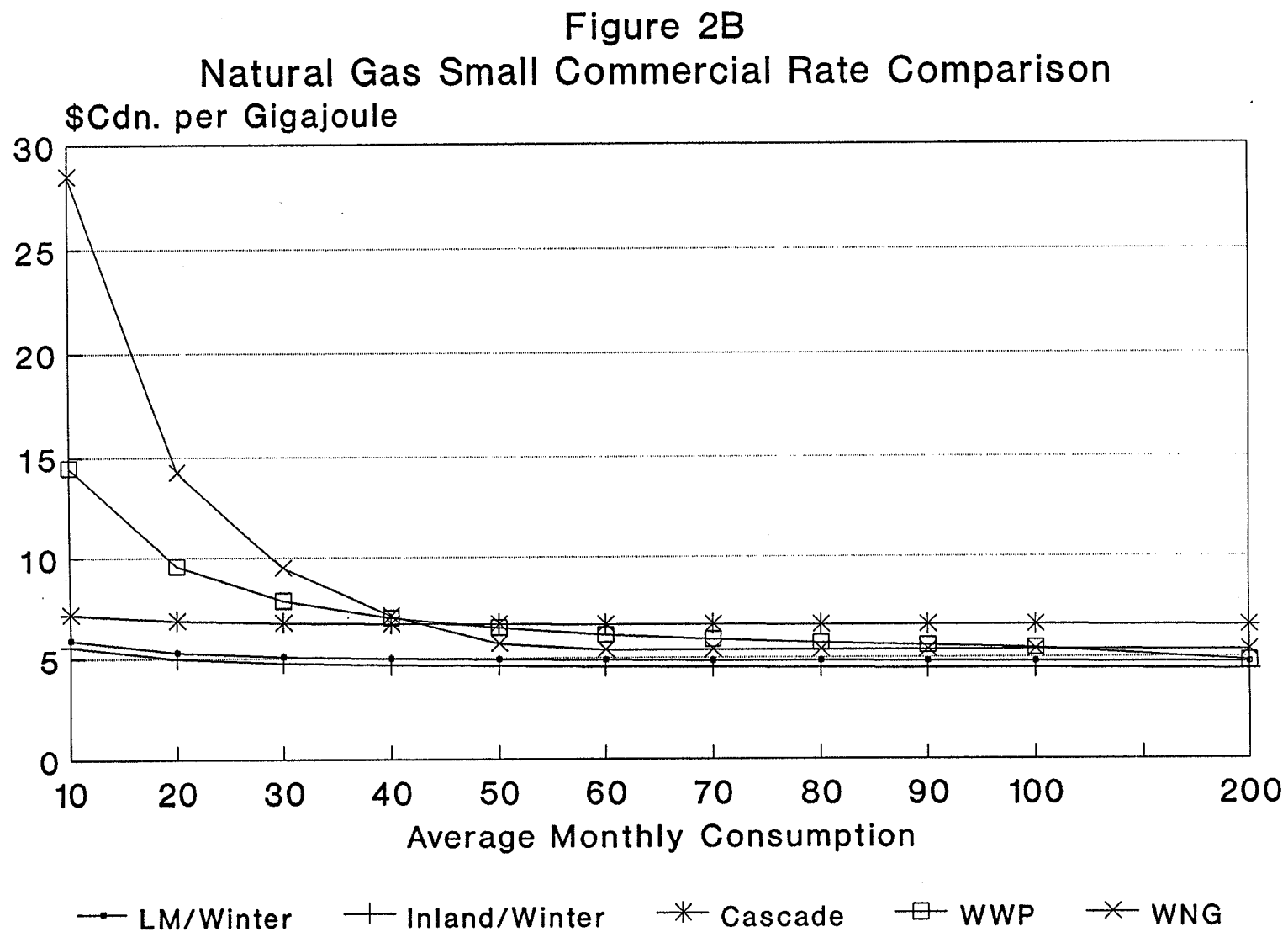
Cdn./U.S. exchange rate is \$1.3564 Cdn. per \$U.S.

Comparisons are approximate because heat content varies by region.

Provincial sales taxes, GST and Municipal taxes are not included in the calculations.



Source: Table 7.



Source: Table 7.

Table 8

Natural Gas Large Commercial Rate Comparison
\$ Cdn. per Gigajoule

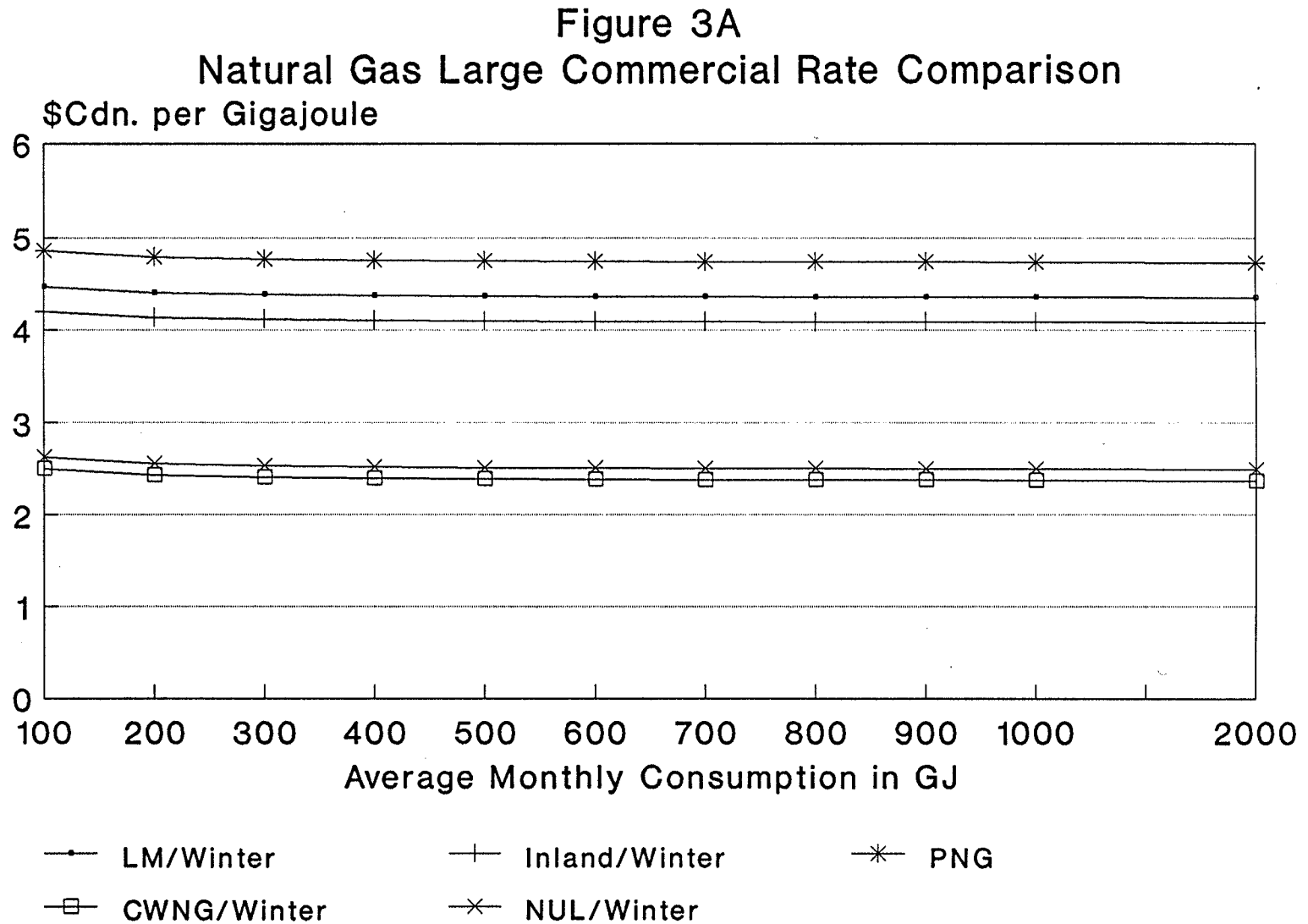
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)
Monthly Volume GJ's	BC Gas Utility						PNG	CWNG		NUL		Cascade	WWP	WNG
	Lower Mainland		Inland		Columbia			Winter	Summer	Winter	Summer	Bellingham	Spokane	Seattle
100	\$4.462	\$3.501	\$4.196	\$3.235	\$4.212	\$3.251	\$4.860	\$2.501	\$2.485	\$2.627	\$2.433	\$6.634	\$5.480	\$5.383
200	4.401	3.440	4.135	3.174	4.151	3.190	4.789	2.431	2.415	2.557	2.363	6.603	4.813	5.374
300	4.380	3.419	4.114	3.153	4.130	3.169	4.765	2.408	2.392	2.534	2.340	6.592	4.585	5.371
400	4.370	3.409	4.104	3.143	4.120	3.159	4.753	2.396	2.380	2.522	2.328	6.587	4.470	5.369
500	4.364	3.403	4.098	3.137	4.114	3.153	4.746	2.389	2.373	2.515	2.321	6.584	4.402	5.368
600	4.360	3.399	4.094	3.133	4.110	3.149	4.742	2.384	2.368	2.510	2.316	6.582	4.356	5.329
700	4.357	3.396	4.091	3.130	4.107	3.146	4.738	2.381	2.365	2.507	2.313	6.580	4.323	5.288
800	4.354	3.393	4.088	3.127	4.104	3.143	4.736	2.379	2.363	2.505	2.311	6.579	4.299	5.257
900	4.353	3.392	4.087	3.126	4.103	3.142	4.734	2.377	2.361	2.503	2.309	6.578	4.280	5.234
1000	4.351	3.390	4.085	3.124	4.101	3.140	4.732	2.375	2.359	2.501	2.307	6.578	4.265	5.215
2000	4.345	3.384	4.079	3.118	4.095	3.134	4.725	2.368	2.352	2.494	2.300	6.574	4.196	5.129

Notes: Lower Mainland – BC Gas Utility Ltd., Rate Schedule 3, Large Commercial Service, effective January 1, 1996.
 Inland – BC Gas Utility Ltd., Rate Schedule 3, Large Commercial Service, effective January 1, 1996.
 Columbia – BC Gas Utility Ltd., Rate Schedule 3, Large Commercial Service, effective January 1, 1996.
 PNG – Pacific Northern Gas Ltd., Rate Schedule 2, General Service, effective January 1, 1995.
 CWNG – Canadian Western Natural Gas Company, Rate No. 1, General Sales Service, effective November 1, 1995.
 NUL – Northwestern Utilities Ltd., Rate No. 1, General Sales Service, effective November 1, 1995.
 Cascade – Cascade Natural Gas Corporation, Rate Schedule 504, General Commercial Service, effective December 18, 1995.
 WWP – Washington Water Power Company, Rate Schedule 111, Large General Service, effective December 22, 1995.
 WNG – Washington Natural Gas, Rate Schedule 41, Large Volume High Load Factor Gas Service, effective May 15, 1995.

Cdn./U.S. exchange rate is \$1.3564 Cdn. per \$U.S.

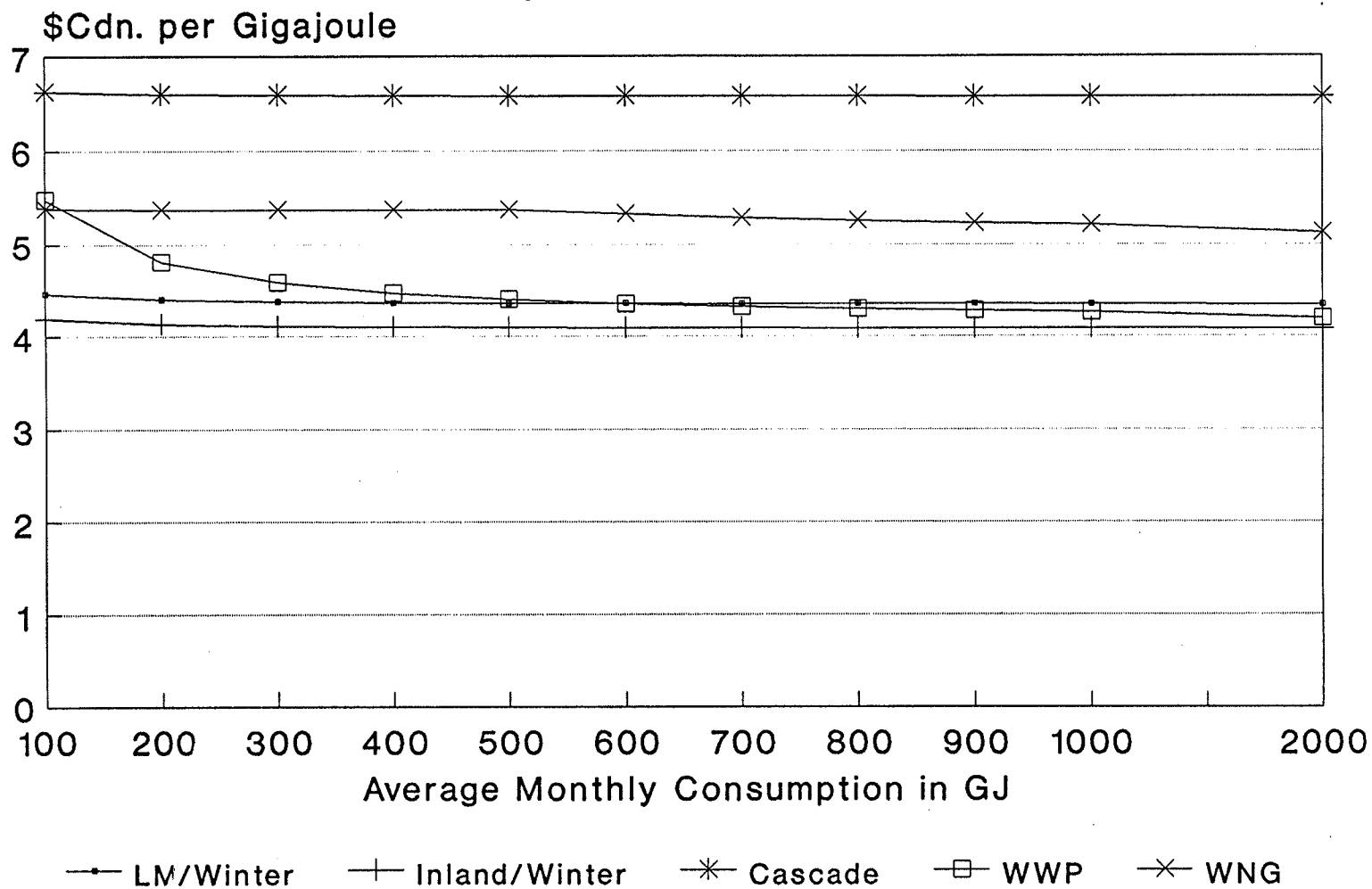
Comparisons are approximate because heat content varies by region.

Provincial sales taxes, GST and Municipal taxes are not included in the calculations.



Source: Table 8

Figure 3B
Natural Gas Large Commercial Rate Comparison



Source: Table 8

Table 9

Natural Gas General Firm Industrial Sales Rate Comparison
\$ Cdn. per Gigajoule

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Monthly Volume GJ's	-----BCGas-----						
	Lower Mainland		Inland		Columbia		PNG
	Winter	Summer	Winter	Summer	Winter	Summer	
1,000	\$3.949	\$3.157	\$3.731	\$2.939	\$3.770	\$2.978	\$3.535
2,000	3.766	2.974	3.548	2.756	3.587	2.795	3.563
3,000	3.705	2.913	3.487	2.695	3.526	2.734	3.572
4,000	3.675	2.883	3.457	2.665	3.496	2.704	3.577
5,000	3.656	2.864	3.438	2.646	3.477	2.685	3.580
6,000	3.644	2.852	3.426	2.634	3.465	2.673	3.582
7,000	3.635	2.843	3.417	2.625	3.456	2.664	3.577
8,000	3.629	2.837	3.411	2.619	3.450	2.658	3.566
9,000	3.624	2.832	3.406	2.614	3.445	2.653	3.557
10,000	3.620	2.828	3.402	2.610	3.441	2.649	3.550
12,500	3.612	2.820	3.394	2.602	3.433	2.641	3.538
15,000	3.607	2.815	3.389	2.597	3.428	2.636	3.529

Notes: Lower Mainland – BC Gas Utility Ltd., Rate Schedule 5, General Firm Service, effective January 1, 1996.
Inland – BC Gas Utility Ltd., Rate Schedule 5, General Firm Service, effective January 1, 1996,
Columbia – BC Gas Utility Ltd., Rate Schedule 5, General Firm Service, effective January 1, 1996,
PNG – Pacific Northern Gas Ltd., Rate Schedule 5, Small Industrial Service,
effective January 1, 1995.

Canada/U.S. exchange rate is \$1.3564 Cdn. per \$U.S.
Comparisons are approximate because heat content varies by region.
Provincial/State sales taxes, GST and Municipal taxes are not included in the calculations.

Table 9, Cont'd

Natural Gas General Firm Industrial Sales Rate Comparison
\$ Cdn. per Gigajoule

(i) Monthly Volume GJ's	(j) CWNG	(k) Summer	(l) NUL	(m) Summer	(n) --- Cascade --- Bellingham	(o) Rate 511	(p) WWP Spokane	(q) Rate 122	(r) WNG Seattle
	Winter		Winter		Rate 505		Rate 121		Rate 41
1,000	1.900	1.884	2.057	1.863	\$5.860	\$5.915	\$3.854	\$3.862	\$5.215
2,000	1.775	1.759	1.907	1.713	5.821	5.664	3.638	3.646	5.129
3,000	1.733	1.717	1.857	1.663	5.808	5.580	3.564	3.572	5.100
4,000	1.712	1.696	1.832	1.638	5.801	5.538	3.527	3.534	5.086
5,000	1.700	1.684	1.817	1.623	5.798	5.513	3.504	3.512	5.077
6,000	1.691	1.675	1.807	1.613	5.795	5.496	3.489	3.497	5.072
7,000	1.685	1.669	1.799	1.605	5.793	5.485	3.479	3.486	5.068
8,000	1.681	1.665	1.794	1.600	5.792	5.476	3.471	3.479	5.065
9,000	1.678	1.662	1.790	1.596	5.791	5.469	3.465	3.472	5.062
10,000	1.675	1.659	1.787	1.593	5.790	5.463	3.460	3.467	5.060
12,500	1.670	1.654	1.781	1.587	5.788	5.453	3.451	3.458	5.057
15,000	1.666	1.650	1.777	1.583	5.787	5.446	3.445	3.452	5.055

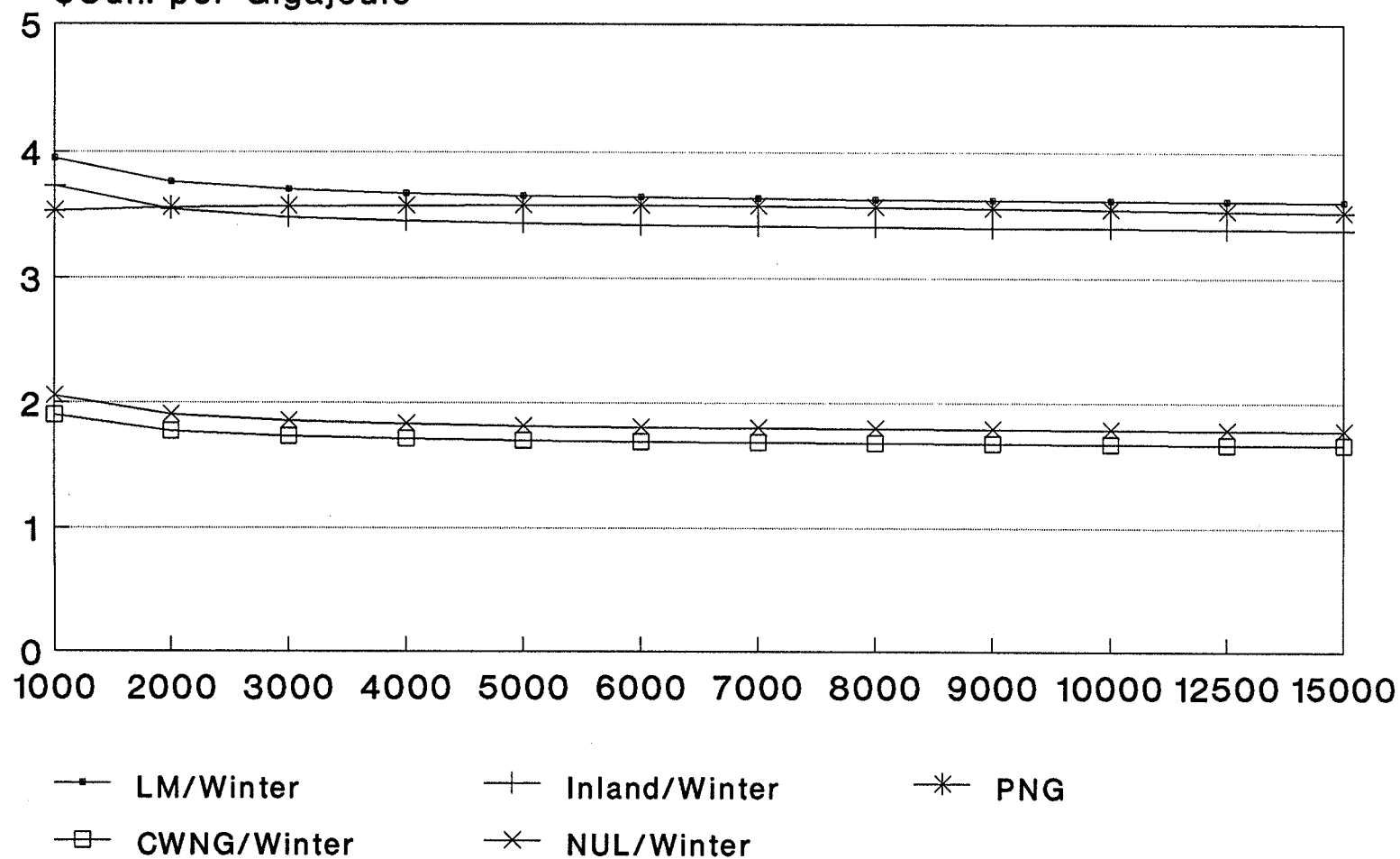
- Notes: CWNG – Canadian Western Natural Gas Company, Rate No. 3, Large Use Sales Service, effective November 1, 1995.
- NUL – Northwestern Utilities Ltd., Rate No. 3, Large Use Sales Service, effective Nov. 1, 1995.
- Cascade – Cascade Natural Gas Corp., Rate 505, General Industrial Service and Rate 511, Large Volume General Industrial Service, effective December 18, 1995.
- WWP – Washington Water Power Co., Rate Schedules 121 and 122, Large General Service, effective December 22, 1995.
- WNG – Washington Natural Gas, Rate Schedule 41, Large Volume High Load Factor Gas Service, effective May 15, 1995.

Canada/U.S. exchange rate is \$1.3564 Cdn. per \$U.S.

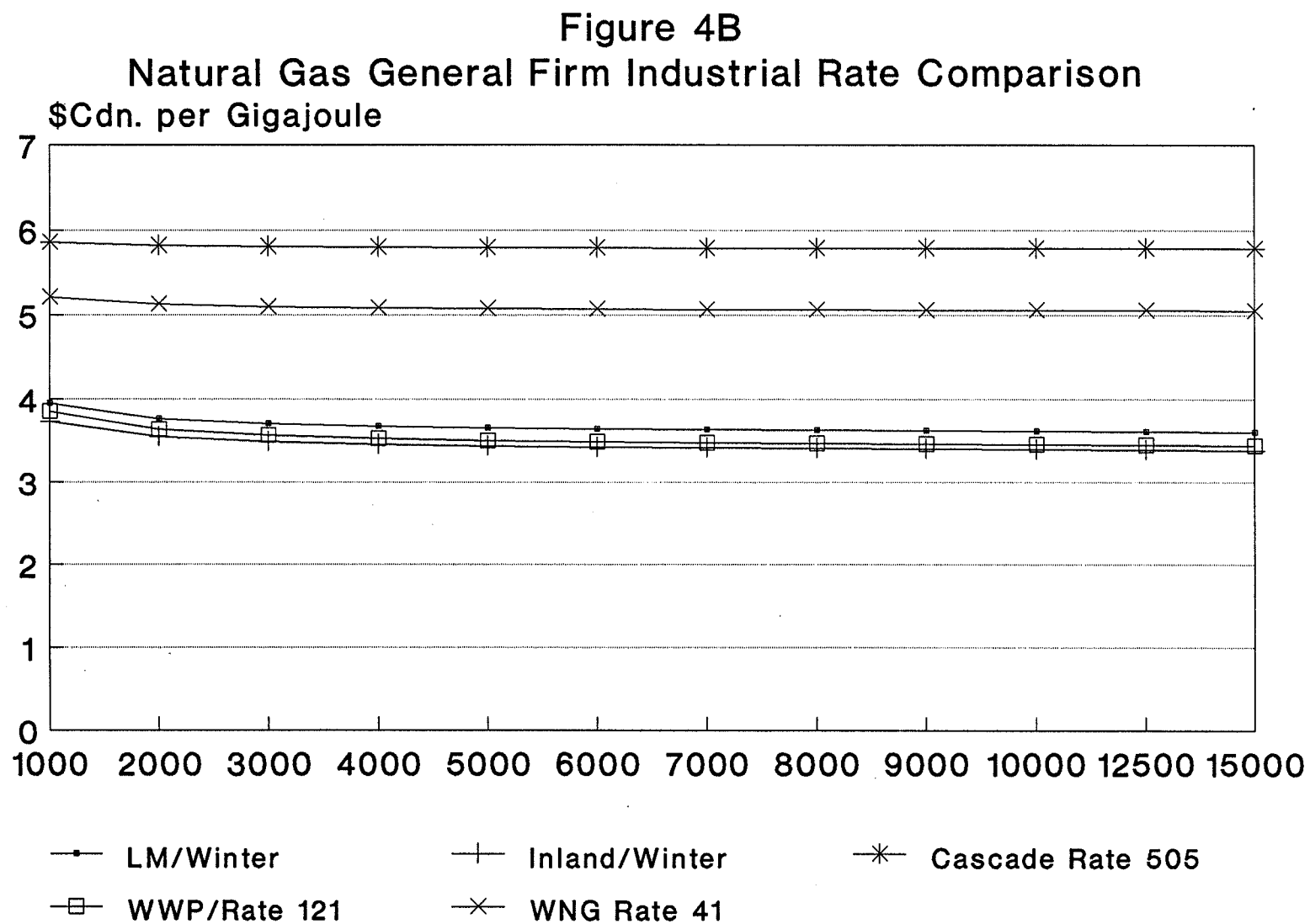
Comparisons are approximate because heat content varies by region.

Provincial/State sales taxes, GST and Municipal taxes are not included in the calculations.

Figure 4A
Natural Gas General Firm Industrial Rate Comparison
 \$Cdn. per Gigajoule



Source: Table 9



Source: Table 9

1.6 LONGER TERM HISTORICAL TRENDS IN ENERGY PRICES

The preceding assessment compared current energy price levels and price level changes over the past few years. What has been the longer term historical trend in energy price movements? In Table 10 below, estimates of average annual constant dollar rates of change for residential natural gas, electricity and fuel prices in B.C. are shown.

Prices changes over the past 20 years can be categorized into three periods: 1975 to 1985, when, due to the crude oil price increases, energy prices increased at rates significantly above the rate of inflation; the years 1985 to 1990, a period of slow economic growth and price stability within OPEC, when energy prices fell in real terms; and finally, the years 1990 to today, a period of consolidation, characterized by deregulation in the natural gas market and the decoupling of oil and natural gas prices, during which energy prices increased, if at all, at rates not much greater than the general inflation rate.

Table 10 shows estimates of price changes for typical B.C. residential energy costs from 1975 to 1996. The data suggests a broad uniformity in energy price movements during this period. Between 1975 and 1985, residential energy prices in B.C. increased at rates above inflation; but between 1985 and 1990, energy price increases were generally below the inflation rate.

Differences in annual rates of change between B.C. Hydro marginal and average electricity prices shown in Table 10 require some explanation. The difference is attributable mainly to a narrowing between the average and marginal rate. In other words, the rate structure has gradually changed from a declining block to a uniform structure over this period. Also, since the average rate is based on utility revenues and

1 volumes, the unit price is affected by changes in weather and
2 economic conditions, factors not related to tariff changes.

3
4 Table 10 also shows rate changes for the Lower Mainland and
5 Inland sales regions of BC Gas. Natural gas rates moved in
6 the same direction in the 1975/80, 1980/85 and 1985/90
7 periods, but in the opposite direction during 1990 to 1996.
8 The divergence in the last period is mainly the result of the
9 implementation of uniform delivery and basic charges within
10 the BC Gas service area (with the exception of the Fort Nelson
11 region) starting in 1994. However, over the entire period
in12 1975 to 1996, the average annual real rate of change
13 typical residential natural gas rates in the Lower Mainland
14 and Inland areas were very similar: 0.8 and 0.5 percent per
15 year, respectively.
16

17 Figure 5 shows selected residential energy price levels in
18 constant dollars over the period 1975 to 1996. But a more
19 revealing analysis of energy price movements is perhaps shown
20 in Figures 6 and 7. Figure 6 shows the cumulative percent
21 change in these same prices since 1975, but in nominal
22 dollars. By expressing prices in nominal dollars a direct
23 comparison with the change in the consumer price index is
24 possible.
25

26 Figure 6 shows that since 1975 the B.C. consumer price index
27 has increased about 116 percent. In comparison, fuel oil
28 prices increased in total about 188 percent, while a typical
29 rate for a BC Gas Inland customer increased approximately
30 138 percent. Over the same period, the B.C. Hydro marginal
31 electric rate rose 160 percent.

Table 10

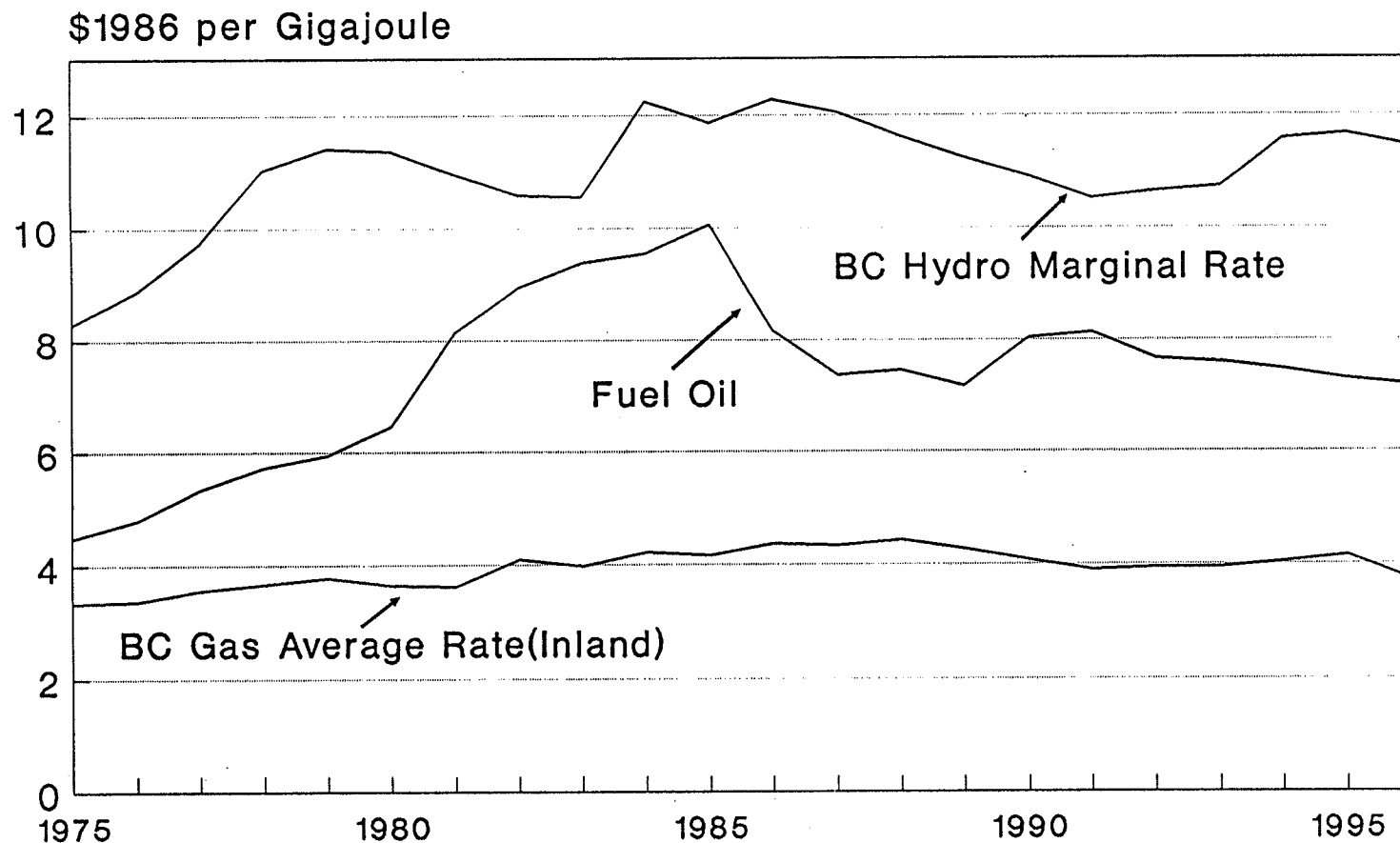
**Average Annual Rate of Change in Selected B.C. Residential Energy Prices,
Measured in Constant Dollars
(Average Annual Percent Change)**

	Lower Mainland Natural Gas Average Rate ¹	Inland Natural Gas Average Rate ¹	B.C. Hydro Marginal Rate ²	B.C. Hydro Average Rate ³	Average Fuel Oil Price ³
1975/1980	0.3%	1.7%	6.5%	0.4%	7.7%
1980/1985	6.0%	2.6%	0.8%	1.3%	9.2%
1985/1990	-3.6%	-0.4%	-1.6%	-1.1%	-4.4%
1990/1996	0.5%	-1.5%	0.8%	-3.4%	-1.8%
1975/1996	0.8%	0.5%	1.5%	-0.8%	2.3%

1. BC Gas estimates based on tariff schedules.
2. BC Gas estimates based on tariff schedules.
3. Source: Natural Resources Canada.

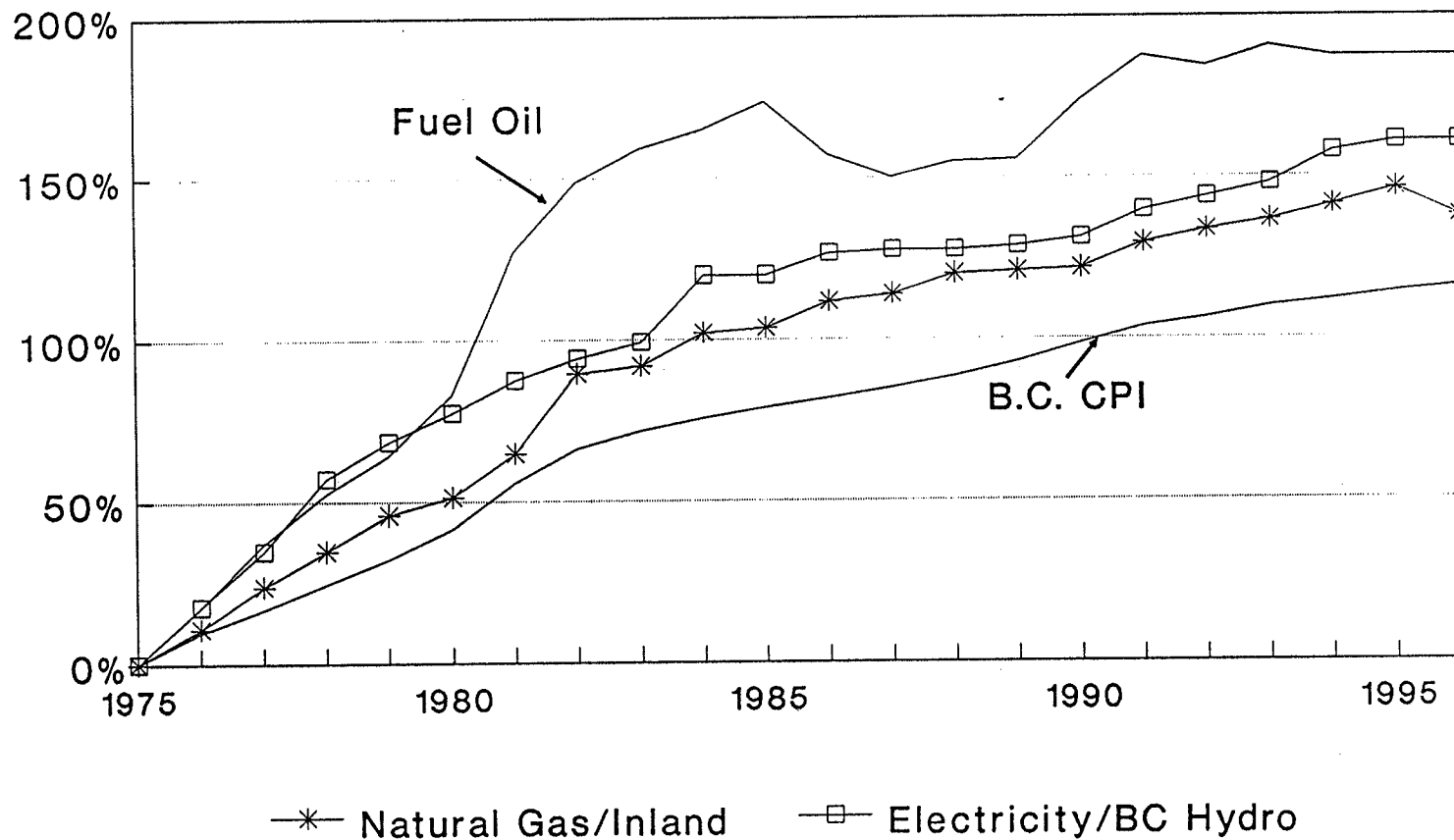
Note: Prices exclude GST.

Figure 5
Selected Historical Residential Energy
Prices in B.C.



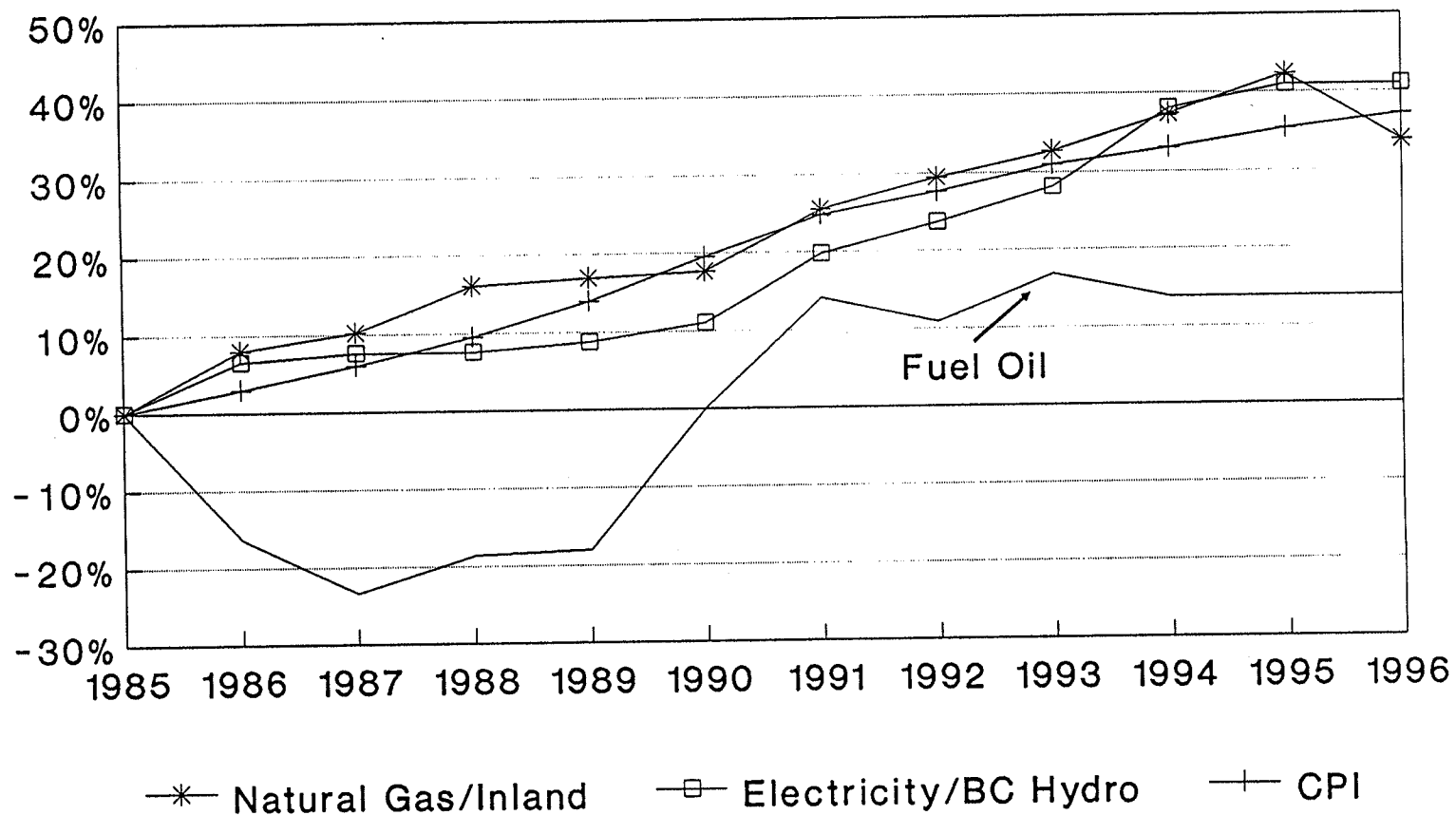
Source: BC Gas, Natural Resources
Canada; Prices exclude GST.

Figure 6
Cumulative Percent Change in Residential
Energy Prices in B.C. Since 1975



Source: BC Gas estimates, Statistics Canada. Prices include GST.

Figure 7
Cumulative Percent Change in Residential
Energy Prices in B.C. Since 1985



Source: BC Gas estimates, Statistics
Canada. Prices include GST.

1 One problem with this type of comparison is that the results
2 depend heavily on the start year. For example, a careful look
3 at Figure 6 shows that most of the cumulative increase in
4 energy prices occurred prior to 1985. Past this date, the
5 cumulative percent change curves tend to flatten, suggesting
6 that a very different picture would emerge if cumulative
7 changes were compared from a start date of 1985.

8
9 This is done in Figure 7. Since 1985, the B.C. consumer price
10 index has risen by about 37 percent. In comparison, energy
11 prices have performed very well. The B.C. Hydro marginal rate
12 increased only 41 percent, just slightly above the general
13 inflation rate. Fuel oil and natural gas prices performed
14 even better, increasing in total just 14 percent in the case
15 of fuel oil, and about 33 percent in the case of natural gas.

16
17 **2.0 RESIDENTIAL ENERGY MARKET FUEL CHOICES AND END USE**
18 **APPLICATIONS - ESTIMATES FROM 1980 TO 1995**
19

20 This section briefly discusses the evolution of energy
21 consumption by fuel and end use in the B.C. residential sector
22 between 1980 and 1995. The data presented here are based
23 primarily on estimates by BC Gas, with supporting data from
24 public sources such as Statistics Canada and the Canadian Gas
25 Association. The data, particularly for 1980 and 1985, is
26 somewhat speculative because corroborative sources are scarce.
27 The data depicts residential energy consumption in the B.C.
28 mainland but excludes energy consumption in apartment
29 buildings.

30
31 What is the breakdown of residential gas consumption among end
32 use applications? Figure 8 shows end use market shares for
33 residential gas consumption in Mainland B.C. The predominance
34 of gas space heating is evident. It is estimated that between
35 1980 and 1990 about 80 percent of residential gas consumption
36 was for space heating purposes. Water heating accounted for

1 about 19 percent, leaving only a small amount for all other
2 end uses.

3
4 However, over the past five or six years, other uses for
5 natural gas, particularly fireplaces, have acquired, if not a
6 significant portion of total gas consumption, than at least a
7 noticeable one. It is estimated that by 1995 non space and
8 water heating applications accounted for almost 10 percent of
9 total residential gas demand.

10
11 Figure 9 focuses on the residential space heat market. This
12 chart shows that a dramatic shift in fuel use occurred between
13 1980 and 1995. BC Gas estimates that fuel oil held over 30
14 percent of the residential space heat market, in terms of
15 percent of total volume of energy consumed, in 1980; but by
16 1995, it accounted for only 8 percent. In contrast, it is
17 estimated that natural gas increased its market share from 54
18 percent to almost 80 percent.

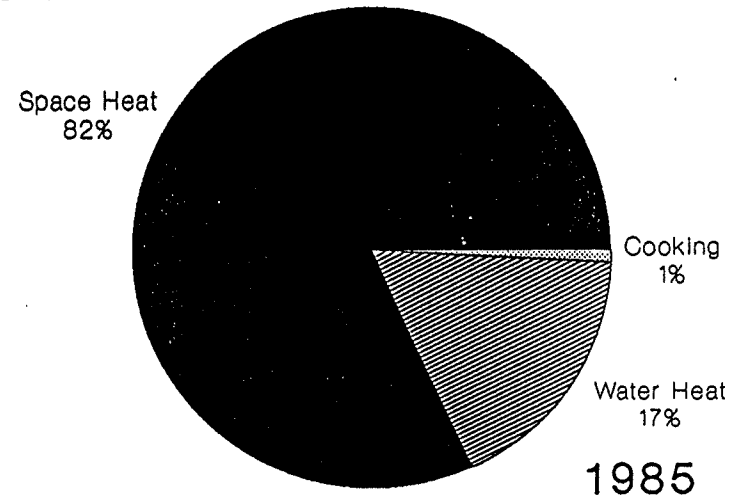
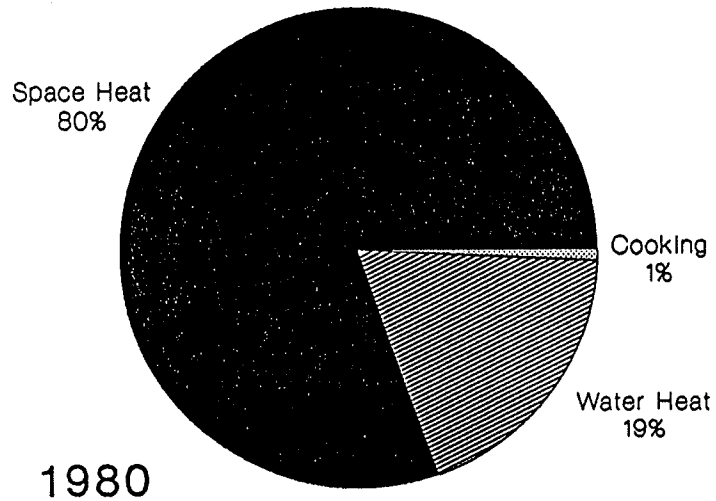
19
20 What caused this shift away from oil? A large part of the
21 answer is furnished in Table 10, which shows rates of change
22 in fuel oil, natural gas and electricity prices between 1975
23 and 1996. During the years 1975 to 1985, fuel oil prices
24 increased, in total, 125 percent in inflation adjusted
25 dollars. Natural gas rates also increased, but not by nearly
26 as much. In the B.C. interior, residential rates increased in
27 total about 24 percent over the same ten year period. Typical
28 residential electricity rates increased about 43 percent in
29 total over this period. Faced with such sharp oil price
30 increases, and with the expectation of further increases to
31 follow, households began switching to natural gas in large
32 numbers.

33
34 Helping to accelerate the trend toward natural gas use were
35 "off oil" programs, sponsored by the federal government, that
36 offered rather generous grants to home owners in order to

1 convert from oil to natural gas.

2
3 The next figure illustrates the residential water heating
4 market. This market evolved in a fashion similar to space
5 heating. It too was characterized by natural gas gaining
6 market share at the expense of fuel oil, though the fuel oil
7 share of this end use was always much lower than in space
8 heating. As Figure 10 shows, the gas share of the water
9 heating market increased from approximately 56 percent in 1975
10 to about 70 percent by 1995. The electric share of the water
11 heating market fell from about 30 percent to 23 percent during
12 this period. BC Gas estimates that on a total volume basis,
13 electric consumption for this purpose increased, but its
14 percentage share fell due to the large gains made by natural
15 gas.

Figure 8



Natural Gas Residential End Uses by Market Share

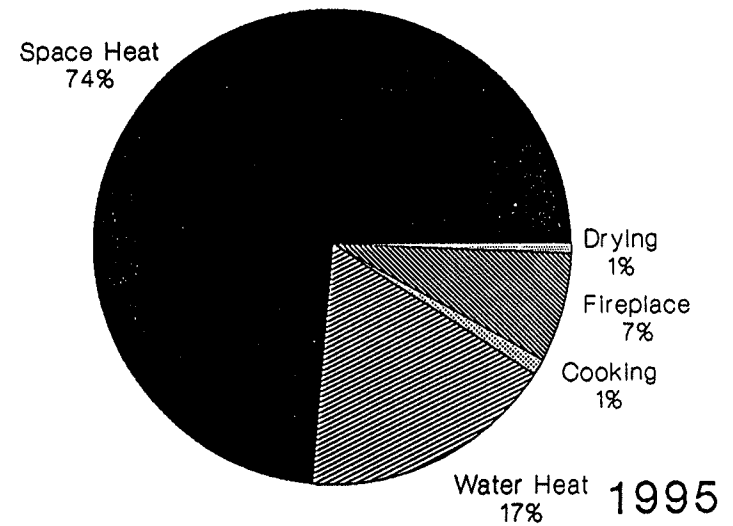
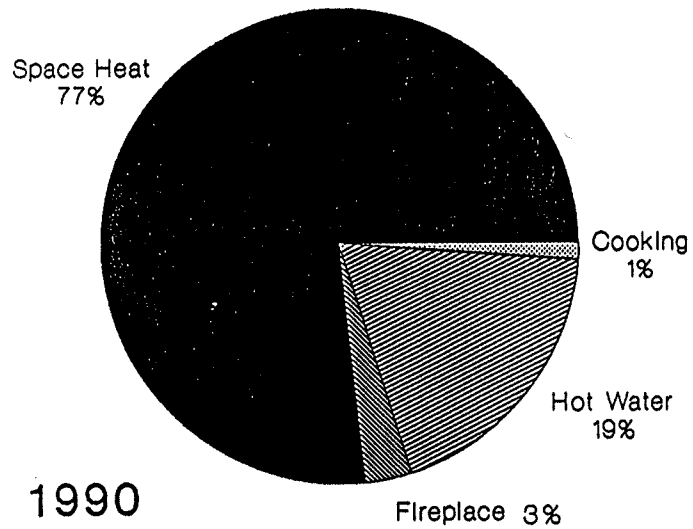
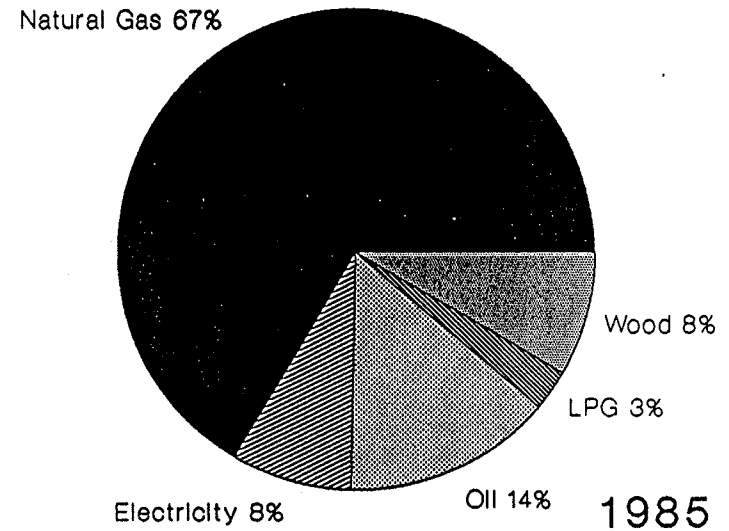
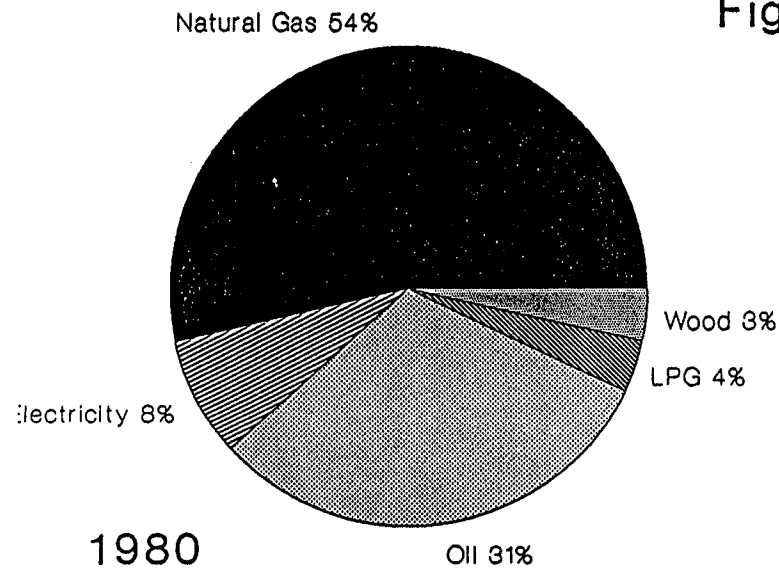


Figure 9



**B.C. Residential Space Heat Market by
Energy Volume Percent Shares**

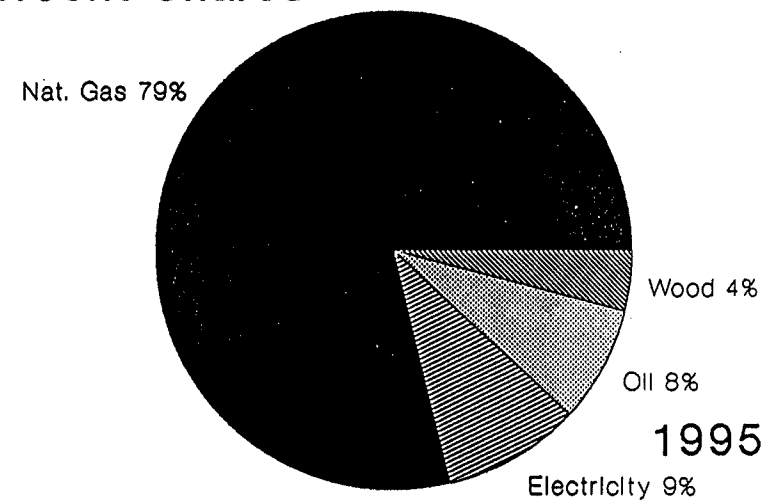
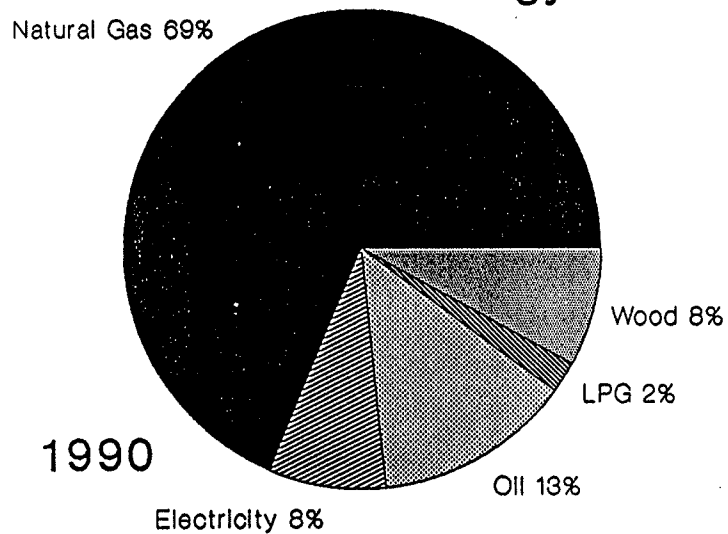
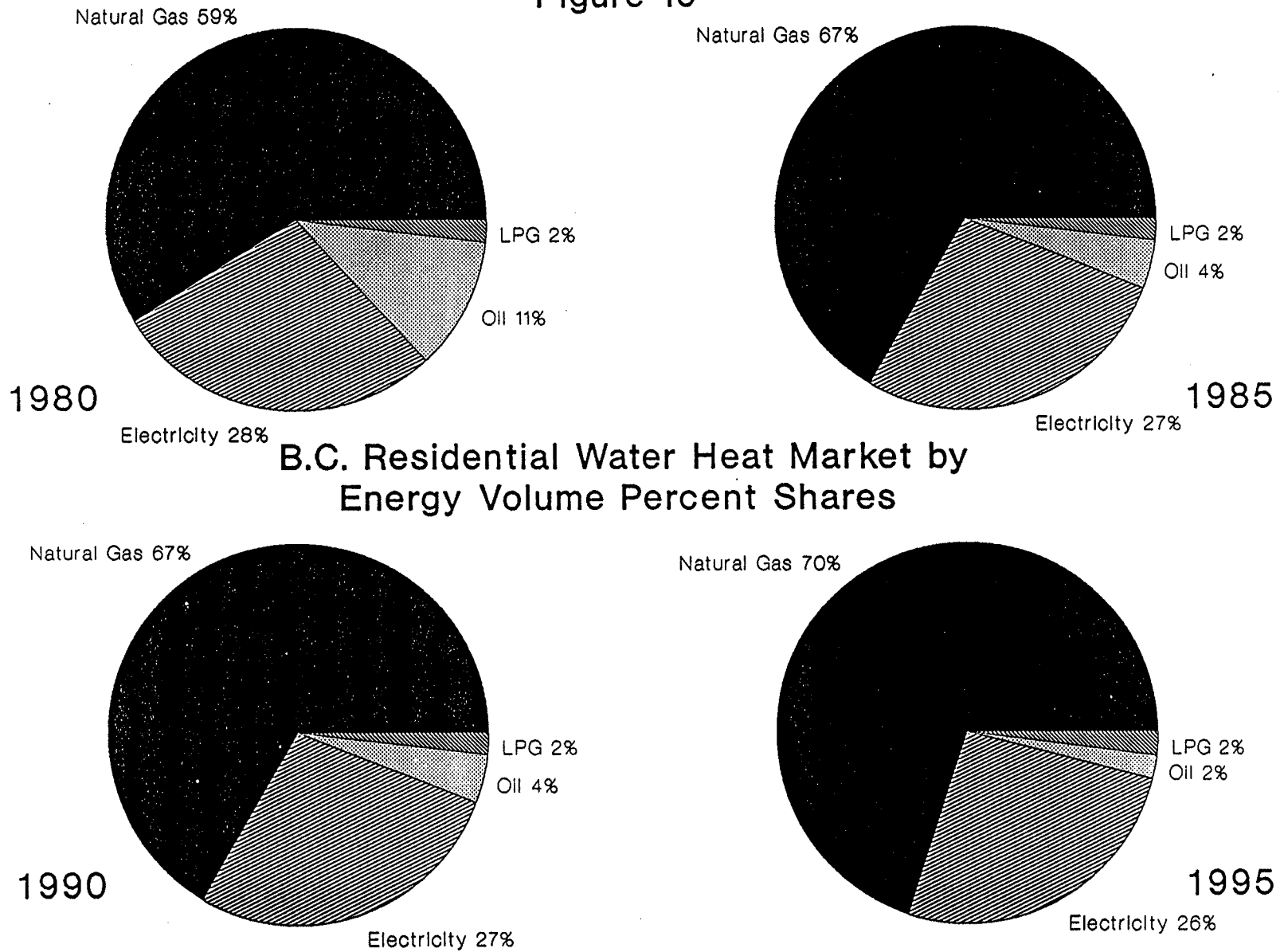


Figure 10



Appendix A - Data Sources

Distributor posted prices lists:

- Chevron Canada Limited, Vancouver, B.C.
- ICG Propane Inc., Burnaby, B.C.
- Imperial Oil Limited, Burnaby, B.C.
- Superior Propane, New Westminster, B.C.

Rate Schedules:

- BC Gas Utility Ltd., BC Gas Tariff, Rate Schedule 1, effective January 1 1996; Rate Schedule 2, effective January 1, 1996; Rate Schedule 3, effective January 1, 1996; Rate Schedule 5, effective January 1, 1996.
- British Columbia Hydro and Power Authority, Electric Tariff, Rate 1101, effective April 1, 1994; Rate 1220, effective April 1, 1995; Rate 1200, effective April 1, 1995.
- West Kootenay Power Ltd., Electric Tariff, Schedule 1, interim rate effective January 1, 1996; Schedule 20, interim rate effective January 1, 1996; Schedule 21, interim rate effective January 1, 1996.
- Canadian Western Natural Gas Limited, Rate Schedule Summary, Rate No.1, effective November 1, 1995; Rate No. 3, effective November 1, 1995.
- Northwestern Utilities Limited, Rate Schedule Summary, Rate No.1, effective November 1, 1995; Rate No. 3, effective November 1, 1995.
- Cascade Natural Gas Corporation, Washington Tariffs, Rate Schedule 501, effective December 22, 1995; Rate Schedule 504, effective December 18, 1995; Rate Schedule 505, effective December 18, 1995.

- 1 - Washington Natural Gas Company, Washington Gas, Rate
2 Schedule 23, effective May 15, 1995; Rate Schedule 41,
3 effective May 15, 1995.
4
- 5 - Washington Water Power Company, Washington Gas, Rate
6 Schedule 101, effective December 22, 1995; Rate Schedule
7 111, effective December 22, 1995; Rate Schedule 121 and
8 122, effective December 22, 1995.
9

10 Other Sources:
11

- 12 - Petroleum Product Market Report, Natural Resources
13 Canada, Canadian Oil Markets and Emergency Planning
14 Division.
15
- 16 - Unpublished data, Statistics Canada, Prices Division.
17
- 18 - Canadian Gas Facts, Canadian Gas Association, various
19 issues.

Appendix B - Energy Conversion Factors and Formulas

B.1 Heat Content Factors

The following energy content factors were used to convert retail prices to an energy equivalent price:

Liquid Propane	25.53 GJ/m ³
Light Fuel Oil	38.68 GJ/m ³
Heavy Fuel Oil	41.73 GJ/m ³
Electricity	3.60 MJ/kw.h
Thermal Coal	18.80 GJ/tonne
Diesel Fuel	38.68 GJ/m ³
Natural Gas	38.56 GJ/m ³

Source: National Energy Board

**B.2 Heat Content and Efficiency Adjusted Price
Conversions**

The following examples show the conversion formulas that are used to convert prices to an energy equivalent and efficiency adjusted basis:

Furnace Oil:

$(39 \text{ ¢/l} \div 38.68 \text{ GJ/m}^3) \times 10 = \$10.08/\text{GJ}$ @ 100% efficiency;
@ 65% efficiency: $\$10.08/\text{GJ} \div .65 = \$15.51/\text{GJ}$.

Propane:

$(36 \text{ ¢/l} \div 25.53 \text{ GJ/m}^3) \times 10 = \$14.10/\text{GJ}$ @ 100% efficiency;
@ 80% efficiency: $\$14.10/\text{GJ} \div .8 = \$17.63/\text{GJ}$.

Electricity:

$(5.2 \text{ ¢/kw.h} \div 3.6 \text{ MJ/kw.h}) \times 10 = \$14.17/\text{GJ}$ @ 100% efficiency.

RESIDENTIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996	Rate 1 Lower Mainland	To individually metered residential premises.	\$6.32/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$2.535 /GJ \$1.268 /GJ Cost of Gas \$2.591 \$2.591 Rider 5 \$0.023 \$0.023 Rider 6 (\$0.169) (\$0.084) Total Comm. chrg. \$4.980 /GJ \$3.798 /GJ 	Rider 5: Rate Stabilization Adjustment Cost Rider 6: Refund of Deferred Gas Cost Credits.
	Rate 1 Inland	To individually metered residential premises.	\$6.32/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$2.535 /GJ \$1.268 /GJ Cost of Gas \$2.404 \$2.404 Rider 2 (\$0.167) (\$0.167) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.169) (\$0.084) Total Comm. chrg. \$4.626 /GJ \$3.444 /GJ 	Rider 2: Deferred Inc. Tax Refund. Rider 5: As above Rider 6: As above
	Rate 1 Columbia	To individually metered residential premises.	\$6.32/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$2.535 /GJ \$1.268 /GJ Cost of Gas \$2.433 \$2.433 Rider 2 (\$0.148) (\$0.148) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.169) (\$0.084) Total Comm. chrg. \$4.674 /GJ \$3.492 /GJ 	Rider 2: As above Rider 5: As above Rider 6: As above
	Rate 1 Revelstoke	To individually metered residential premises.	\$6.32/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$2.535 /GJ \$1.268 /GJ Cost of Gas \$2.404 \$2.404 Rider 1 \$2.538 \$2.538 Rider 2 (\$0.167) (\$0.167) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.169) (\$0.184) Total Comm. chrg. \$7.164 /GJ \$5.882 /GJ 	Rider 1: Propane Surcharge appl. to City of Revelstoke & surrounding areas. Rider 2: As above Rider 5: As above Rider 6: As above

RESIDENTIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
PNG (NE) Ltd. January 1, 1995	Dawson Creek	To individually metered residential premises.	\$5.00/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Commodity Charge \$3.669 /GJ 	
	Tumbler Ridge	To individually metered residential premises.	\$8.50/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Commodity Charge \$4.403 /GJ 	
PNG, BC January 1, 1995	Rate 1 Residential Service	To individually metered residential premises.	\$6.57/month	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Charge First GJ \$6.570 /GJ Next 10 GJ \$5.566 all additional \$5.125 	
CWNG, AB November 1, 1995	Rate No. 1 General Service	< 10,000 GJ/year	\$14.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.053 /GJ \$1.053 /GJ Gas Costs \$1.308 \$1.292 Total Comm. chrg. \$2.361 /GJ \$2.345 /GJ 	
NUL, AB November 1, 1995 NUL Summary	Rate No. 1 General Services	< 8,000 GJ/year	\$14.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.208 /GJ \$1.208 /GJ Gas Costs \$1.279 \$1.085 Total Comm. chrg. \$2.487 /GJ \$2.293 /GJ 	
Centra Gas, Alta. November 6, 1995 C.G.A. Rate Schedules	Rate 1 Small Gen. Ser.	Avail. to all cust. except those who do not purchase their total gas req. from the Company.	\$11.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.397 /GJ \$1.397 /GJ Gas Costs \$1.292 \$1.300 Total Comm. chrg. \$2.689 /GJ \$2.697 /GJ 	
SaskEnergy, Sask January 1, 1996	Rate G01 Domestic Residential	To individually metered residential premises & resort cottages.	\$9.85/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Commodity Charge \$3.396 /GJ 	

RESIDENTIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
SaskEnergy, Sask January 1, 1996	Rate G17 Domestic Farm	For farm residential and agricultural use	\$11.55/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Commodity Charge \$3.396 /GJ 	
Centra Gas, MN January 31, 1996	Rate 1 Small Gen Ser.	For gas supplied via one domestic sized meter on a firm basis.	\$10.00/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Commodity Charge \$3.940 /GJ 	
Centra Gas, Ontario January 1, 1995	Rate 201 Small Vol. Gen. Fort Frances Zone	< or = 2,000 GJ/year	\$6.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov - Mar) (Apr - Oct) First 3.86 GJ \$1.951 /GJ \$1.951 /GJ next 7.712 GJ \$1.547 \$1.547 next 7.712 GJ \$1.341 \$1.341 next 19.28 GJ \$1.102 \$1.102 over 37.45 GJ \$0.315 \$0.315 Gas Sup. Chrg. \$3.263 /GJ \$3.004 /GJ Total Comm. chrg. First 3.86 GJ \$5.214 /GJ \$4.955 /GJ next 7.712 GJ \$4.810 \$4.551 next 7.712 GJ \$4.604 \$4.345 next 19.28 GJ \$4.365 \$4.105 over 37.45 GJ \$3.578 \$3.319 	
	Rate 101 Small Vol. Gen. Western Zone	< or = 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov - Mar) (Apr - Oct) First 3.86 GJ \$2.594 /GJ \$2.594 /GJ next 7.712 GJ \$2.402 \$2.402 next 7.712 GJ \$2.304 \$2.304 next 19.28 GJ \$2.190 \$2.190 over 37.45 GJ \$1.815 \$1.815 Gas Sup. Chrg. \$3.288 /GJ \$3.028 /GJ Total Comm. chrg. First 3.86 GJ \$5.882 /GJ \$5.623 /GJ next 7.712 GJ \$5.690 \$5.431 next 7.712 GJ \$5.592 \$5.333 next 19.28 GJ \$5.477 \$5.218 over 37.45 GJ \$5.103 \$4.844 	

RESIDENTIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas, Ontario January 1, 1995	Rate 301 Small Vol. Gen. Western Zone	< or = 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov – Mar) (Apr – Oct) First 3.86 GJ \$2.594 /GJ \$2.594 /GJ next 7.712 GJ \$2.402 \$2.402 next 7.712 GJ \$2.304 \$2.304 next 19.28 GJ \$2.190 \$2.190 over 37.45 GJ \$1.815 \$1.815 Gas Sup. Chrg. \$3.588 /GJ \$3.328 /GJ Total Comm. chrg. First 3.68 GJ \$6.182 /GJ \$5.923 /GJ next 7.712 GJ \$5.990 \$5.731 next 7.712 GJ \$5.892 \$5.633 next 19.28 GJ \$5.777 \$5.518 over 37.45 GJ \$5.403 \$5.144 	
	Rate 601 Small Vol. Gen. Northern Zone	< or = 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov – Mar) (Apr – Oct) First 3.86 GJ \$2.594 /GJ \$2.594 /GJ next 7.712 GJ \$2.402 \$2.402 next 7.712 GJ \$2.304 \$2.304 next 19.28 GJ \$2.190 \$2.190 over 37.45 GJ \$1.815 \$1.815 Gas Sup. Chrg. \$3.761 /GJ \$3.502 /GJ Total Comm. chrg. First 3.86 GJ \$6.355 /GJ \$6.096 /GJ next 7.712 GJ \$6.163 \$5.904 next 7.712 GJ \$6.065 \$5.806 next 19.28 GJ \$5.951 \$5.692 over 37.45 GJ \$5.576 \$5.317 	

RESIDENTIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Consumers Gas Oct. 1, 1995	Rate 1 Residential Central Heating Service	Avail. to any cust. using gas in a res. building through one meter and containing no more than 6 dwelling units.	\$6.75/month	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Margin (Nov – Mar) (Apr – Oct) First 1.158 GJ \$3.868 /GJ \$3.151 /GJ next 2.123 GJ \$3.705 \$2.989 next 3.281 GJ \$3.578 \$2.862 over 6.562 GJ \$3.483 \$2.767 Gas Supply Chrg. \$1.664 /GJ \$1.664 /GJ Total Comm. chrg. First 1.158 GJ \$5.532 /GJ \$4.816 /GJ next 2.123 GJ \$5.370 \$4.653 next 3.281 GJ \$5.243 \$4.526 over 6.562 GJ \$5.148 \$4.432	
Union Gas, Ontario Jan. 1, 1996 EBRO 476/03/04	Rate M2 General Ser. Rate		\$7.50/month	<ul style="list-style-type: none">Declining Rate Structure: Margin First 54 GJ \$4.774 /GJ Next 177 GJ \$3.829 Next 4,781 GJ \$3.470 Next 10,411 GJ \$3.196 Over 15,423 GJ \$3.157 Cost of Gas \$0.275 /GJ Total Comm. chrg. First 54 GJ \$5.049 /GJ Next 177 GJ \$4.104 Next 4,781 GJ \$3.745 Next 10,411 GJ \$3.471 Over 15,423 GJ \$3.433	

RESIDENTIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge			Comments
Gaz Metropolitan Quebec October 1, 1995 CGA Rate Schedules	Gen. Sales Service Rate No. 1		Min. Daily Chrg. \$0.27791/meter/day	• Declining Rate Structure:			Price includes all taxes and the \$2.276/GJ supply charge
				Margin	Southern Zone	Northern Zone	
				First 0.1 GJ	\$7.484 /GJ	\$5.740 /GJ	
				next 0.5 GJ	\$6.806	\$5.109	
				next 1 GJ	\$6.186	\$4.566	
				next 4 GJ	\$5.635	\$4.084	
				next 12 GJ	\$4.928	\$3.541	
				next 37.45 GJ	\$4.178	\$3.038	
				next 112 GJ	\$3.542	\$2.609	
				next 275 GJ	\$3.003	\$2.319	
				next 1125 GJ	\$2.630	\$2.128	
				next 3,750 GJ	\$2.368	\$2.008	
				over 3,750 GJ	\$2.190	\$1.948	
				Cost of Gas	\$1.237 /GJ	\$1.237 /GJ	
				Total Comm. chrg.			
				First 0.1 GJ	\$8.721 /GJ	\$6.977 /GJ	
				next 0.5 GJ	\$8.043	\$6.346	
				next 1 GJ	\$7.423	\$5.802	
				next 4 GJ	\$6.872	\$5.321	
				next 12 GJ	\$6.165	\$4.778	
				next 37.45 GJ	\$5.415	\$4.275	
				next 112 GJ	\$4.778	\$3.845	
				next 275 GJ	\$4.239	\$3.555	
				next 1125 GJ	\$3.867	\$3.365	
				next 3,750 GJ	\$3.604	\$3.245	
				over 3,750 GJ	\$3.427	\$3.184	

RESIDENTIAL

Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas Washington January 7, 1994	Rate 501 Gen. Residential Serv. Rate	avail. to residential cust. served by the Co. via one or meters, billed separately.	\$2.77/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$7.067 /GJ 	
	Rate 503 Residential Service Rate (Optional)		\$7.93/Mth	<ul style="list-style-type: none"> Declining Block Structure: Total Comm. Chrg. First 1.055 GJ \$7.929 /GJ Next 4.220 GJ \$7.099 All over 5.275 GJ \$6.372 	
Cascade Natural Gas Oregon January 7, 1994	Rate 101 Gen. Residential Service	Avail to res. cust.'s billed under one or more meters.	\$4.08/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$8.474 /GJ 	
Washington Water Power Washington	Rate 101 General Service	Avail. to cust. in Wash. where gas service is available.	\$4.42/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$5.447 /GJ 	
Wash. Wtr. Pwr. OR (July 21, 1995)	Rate 410 Gas Res. Serv.	Applicable to res. cust. for all purposes.	\$4.76/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$7.372 /GJ 	
Northwest Nat. Gas Washington Dec. 1, 1994	Rate 2 Residential Serv.		\$7.64/Mth	<ul style="list-style-type: none"> Declining Block Structure Total Comm. Chrg. First 0.633 GJ \$7.643 /GJ Next 3.587 GJ \$7.213 All additional \$6.569 	
	Rate 24 Residential Serv. All Gas All Gas		\$12.97/Mth	<ul style="list-style-type: none"> Declining Block Structure Total Comm. Chrg. First 1.688 GJ \$12.974 /GJ Next 19.412 GJ \$6.641 All additional GJ \$6.104 	

RESIDENTIAL

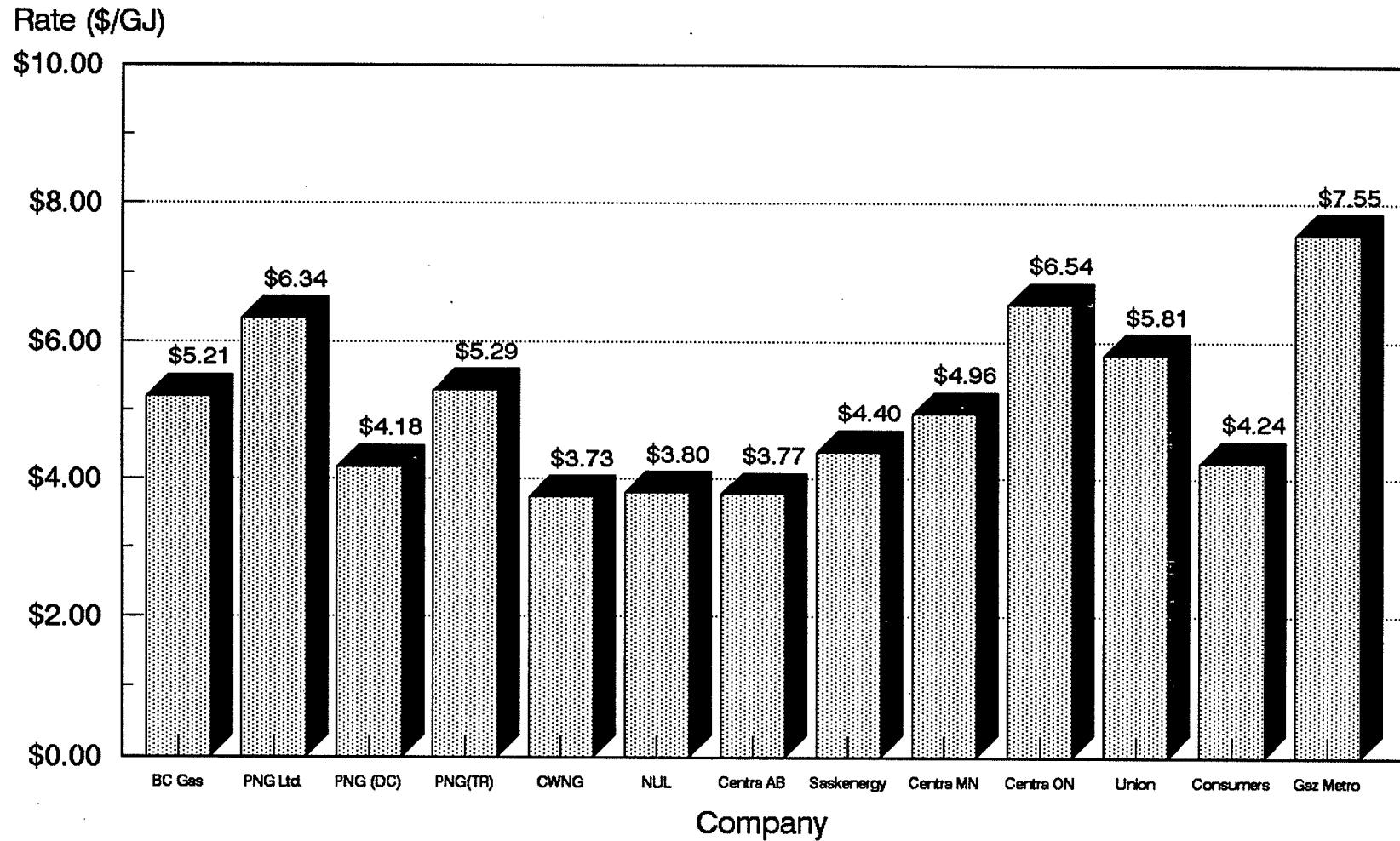
Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Northwest Nat. Gas Washington Dec. 1, 1994	Rate 26 Residential Serv. Air Conditioning		\$12.91/Mth	<ul style="list-style-type: none"> Declining Block Structure Total Comm. Chrg. First 1.688 GJ \$12.908 /GJ Next 4.642 GJ \$6.533 All additional GJ \$6.015 	
	Rate 27 Residential Dry Out Serv.		N/A	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$5.511 /GJ 	
Northwest Nat. Gas Oregon Jan. 1, 1995	Rate 2 Residential Service		\$5.44/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$7.589 /GJ 	
Wash. Nat. Gas May 15, 1995	Rate 11 General Serv.		\$6.12/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.320 /GJ 	
	Rate 23 Residential Gen. Serv.	For any residential customer.	\$6.12/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.339 /GJ 	
	Rate 24 Res. Htg./ Water Htg. Serv.	Avail. to any res. cust. where gas is used as principle means of space htg. & water heating.	\$6.12/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.339 /GJ 	

COMPARISON OF RESIDENTIAL RATES

For Major Canadian Utilities

@ April 1996



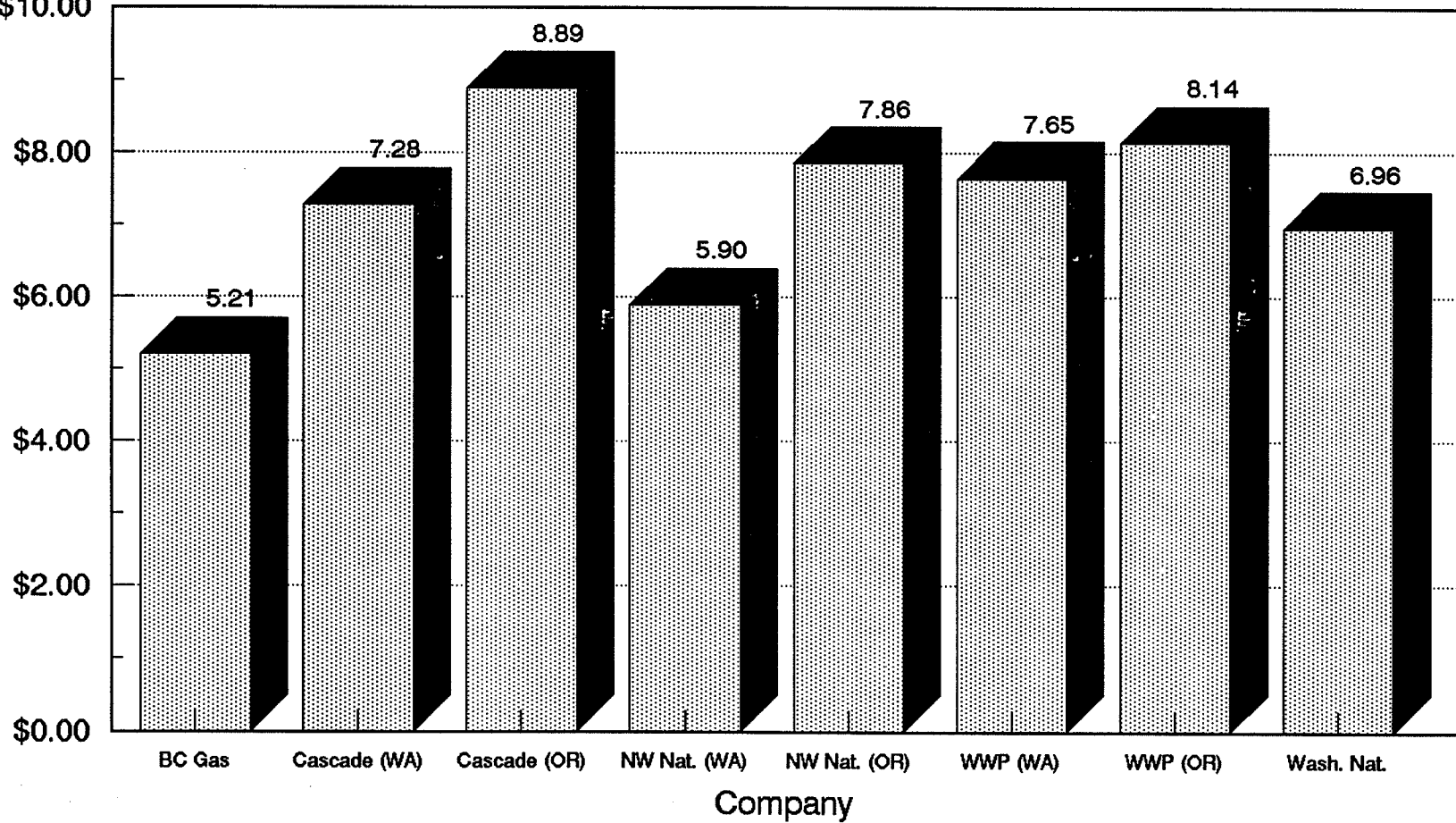
COMPARISON OF RESIDENTIAL RATES

For Northwestern U.S. Utilities

@ April 1996

Rate (\$/GJ)

\$10.00



GENERAL SERVICE/SMALL COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1995 BC Gas Tariff	Rate 2 Lower Mainland Small Comm. Ser.	< 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ 1.021 /GJ Cost of Gas \$2.733 \$2.733 Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$4.679 \$3.718 	Rider 5: Rate Stabilization Adjustment Cost. Rider 6: Refund of Deferred Gas Cost Credits.
	Rate 2 Inland Small Comm. Ser.	< 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ \$1.021 /GJ Cost of Gas \$2.553 \$2.553 Rider 2 (\$0.128) (\$0.128) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$4.371 /GJ \$3.410 /GJ 	Rider 2: Deferred Inc. Tax Refund. Rider 5: As above. Rider 6: As above.
	Rate 2 Columbia Small Comm. Ser.	< 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ \$1.021 /GJ Cost of Gas \$2.562 \$2.562 Rider 2 (\$0.107) (\$0.107) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$4.401 /GJ \$3.440 /GJ 	Rider 2: As above. Rider 5: As above. Rider 6: As above.
	Rate 2 Revelstoke Small Comm. Ser.	< 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ \$2.021 /GJ Cost of Gas \$2.533 \$2.533 Rider 1 \$1.318 \$1.318 Rider 2 (\$0.128) (\$0.128) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$5.669 /GJ \$5.708 /GJ 	Rider 1: Propane Surcharge appl. to City of Revelstoke & surrounding areas. Rider 2: As above. Rider 5: As above. Rider 6: As above.

GENERAL SERVICE/SMALL COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
PNG (NE) Ltd January 1, 1995	Small Commercial Dawson Creek	Avail. to cust. using < 6,000 GJ/year.	\$5.00/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.625 /GJ 	
	Small Commercial Tumbler Ridge	Avail. to cust. using < 6,000 GJ/year.	\$8.50/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$4.344 /GJ 	
PNG January 1, 1995 CGA Rate Schedules	Rate 2 General Service	To firm gas supplied thru a single service line and thru 1 meter for use in approved appliances in commercial or institutional operations.	\$6.182/month	<ul style="list-style-type: none"> Declining Rate Structure Total Comm. Chrg. First GJ (less) \$6.120 /GJ next 6 \$5.306 next 21 \$5.034 next 82 \$4.750 all additional \$4.718 	
CWNG, Alta November 1, 1995 CWNG Summary	Rate 1 General Service	avail. to cust.'s using less than 10,000GJ per year.	\$14.00/Mth	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.053 /GJ \$1.053 /GJ Cost of Gas \$1.308 \$1.292 Total Comm. Chrg. \$2.361 /GJ \$2.345 /GJ 	
Centra Gas, Alta. November 6, 1995 C.G.A. Rate Schedules	Small Gen. Ser.	avail. to all customers	\$11.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.397 /GJ \$1.397 Cost of Gas \$1.567 \$1.349 Total Comm. Chrg. \$2.964 /GJ \$2.746 /GJ 	
NUL, Alta November 1, 1995 NUL Summary	Rate A1A General Services	Avail. to cust. using < 8,000 GJ/year	\$14.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.208 /GJ \$1.208 /GJ Cost of Gas \$1.279 \$1.085 Total Charge \$2.487 /GJ \$2.293 /GJ 	
Saskenergy, Sask January 1, 1996	Rate 2 General Service	<3,860 GJ/year	\$15.45/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.233 /GJ 	

GENERAL SERVICE/SMALL COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas MN January 31, 1996 CGA Rate Schedules	Small Gen. Ser.	Avail. to cust. using gas thru on domestic sized meter of a firm basis.	\$10.00/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.940 /GJ 	
Centra Gas, ON January 1, 1995 C.G.A. Rate Schedules E.B.R.O. 474-A	Rate 201 Small Vol. Gen. Fort Frances Zone	Avail. to cust. using Less than or equal to 2,000 GJ/year	\$6.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Commodity Chrg. Margin (Nov - Mar) (Apr - Oct) First 3.86 GJ \$1.951 /GJ \$1.951 /GJ next 7.712 GJ \$1.547 \$1.547 next 7.712 GJ \$1.341 \$1.341 next 19.28 GJ \$1.102 \$1.102 over 37.45 GJ \$0.315 \$0.315 Cost of Gas \$3.263 /GJ \$3.004 /GJ Total Comm. Chrg. First 3.86 GJ \$5.214 /GJ \$4.955 /GJ next 7.712 GJ \$4.810 \$4.551 next 7.712 GJ \$4.604 \$4.345 next 19.28 GJ \$4.365 \$4.105 over 37.45 GJ \$3.578 \$3.319 	
	Rate 101 Small Vol. Gen. Western Zone	Less than or equal to 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Commodity Chrg. Margin (Nov - Mar) (Apr - Oct) First 3.86 GJ \$2.594 /GJ \$2.594 /GJ next 7.712 GJ \$2.402 \$2.402 next 7.712 GJ \$2.304 \$2.304 next 19.28 GJ \$2.190 \$2.190 over 37.45 GJ \$1.815 \$1.815 Cost of Gas \$3.288 /GJ \$3.028 /GJ Total Comm. Chrg. First 3.86 GJ \$5.882 /GJ \$5.623 /GJ next 7.712 GJ \$5.690 \$5.431 next 7.712 GJ \$5.592 \$5.333 next 19.28 GJ \$5.477 \$5.218 over 37.45 GJ \$5.103 \$4.844 	

GENERAL SERVICE/SMALL COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas, ON January 1, 1995 C.G.A. Rate Schedules E.B.R.O. 474-A	Rate 301 Small Vol. Gen. Northern Zone	Less than or equal to 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Commodity Chrg. Margin (Nov – Mar) (Apr – Oct) First 3.86 GJ \$2.594 /GJ \$2.594 /GJ next 7.712 GJ \$2.402 \$2.402 next 7.712 GJ \$2.304 \$2.304 next 19.28 GJ \$2.190 \$2.190 over 37.45 GJ \$1.815 \$1.815 Cost of Gas \$3.588 /GJ \$3.328 /GJ Total Comm. Chrg. First 3.86 GJ \$6.182 /GJ \$5.923 /GJ next 7.712 GJ \$5.990 \$5.731 next 7.712 GJ \$5.892 \$5.633 next 19.28 GJ \$5.777 \$5.518 over 37.45 GJ \$5.403 \$5.144	
	Rate 601 Small Vol. Gen. Eastern Zone	Less than or equal to 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Commodity Chrg. Margin (Nov – Mar) (Apr – Oct) First 3.86 GJ \$2.594 /GJ \$2.594 /GJ next 7.712 GJ \$2.402 \$2.402 next 7.712 GJ \$2.304 \$2.304 next 19.28 GJ \$2.190 \$2.190 over 37.45 GJ \$1.815 \$1.815 Cost of Gas \$3.761 /GJ \$3.502 /GJ Total Comm. Chrg. First 3.86 GJ \$6.355 /GJ \$6.096 /GJ next 7.712 GJ \$6.163 \$5.904 next 7.712 GJ \$6.065 \$5.806 next 19.28 GJ \$5.951 \$5.692 over 37.45 GJ \$5.576 \$5.317	

GENERAL SERVICE/SMALL COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Consumers Gas, Ontario October 1, 1995 CGA Rate Schedule	Rate 6 General Service	Avail. to cust. needing to use the Co.'s natural gas distribution network to have transported gas supplied to a single terminal location for non-residential use.	\$10.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Commodity Chrg. Margin (Nov – Mar) (Apr – Oct) First 1 GJ \$3.344 /GJ \$2.602 /GJ next 2 GJ \$3.211 \$2.469 next 50 GJ \$3.064 \$2.322 next 52 GJ \$2.904 \$2.163 next 105 GJ \$2.745 \$2.003 over 210 GJ \$2.559 \$1.817 Cost of Gas \$1.664 /GJ \$1.664 /GJ Total Comm. Chrg. First 1 GJ \$5.009 /GJ \$4.267 /GJ next 2 GJ \$4.875 \$4.133 next 50 GJ \$4.728 \$3.987 next 52 GJ \$4.569 \$3.827 next 105 GJ \$4.409 \$3.667 over 210 GJ \$4.223 \$3.481 	
Union Gas, Ontario Jan. 1, 1996 EBRO 476/03/04	Rate M2 General Ser. Rate		\$7.50/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. Margin First 54 GJ \$4.774 /GJ next 177 GJ \$3.829 next 4,780 GJ \$3.470 next 10,400 GJ \$3.196 over 15,400 GJ \$3.157 Cost of Gas \$0.275 /GJ Total Comm. Chrg. First 54 GJ \$5.049 /GJ next 177 GJ \$4.104 next 4,780 GJ \$3.745 next 10,400 GJ \$3.471 over 15,400 GJ \$3.433 	

GENERAL SERVICE/SMALL COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge			Comments
Gaz Metropolitan October 1, 1995	Rate 1 Gen. Sales Serv.		Min. Daily Chrg. \$0.27791/meter/day	● Declining Rate Structure:			Price includes all taxes and the \$2.276/GJ supply charge
				Margin	Southern Zone	Northern Zone	
				first 0.1 GJ	\$7.484 /GJ	\$5.740 /GJ	
				next 0.5 GJ	\$6.806	\$5.109	
				next 1 GJ	\$6.186	\$4.566	
				next 4 GJ	\$5.635	\$4.084	
				next 12 GJ	\$4.928	\$3.541	
				next 37.45 GJ	\$4.178	\$3.038	
				next 112 GJ	\$3.542	\$2.609	
				next 275 GJ	\$3.003	\$2.319	
				next 1125 GJ	\$2.630	\$2.128	
				next 3,750 GJ	\$2.368	\$2.008	
				over 3,750 GJ	\$2.190	\$1.948	
				Cost of Gas	\$1.237 /GJ	\$1.237 /GJ	
				Total Comm. Chrg.			
				first 0.1 GJ	\$8.721 /GJ	\$6.977 /GJ	
				next 0.5 GJ	\$8.043	\$6.346	
				next 1 GJ	\$7.423	\$5.802	
				next 4 GJ	\$6.872	\$5.321	
				next 12 GJ	\$6.165	\$4.778	
				next 37.45 GJ	\$5.415	\$4.275	
				next 112 GJ	\$4.778	\$3.845	
				next 275 GJ	\$4.239	\$3.555	
				next 1125 GJ	\$3.867	\$3.365	
				next 3,750 GJ	\$3.604	\$3.245	
				over 3,750 GJ	\$3.427	\$3.184	

GENERAL SERVICE/SMALL COMMERCIAL

Rate Summary for American Natural Gas Utilities

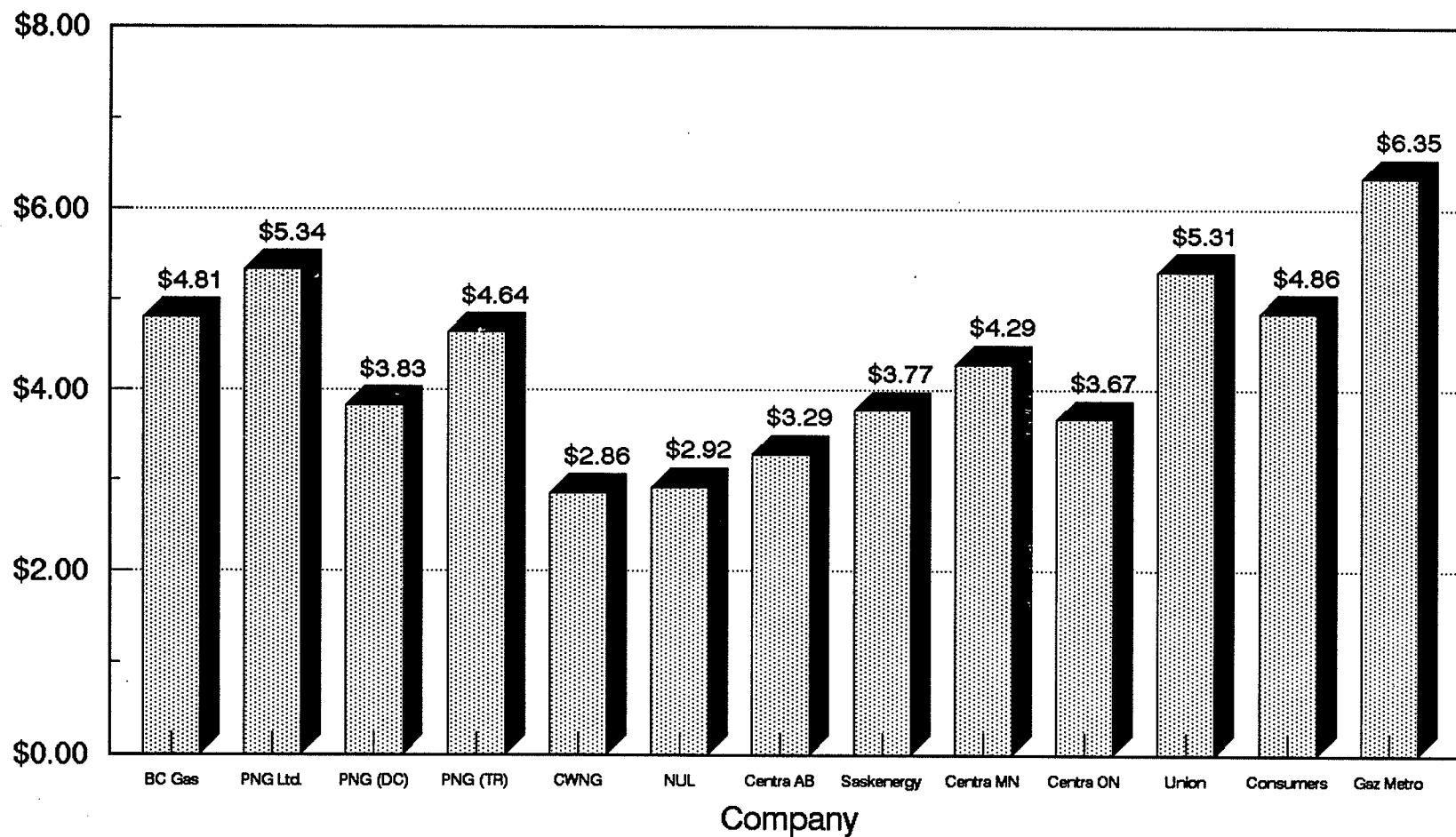
Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas (Washington) January 7, 1994	Rate 504 Gen. Commercial Service Rate	avail. to comm. cust. through one or more meters, billed separately.	\$2.72/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 5.275 GJ \$7.159 /GJ All over 5.275 GJ \$6.487 	
Cascade Natural Gas (Oregon) Jan 7, 1994	Rate 104 Gen. Comm. Rate	For comm. cust. through one or more meters at option of the Co.	\$4.08/Mth	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$7.152 /GJ 	
Wash. Wtr. Pwr. (Oregon) July 21, 1995	Rate 420 General Nat. Gas Service	Appl. to comm. & ind. gas service for all purposes.	\$4.76/Mth	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$6.109 /GJ 	
Northwest Nat. Gas (Washington) Jan. 1, 1995	Rate 1 General Service		\$4.16/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 0.211 GJ \$4.162 /GJ Next 5.064 GJ \$8.859 All additional GJ \$8.484 	
Northwest Nat. Gas (Oregon) Jan 1, 1995	Rate 1 General Serv.		\$5.44/Mth	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$7.628 /GJ 	
Wash. Nat. Gas May 15, 1995	Rate 31 Comm. & Ind. Gen. Serv.	Avail. to any comm. or ind. customer.	\$13.60/Mth	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$6.019 /GJ 	

COMPARISON OF SMALL COMMERCIAL RATES

For Major Canadian Utilities

@ April 1996

Avg. Rate (\$/GJ)

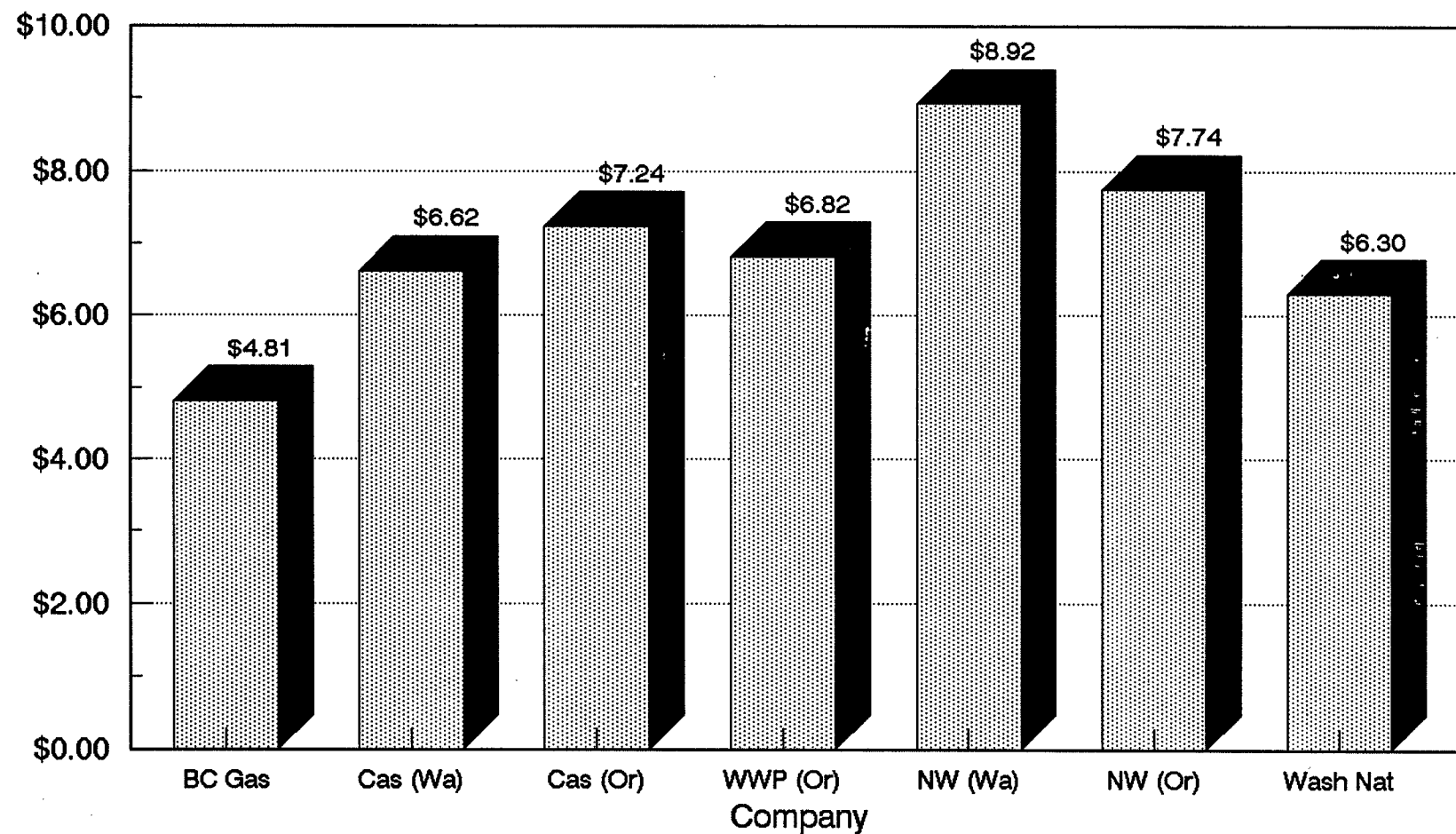


COMPARISON OF SMALL COMMERCIAL RATES

For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996 BC Gas Tariff	Rate 3 Lower Mainland Large Comm. Ser.	> 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ \$1.021 /GJ Cost of Gas \$2.393 \$2.393 Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$4.339 /GJ \$3.378 /GJ 	Rider 5: Rate Stabilization Adjustment Cost. Rider 6: Refund of Deferred Gas Cost Credits.
	Rate 3 Inland Large Comm. Ser.	> 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ \$1.021 /GJ Cost of Gas \$2.225 \$2.225 Rider 2 (\$0.098) \$0.098 Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$4.073 /GJ \$3.308 /GJ 	Rider 2: Deferred Inc. Tax Refund. Rider 5: As above Rider 6: As above
	Rate 3 Columbia Large Comm. Ser.	> 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ \$1.021 /GJ Cost of Gas \$2.250 \$2.250 Rider 2 (\$0.107) (\$0.107) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$4.089 /GJ \$3.128 /GJ 	Rider 2: As above Rider 5: As above Rider 6: As above
	Rate 3 Revelstoke Large Comm. Ser.	> 2,000 GJ/year	\$12.64/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$2.041 /GJ \$1.021 /GJ Cost of Gas \$2.225 \$2.225 Rider 1 \$1.626 \$1.626 Rider 2 (\$0.098) (\$0.098) Rider 5 \$0.023 \$0.023 Rider 6 (\$0.118) (\$0.059) Total Comm. Chrg. \$5.699 /GJ \$4.738 /GJ 	Rider 1: Propane Surcharge appl. to City of Revelstoke & surrounding areas. Rider 2: As above Rider 5: As above Rider 6: As above

GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
PNG (NE) Ltd January 1, 1995	Small Commercial Dawson Creek	Avail. to cust. using < 6,000 GJ/year.	\$5.00/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.625 /GJ 	
	Small Commercial Tumbler Ridge	Avail. to cust. using < 6,000 GJ/year.	\$8.50/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$4.334 /GJ 	
PNG January 1, 1995 CGA Rate Schedules	Rate 2 General Service	To firm gas supplied thru a single service line and thru 1 meter for use in approved appliances in commercial or institutional operations.	\$6.182/month	<ul style="list-style-type: none"> Declining Rate Structure Total Comm. Chrg. First GJ (less) \$6.120 /GJ next 6 \$5.306 next 21 \$5.034 next 82 \$4.750 all additional \$4.718 	
CWNG November 1, 1995 CWNG Summary	Rate 1 General Service	avail. to cust.'s using less than 10,000GJ per year.	\$14.00/Mth	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.053 /GJ \$1.053 /GJ Gas Costs <u>\$1.308</u> <u>\$1.292</u> Total Comm. Chrg. \$2.361 /GJ \$2.345 /GJ 	
Centra Gas, Alta. November 6, 1995 C.G.A. Rate Schedules	Small Gen. Ser.	avail. to all customers	\$11.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.397 /GJ \$1.397 /GJ Gas Costs <u>\$1.567</u> <u>\$1.349</u> Total Comm. Chrg. \$2.964 /GJ \$2.746 /GJ 	

GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
NUL, Alta November 1, 1995 NUL Summary	Rate A1A General Services	Avail. to cust. using < 8,000 GJ/year	\$14.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.208 /GJ \$1.208 /GJ Gas Costs \$1.279 \$1.085 Total Comm. Chrg. \$2.487 /GJ \$2.293 /GJ 	
Saskenergy, Sask January 1, 1996	Rate 3 General Service	Appl. to cust. using 3,860 - 25,476 GJ/year	\$37.25/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.039 /GJ 	
Centra Gas MN January 31, 1996 CGA Rate Schedules	Small Gen. Ser.	Avail. to cust. using gas thru on domestic sized meter of a firm basis.	\$10.00/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.940 /GJ 	
Centra Gas, ON January 1, 1995 C.G.A. Rate Schedules E.B.R.O. 474-A	Rate 201 Small Vol. Gen. Fort Frances Zone	Avail. to cust. using Less than or equal to 2,000 GJ/year	\$6.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Commodity Chrgs. Margin (Nov - Mar) (Apr - Oct) First 3.86 GJ \$1.951 /GJ \$1.951 /GJ next 7.712 GJ \$1.547 \$1.547 next 7.712 GJ \$1.341 \$1.341 next 19.28 GJ \$1.102 \$1.102 over 37.45 GJ \$0.315 \$0.315 Cost of Gas \$3.263 /GJ \$3.004 /GJ Total Comm. Chrg. First 3.86 GJ \$5.214 /GJ \$4.955 /GJ next 7.712 GJ \$4.810 \$4.551 next 7.712 GJ \$4.604 \$4.345 next 19.28 GJ \$4.365 \$4.105 over 37.45 GJ \$3.578 \$3.319 	

GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments																																							
Centra Gas, ON January 1, 1995 C.G.A. Rate Schedules E.B.R.O. 474-A	Rate 101 Small Vol. Gen. Western Zone	Less than or equal to 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Commodity Chrgs. <table><thead><tr><th>Margin</th><th>(Nov – Mar)</th><th>(Apr – Oct)</th></tr></thead><tbody><tr><td>First 3.86 GJ</td><td>\$2.594 /GJ</td><td>\$2.594 /GJ</td></tr><tr><td>next 7.712 GJ</td><td>\$2.402</td><td>\$2.402</td></tr><tr><td>next 7.712 GJ</td><td>\$2.304</td><td>\$2.304</td></tr><tr><td>next 19.28 GJ</td><td>\$2.190</td><td>\$2.190</td></tr><tr><td>over 37.45 GJ</td><td>\$1.815</td><td>\$1.815</td></tr><tr><td>Cost of Gas</td><td>\$3.288 /GJ</td><td>\$3.028 /GJ</td></tr><tr><td>Total Comm. Chrg.</td><td></td><td></td></tr><tr><td>First 3.86 GJ</td><td>\$5.882 /GJ</td><td>\$5.623 /GJ</td></tr><tr><td>next 7.712 GJ</td><td>\$5.690</td><td>\$5.431</td></tr><tr><td>next 7.712 GJ</td><td>\$5.592</td><td>\$5.333</td></tr><tr><td>next 19.28 GJ</td><td>\$5.477</td><td>\$5.218</td></tr><tr><td>over 37.45 GJ</td><td>\$5.103</td><td>\$4.844</td></tr></tbody></table>	Margin	(Nov – Mar)	(Apr – Oct)	First 3.86 GJ	\$2.594 /GJ	\$2.594 /GJ	next 7.712 GJ	\$2.402	\$2.402	next 7.712 GJ	\$2.304	\$2.304	next 19.28 GJ	\$2.190	\$2.190	over 37.45 GJ	\$1.815	\$1.815	Cost of Gas	\$3.288 /GJ	\$3.028 /GJ	Total Comm. Chrg.			First 3.86 GJ	\$5.882 /GJ	\$5.623 /GJ	next 7.712 GJ	\$5.690	\$5.431	next 7.712 GJ	\$5.592	\$5.333	next 19.28 GJ	\$5.477	\$5.218	over 37.45 GJ	\$5.103	\$4.844	
	Margin	(Nov – Mar)	(Apr – Oct)																																									
First 3.86 GJ	\$2.594 /GJ	\$2.594 /GJ																																										
next 7.712 GJ	\$2.402	\$2.402																																										
next 7.712 GJ	\$2.304	\$2.304																																										
next 19.28 GJ	\$2.190	\$2.190																																										
over 37.45 GJ	\$1.815	\$1.815																																										
Cost of Gas	\$3.288 /GJ	\$3.028 /GJ																																										
Total Comm. Chrg.																																												
First 3.86 GJ	\$5.882 /GJ	\$5.623 /GJ																																										
next 7.712 GJ	\$5.690	\$5.431																																										
next 7.712 GJ	\$5.592	\$5.333																																										
next 19.28 GJ	\$5.477	\$5.218																																										
over 37.45 GJ	\$5.103	\$4.844																																										
	Rate 301 Small Vol. Gen. Northern Zone	Less than or equal to 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Commodity Chrgs. <table><thead><tr><th>Margin</th><th>(Nov – Mar)</th><th>(Apr – Oct)</th></tr></thead><tbody><tr><td>First 3.86 GJ</td><td>\$2.594 /GJ</td><td>\$2.594 /GJ</td></tr><tr><td>next 7.712 GJ</td><td>\$2.402</td><td>\$2.402</td></tr><tr><td>next 7.712 GJ</td><td>\$2.304</td><td>\$2.304</td></tr><tr><td>next 19.28 GJ</td><td>\$2.190</td><td>\$2.190</td></tr><tr><td>over 37.45 GJ</td><td>\$1.815</td><td>\$1.815</td></tr><tr><td>Cost of Gas</td><td>\$3.588 /GJ</td><td>\$3.328 /GJ</td></tr><tr><td>Total Comm. Chrg.</td><td></td><td></td></tr><tr><td>First 3.86 GJ</td><td>\$6.182 /GJ</td><td>\$5.923 /GJ</td></tr><tr><td>next 7.712 GJ</td><td>\$5.990</td><td>\$5.731</td></tr><tr><td>next 7.712 GJ</td><td>\$5.892</td><td>\$5.633</td></tr><tr><td>next 19.28 GJ</td><td>\$5.777</td><td>\$5.518</td></tr><tr><td>over 37.45 GJ</td><td>\$5.403</td><td>\$5.144</td></tr></tbody></table>	Margin	(Nov – Mar)	(Apr – Oct)	First 3.86 GJ	\$2.594 /GJ	\$2.594 /GJ	next 7.712 GJ	\$2.402	\$2.402	next 7.712 GJ	\$2.304	\$2.304	next 19.28 GJ	\$2.190	\$2.190	over 37.45 GJ	\$1.815	\$1.815	Cost of Gas	\$3.588 /GJ	\$3.328 /GJ	Total Comm. Chrg.			First 3.86 GJ	\$6.182 /GJ	\$5.923 /GJ	next 7.712 GJ	\$5.990	\$5.731	next 7.712 GJ	\$5.892	\$5.633	next 19.28 GJ	\$5.777	\$5.518	over 37.45 GJ	\$5.403	\$5.144	
Margin	(Nov – Mar)	(Apr – Oct)																																										
First 3.86 GJ	\$2.594 /GJ	\$2.594 /GJ																																										
next 7.712 GJ	\$2.402	\$2.402																																										
next 7.712 GJ	\$2.304	\$2.304																																										
next 19.28 GJ	\$2.190	\$2.190																																										
over 37.45 GJ	\$1.815	\$1.815																																										
Cost of Gas	\$3.588 /GJ	\$3.328 /GJ																																										
Total Comm. Chrg.																																												
First 3.86 GJ	\$6.182 /GJ	\$5.923 /GJ																																										
next 7.712 GJ	\$5.990	\$5.731																																										
next 7.712 GJ	\$5.892	\$5.633																																										
next 19.28 GJ	\$5.777	\$5.518																																										
over 37.45 GJ	\$5.403	\$5.144																																										

GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Contra Gas, ON January 1, 1995 C.G.A. Rate Schedules E.B.R.O. 474-A	Rate 601 Small Vol. Gen. Eastern Zone	Less than or equal to 2,000 GJ/year	\$9.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Commodity Chrgs. Margin (Nov - Mar) (Apr - Oct) First 3.86 GJ \$2.594 /GJ \$2.594 /GJ next 7.712 GJ \$2.402 \$2.402 next 7.712 GJ \$2.304 \$2.304 next 19.28 GJ \$2.190 \$2.190 over 37.45 GJ \$1.815 \$1.815 Cost of Gas \$3.761 /GJ \$3.502 /GJ Total Comm. Chrg. First 3.86 GJ \$6.355 /GJ \$6.096 /GJ next 7.712 GJ \$6.163 \$5.904 next 7.712 GJ \$6.065 \$5.806 next 19.28 GJ \$5.951 \$5.692 over 37.45 GJ \$5.576 \$5.317 	
Consumers Gas Ontario October 1, 1995 CGA Rate Schedule	Rate 6 General Service	Avail. to cust. needing to use the Co.'s natural gas distribution network to have transported gas supplied to a single terminal location for non-residential use.	\$10.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Commodity Chrgs. Margin (Nov - Mar) (Apr - Oct) First 1 GJ \$3.344 /GJ \$2.602 /GJ next 2 GJ \$3.211 \$2.469 next 50 GJ \$3.064 \$2.322 next 52 GJ \$2.904 \$2.163 next 105 GJ \$2.745 \$2.003 over 210 GJ \$2.559 \$1.817 Cost of Gas \$1.664 /GJ \$1.664 /GJ Total Comm. Chrg. First 1 GJ \$5.009 /GJ \$4.267 /GJ next 2 GJ \$4.875 \$4.133 next 50 GJ \$4.728 \$3.987 next 52 GJ \$4.569 \$3.827 next 105 GJ \$4.409 \$3.667 over 210 GJ \$4.223 \$3.481 	

GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Union Gas, Ontario Jan. 1, 1996 EBRO 476/03/04 @37.45MJ/m3	Rate M2 General Ser. Rate		\$7.50/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Charges <ul style="list-style-type: none"> First 54 GJ \$4.774 /GJ next 177 GJ \$3.829 next 4,780 GJ \$3.470 next 10,400 GJ \$3.196 over 15,400 GJ \$3.157 Cost of Gas \$0.275 /GJ Total Comm. Chrg. <ul style="list-style-type: none"> First 54 GJ \$5.049 /GJ next 177 GJ \$4.104 next 4,780 GJ \$3.745 next 10,400 GJ \$3.471 over 15,400 GJ \$3.433 	

GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge			Comments
Gaz Metropolitan October 1, 1995	Rate 1 Gen. Sales Service		Min. Daily Chrg. \$0.27791/meter/day	<ul style="list-style-type: none">Declining Rate Structure:<ul style="list-style-type: none">Margin<ul style="list-style-type: none">Southern ZoneNorthern Zonefirst 0.1 GJ\$7.484 /GJ\$5.740 /GJnext 0.5 GJ\$6.806\$5.109next 1 GJ\$6.186\$4.566next 4 GJ\$5.635\$4.084next 12 GJ\$4.928\$3.541next 37.45 GJ\$4.178\$3.038next 112 GJ\$3.542\$2.609next 275 GJ\$3.003\$2.319next 1125 GJ\$2.630\$2.128next 3,750 GJ\$2.368\$2.008over 3,750 GJ\$2.190\$1.948Cost of Gas\$1.237 /GJ\$1.237 /GJTotal Comm. Chrg.<ul style="list-style-type: none">first 0.1 GJ\$8.721 /GJ\$6.977 /GJnext 0.5 GJ\$8.043\$6.346next 1 GJ\$7.423\$5.802next 4 GJ\$6.872\$5.321next 12 GJ\$6.165\$4.778next 37.45 GJ\$5.415\$4.275next 112 GJ\$4.778\$3.845next 275 GJ\$4.239\$3.555next 1125 GJ\$3.867\$3.365next 3,750 GJ\$3.604\$3.245over 3,750 GJ\$3.427\$3.184			Price includes all taxes and the \$2.276/GJ supply charge

GENERAL SERVICE/LARGE COMMERCIAL

Rate Summary for American Natural Gas Utilities

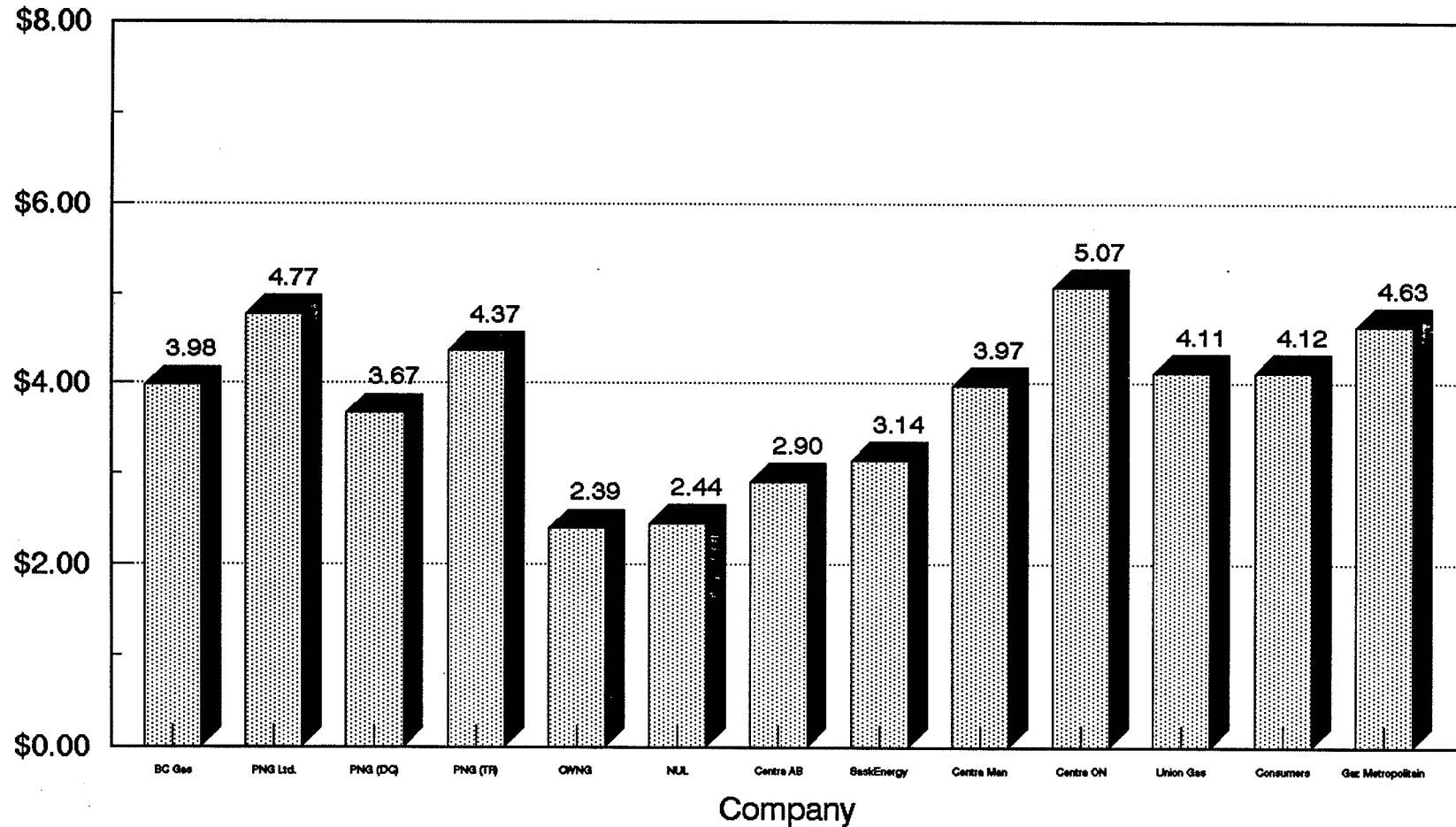
Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas (Washington) January 7, 1994	Rate 504 Gen. Commercial Service Rate	avail. to comm. cust. through one or more meters, billed separately.	\$2.72/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 5.275 GJ \$7.159 /GJ All over 5.275 GJ \$6.487 	
Cascade Natural Gas (Oregon) Jan 7, 1994	Rate 104 Gen. Comm. Rate	For comm. cust. through one or more meters at option of the Co.	\$4.08/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$7.152 /GJ 	
Wash. Wtr. Pwr. (Oregon) July 21, 1995	Rate 111 Large Gen. Serv. (Firm)	Avail. to cust. in Wash. where gas used on the premises is supplied at 1 point of del. through a single meter.	\$113.68/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 21.1 GJ \$5.388 /GJ Next 84.4 \$5.194 All over 105.5 \$4.605 	
	Rate 420 General Nat. Gas Service	Appl. to comm. & ind. gas service for all purposes.	\$4.76/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.721 /GJ 	
Northwest Natural Gas (Washington) Dec. 1, 1995	Rate 3 Comm. & Ind. Sales Service		\$10.17/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 1,055 GJ \$10.173 /GJ Next 26.38 GJ \$7.606 Next 180 GJ \$6.766 All additional \$6.301 	
Northwest Natural Gas (Oregon) Dec. 1, 1995	Rate 3 Comm. & Ind. Sales Serv.		\$8.16/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.109 /GJ 	
Wash. Nat. Gas May 15, 1995	Rate 31 Comm. & Ind. Gen. Serv.	Avail. to any comm. or ind. customer.	\$13.60/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.019 /GJ 	

COMPARISON OF LARGE COMMERCIAL RATES

For Major Canadian Utilities

@ April 1996

Avg. Rate (\$/GJ)

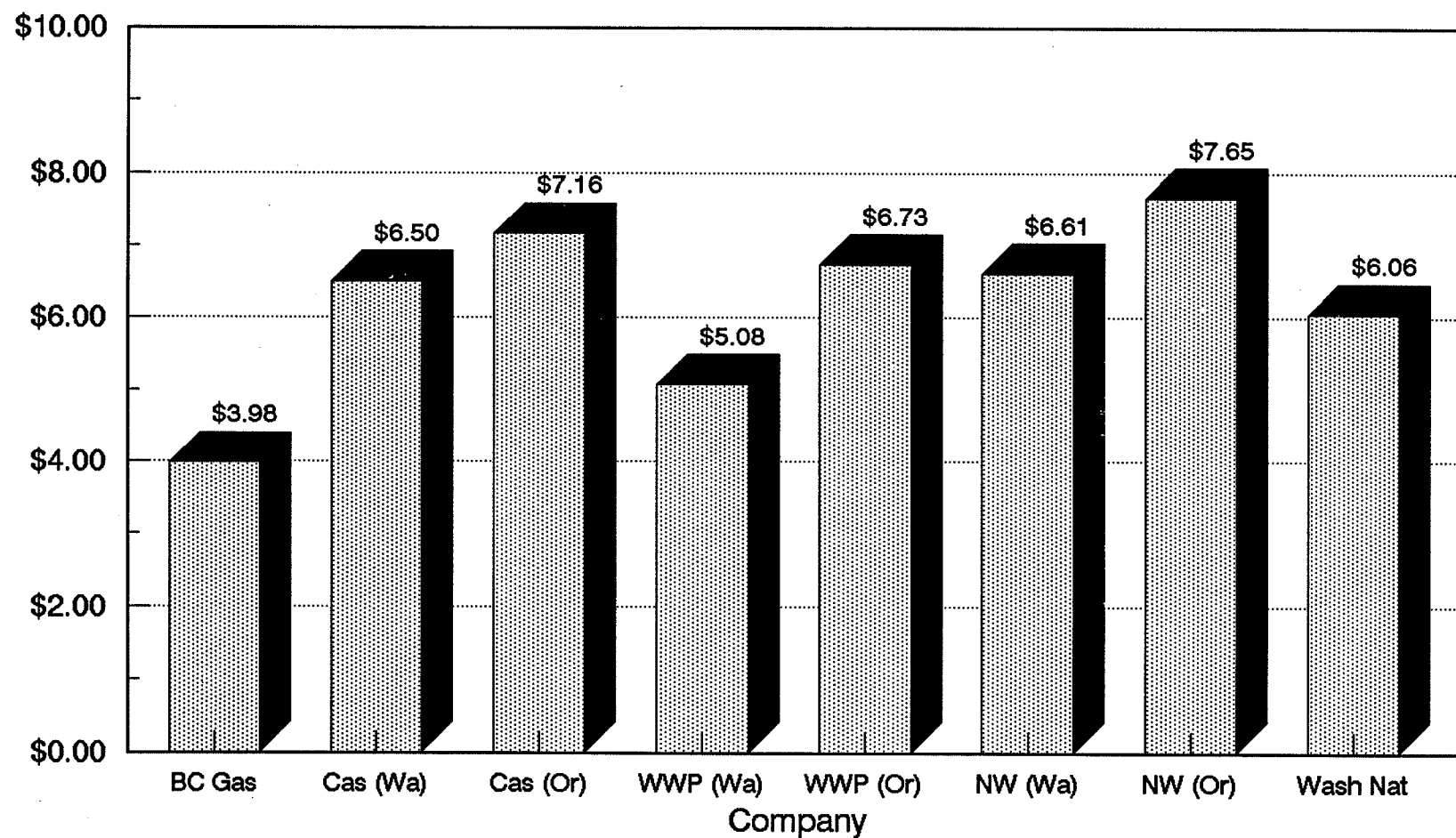


COMPARISON OF LARGE COMMERCIAL RATES

For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



SEASONAL SERVICE

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1995 BC Gas Tariff	Rate 4 Lower Mainland Seasonal Service	Avail. for sale of gas mainly during the off- peak period.	\$366.00/month	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$5.070/GJ \$0.733/GJ Cost of Gas \$5.182 \$1.166 Rider 6 (\$0.338) (\$0.057) Total Comm. Chrg. \$9.914/GJ \$1.842/GJ	Rider 6: Refund of Credits. Minimum charge not charged to cust. when no gas is consumed.
	Rate 4 Inland Seasonal Service	Avail. for sale of gas mainly during the off- peak period.	\$366.00/month	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$5.070/GJ \$0.733/GJ Cost of Gas \$4.808 \$1.115 Rider 2 (\$0.055) (\$0.055) Rider 6 (\$0.338) (\$0.057) Total Comm. Chrg. \$9.485/GJ \$1.736/GJ	Rider 2: Deferred Inc. Tax Refund. Rider 6: As above
	Rate 4 Columbia Seasonal Service	Avail. for sale of gas mainly during the off- peak period.	\$366.00/month	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrgs. (Nov – Mar) (Apr – Oct) Margin \$5.070/GJ \$0.733/GJ Cost of Gas \$4.866 \$1.115 Rider 2 (\$0.063) (\$0.063) Rider 6 (\$0.338) (\$0.057) Total Comm. Chrg. \$9.535/GJ \$1.728/GJ	Rider 2: As above Rider 6: As above

SEASONAL SERVICE

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
PNG January 1, 1995 CGA Rate Schedules	Rate 4 Comm. Seasonal Service	For comm. use where gas will be used mainly during off-peak period.	\$650.98/month	• Declining Rate Structure: Total Commodity Chrg. First 220 GJ \$650.980 Next 880 GJ \$2.964/GJ All additional \$2.605/GJ	This rate is not a strictly seasonal rate. Gas can be consumed yr. round. Min. chrg. applies even during months of zero gas consumption.
	Rate 6 Seasonal Off-Peak Serv.	For ind. or comm. use where gas will be used principally during the Off-peak period.	\$808.94/month	• Declining Rate Structure: Total Commodity Chrg. During Off-Peak Period First 220 GJ \$808.940 All additional \$3.162/GJ Total Commodity Chrg. During Peak Period First 6 GJ \$3.677/GJ All additional \$6.900/GJ	
Union Gas, Ontario April 1, 1994	Rate M6A Seasonal Ind. & Commercial Contract Rate	For cust. who enters into a contract for purchase or transportation of gas for seasons that specify a daily contracted demand of 185 – 5,483 GJ	Min. mth. bill = to \$21.94/day for del. If cust. purchases gas, an additional chrg. of \$54.71 will apply for each day gas is supplied.	• Uniform Rate Structure: Total Commodity Chrg. Margin \$0.339/GJ Cost of Gas <u>\$2.604</u> Total Comm. Chrg. \$2.943/GJ	

SEASONAL SERVICE

Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Wash. Wtr. Pwr. (Washington) July 21, 1995	Rate 444 Seasonal Rates	Applicable for gas serv. from Mar. 1 to Nov. 30, of each yr.	\$4,075.59/season	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Total Commodity Chrg. Mar – Nov only \$6.158/GJ	
Northwest Nat. Gas (Washington) Dec. 1, 1995	Rate 11 Seasonal Swing & Off–Peak Firm Sales Serv. (Optional)	To firm gas supplied at one point of delivery through one meter to approved equipment and installations in comm, ind. & institutional estab.	<p>\$115.63/month for the months of July, August, & September only.</p> <p>The basic chrg. is waived throughout the rest of the year. The company is currently looking at making changes to this rate schedule.</p>	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Total Comm. Chrg. (Apr – Oct) First 21.1 GJ \$6.158/GJ Next 504.4 GJ \$5.174 All additional GJ \$5.084 (Mar & Nov) First 105.5 GJ \$6.372/GJ Next 105.5 GJ \$5.442 All additional GJ \$5.406 (Dec – Feb) First 84.4 GJ \$11.078/GJ Next 126.6 GJ \$8.387 All additional GJ \$7.124	<p>No monthly or seasonal alternation permitted during the yr. between this & other rate sched. for all or any portion of the serv. supplied.</p> <p>Cust.'s can extend gas use beyond contracted period w/o penalty. Min. charge applicable only during Apr – Oct.</p>
Northwest Natural Gas (Oregon) Jan. 1, 1995	Rate 10 Seasonal Swing Off–Peak Sales Serv.	To firm gas supplied at 1 point of delivery through one meter to approved equipment & installation for comm, ind, & instit. establishments	\$22.44/month between Apr. to Oct. only	<ul style="list-style-type: none">Declining Rate Structure: Total Comm. Chrg. Apr – Oct \$6.208/GJ Mar & Nov \$6.446/GJ Dec – Feb \$9.515/GJ	No monthly or seasonal alternation permitted during the yr. between this & other rates for all or any portion of service to be supplied.

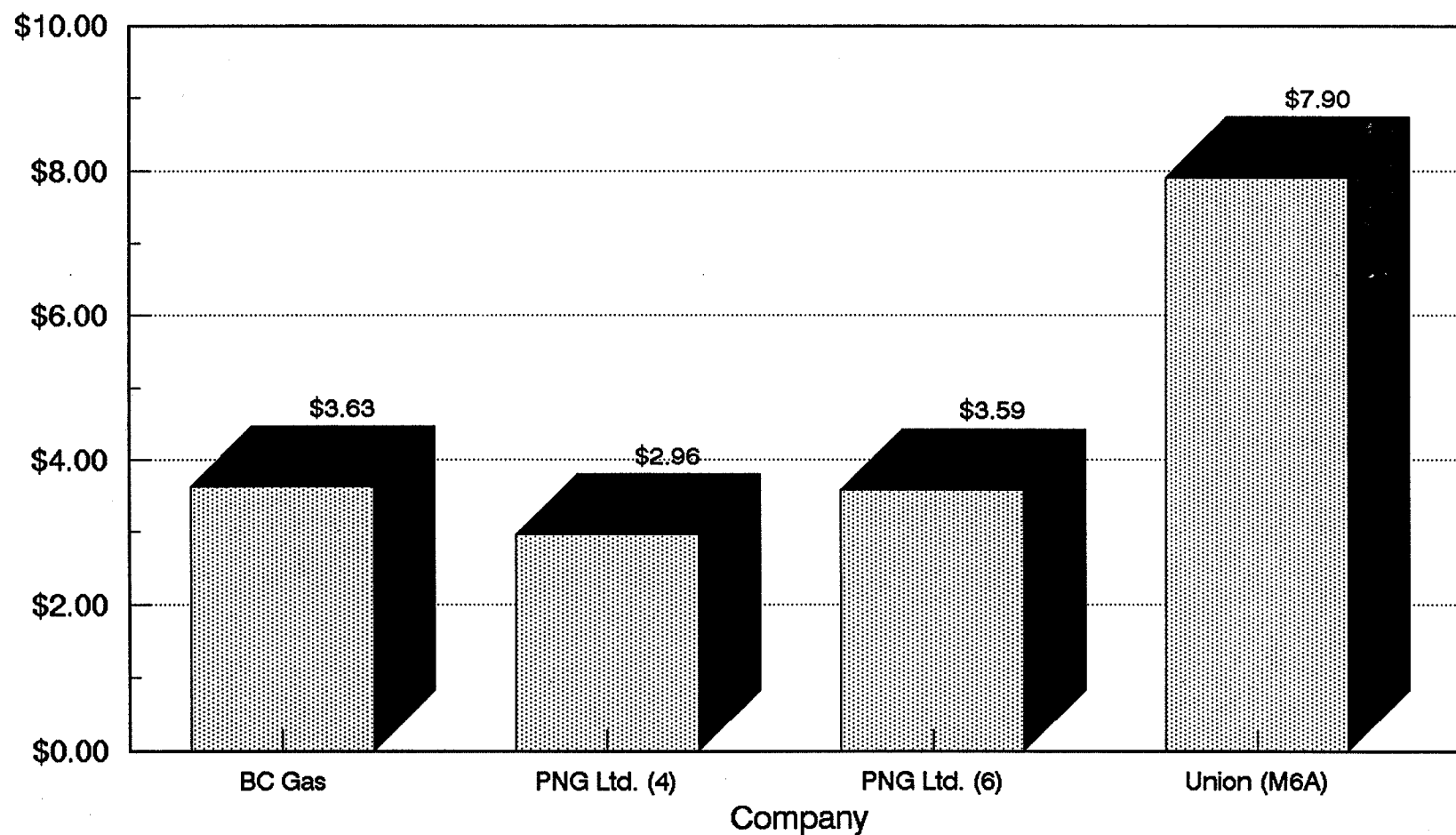
* Note: Rates have been converted to Cdn. \$/GJ based on \$1.36 Cdn/US\$ and 0.1055 therms/GJ.

COMPARISON OF SEASONAL RATES

For Major Canadian Utilities

@ April 1996

Avg. Rate (\$/GJ)

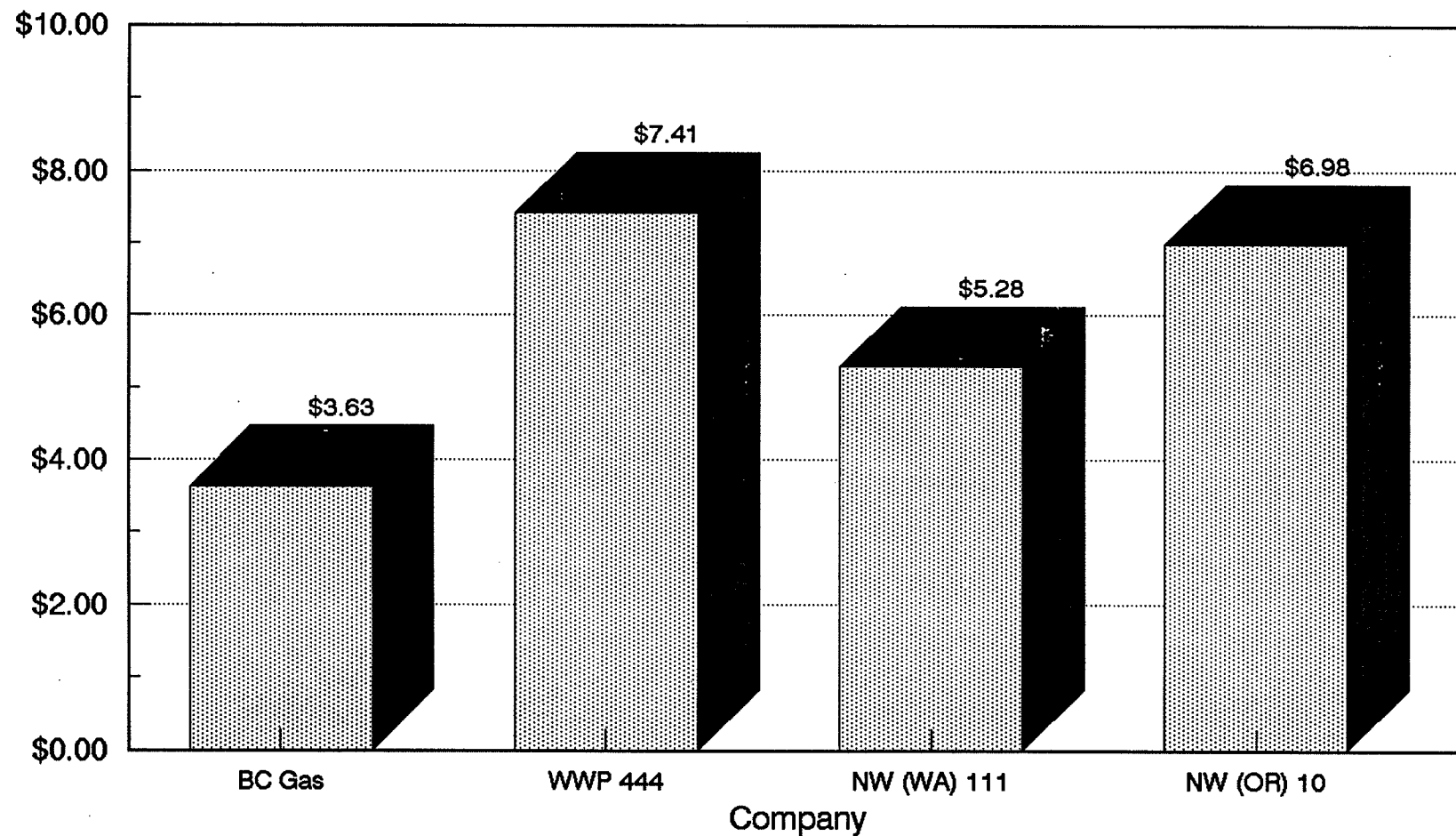


COMPARISON OF SEASONAL RATES

For Major Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



SMALL FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996 BC Gas Tariff	Rate 5 Lower Mainland General Firm	Sale of firm gas to cust. who uses > 50% of its approved connected gas load for applications other than space heating.	\$366.00/month	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.646 /GJ \$0.853 /GJ Cost of Gas \$2.012 \$2.012 Rider 6 (\$0.074) (\$0.074) Total comm. chrg \$3.584 /GJ \$2.791 /GJ	Rider 6: Refund of Deferred Gas Cost Credits.
	Rate 5 Inland General Firm	As above	\$366.00/month	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.645 /GJ \$0.853 /GJ Cost of Gas \$1.880 \$1.880 Rider 2 (\$0.086) (\$0.086) Rider 6 (\$0.074) (\$0.074) Total comm. chrg \$3.365 /GJ \$2.573 /GJ	Rider 2: Deferred Inc. Tax Refund. Rider 6: As above
	Rate 5 Columbia General Firm	As above	\$366.00/month	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.645 /GJ \$0.853 /GJ Cost of Gas \$1.896 \$1.896 Rider 2 (\$0.063) (\$0.063) Rider 6 (\$0.074) (\$0.074) Total Comm. Chrg. \$3.404 /GJ \$2.612 /GJ	Rider 2: As above Rider 6: As above
PNG, B.C. January 1, 1995 CGA Rate Schedule	Rate 5 Small Industrial	For firm gas supplied for use in approved equipment in industrial operations which are those processing &	\$1.162.56/month	• Declining Rate Structure: Total Comm. Chrg. First 320 GJ \$1,162.560 next 6.130 GJ \$3.591 /GJ All additional GJ \$3.487	

SMALL FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
CWNG, Alta November 1, 1995 CWNG Summary	Rate 3 Large Use Sales Service	avail. to cust. using 10,000GJ or more/yr. on an annual contract.	\$250.00/month Demand Charge \$3.25/month/GJ	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.299 /GJ \$0.299 /GJ Cost of Gas <u>\$1.308</u> <u>\$1.292</u> Total Comm. Chrg. \$1.607 /GJ \$1.591 /GJ	Rider "F" is the recovery of gas costs.
	Rate 4 High Load Factor – Transmission	For cust. served directly from Co.'s main high pressure transmission lines on an annual contract.	\$500/month Demand Charge: \$2.30/month/GJ of billing demand	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.180 /GJ \$0.180 /GJ Cost of Gas <u>\$1.308</u> <u>\$1.292</u> Total Comm. Chrg. \$1.488 /GJ \$1.472 /GJ	Rider "F" is Recovery of Gas Costs.
Centra Gas, Alta. November 6, 1995 C.G.A. Rate Schedules	Rate No. 2 Opt. Lrg. Gen. Ser.	Avail. to all customers on an annual contract.	\$150.00/month	<ul style="list-style-type: none">Uniform Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.119 /GJ \$1.119 /GJ Cost of Gas <u>\$1.292</u> <u>\$1.300</u> Total Comm. Chrg. \$2.411 /GJ \$2.419 /GJ	
	Rate No. 3 Opt. Gen. High Load Ser.	Avail. to cust. who use in excess of 50,000 GJ/yr.	\$415.00/month DC \$4.40/mon/GJ of Billing Demand	<ul style="list-style-type: none">Uniform Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.049 /GJ \$0.049 /GJ Cost of Gas <u>\$1.292</u> <u>\$1.300</u> Total Comm. Chrg. \$1.341 /GJ \$1.349 /GJ	
NUL, Alta November 1, 1995 NUL Summary	Rate A3A Large Use Sales Service	Avail. to cust. using 8,000 GJ/year or more.	\$275.00/month Demand charge \$4.00/month/GJ of billing demand	<ul style="list-style-type: none">Uniform Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.425 /GJ \$0.425 /GJ Cost of Gas <u>\$1.279</u> <u>\$1.085</u> Total Comm. Chrg. \$1.704 /GJ \$1.510 /GJ	

SMALL FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
NUL, Alta June 1, 1995 NUL Summary	Rate 4 High Load Factor Transmission	Avail. to all cust. served directly from NUL's main high pressure transmission lines.	\$600.00/month Demand Charge: \$1.60/month/GJ of 24 hour billing demand.	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.323 /GJ \$0.323 /GJ Cost of Gas \$1.279 \$1.085 Total Comm. Chrg. \$1.602 /GJ \$1.408 /GJ 	
Saskenergy, Sask January 1, 1996	Rate 3 General Service	Appl. to cust. using 3,860–25,476 GJ/year	\$37.25/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.039 /GJ 	
	G04 Industrial Commodity	annual consumption between 25,000 to 50,000 GJ/year.	\$200.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 1500 GJ \$2.585 /GJ Balance \$2.461 	
Centra Gas, MN January 31, 1996 CGA Rate Schedule	Large Gen. Ser. Class 4, 3 and 2	For gas delivered through one meter other than domestic sized meters on a firm basis.	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. Margin T-Service 25,000 GJ/yr. \$2.808 /GJ \$0.826 /GJ 64,000 GJ/yr. \$2.764 \$0.775 127,000 GJ/yr. \$2.731 \$0.754 Total Comm. Chrg. 25,000 GJ/yr. \$3.635 /GJ 64,000 GJ/yr. \$3.539 127,000 GJ/yr. \$3.484 	Class 4 cust. uses up to 25,000 GJ/yr. Class 3 cust. uses up to 64,000 GJ/yr. Class 2 cust. uses up to 127,000 GJ/yr.

SMALL FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas, ON January 1, 1995 CGA Rate Schedule EBRO 474-A	Rate 210 Large Volume General Service Fort Frances Zone	>1,930 GJ/yr and Combined firm and interruptible requirement less than 540 GJ/day	\$14.00/month	• Declining Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin First 38 GJ \$2.469 /GJ 2.4694 /GJ next 350 GJ \$1.130 \$1.130 next 770 GJ \$0.388 \$0.388 next 2,700 GJ \$0.183 \$0.183 over 3,800 GJ \$0.073 \$0.073 Cost of Gas \$3.282 /GJ \$2.504 /GJ Total Comm. Chrg. First 38 GJ \$5.751 /GJ \$4.974 /GJ next 350 GJ \$4.412 \$3.634 next 770 GJ \$3.669 \$2.892 next 2,700 GJ \$3.465 \$2.687 over 3,800 GJ \$3.355 \$2.577	
	Rate 110 Large Volume General Service Western Zone	>1,930 GJ/yr and Combined firm and interruptible requirement less than 540 GJ/day	\$25.00/month	• Declining Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin First 38 GJ \$2.092 /GJ \$2.092 /GJ next 350 GJ \$1.561 \$1.561 next 770 GJ \$1.266 \$1.266 next 2,700 GJ \$1.074 \$1.074 over 3,800 GJ \$0.312 \$0.312 Cost of Gas \$3.306 /GJ \$2.623 /GJ Total Comm. Chrg. First 38 GJ \$4.867 \$4.183 next 350 GJ \$4.573 \$3.889 next 770 GJ \$4.381 \$3.697 next 2,700 GJ \$3.618 \$2.934 over 3,800 GJ \$3.306 \$2.623	

SMALL FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas, Ontario January 1, 1995 CGA Rate Schedule EBRO 474-A	Rate 310 Large Volume General Service Northern Zone	>1,930 GJ/yr and Combined firm and interruptible requirement less than 540 GJ/day	\$25.00/month	<div>• Declining Seasonal Rate Structure: Commodity Chrg. Margin<div>(Nov – Mar) (Apr – Oct)</div><div>First 38 GJ \$2.092 /GJ \$2.092 /GJ</div><div>next 350 GJ \$1.561 \$1.561</div><div>next 770 GJ \$1.266 \$1.266</div><div>next 2,700 GJ \$1.074 \$1.074</div><div>over 3,800 GJ \$0.312 \$0.312</div> Cost of Gas \$3.606 /GJ \$2.829 /GJ Total Comm. Chrg. \$5.698 /GJ \$4.921 /GJ First 38 GJ \$5.167 \$4.390 next 350 GJ \$4.872 \$4.095 next 770 GJ \$4.681 \$3.903 next 2,700 GJ \$3.918 \$3.141 over 3,800 GJ \$3.606 \$2.829</div>	
	Rate 610 Large Volume General Service Eastern Zone	>1,930 GJ/yr and Combined firm and interruptible requirement less than 540 GJ/day	\$25.00/month	<div>• Declining Seasonal Rate Structure: Commodity Chrg. Margin<div>(Nov – Mar) (Apr – Oct)</div><div>First 38 GJ \$2.092 /GJ \$2.092 /GJ</div><div>next 350 GJ \$1.561 \$1.561</div><div>next 770 GJ \$1.266 \$1.266</div><div>next 2,700 GJ \$1.074 \$1.074</div><div>over 3,800 GJ \$0.312 \$0.312</div> Cost of Gas \$3.780 /GJ \$3.003 /GJ Total Comm. Chrg. \$5.872 /GJ \$5.095 /GJ First 38 GJ \$5.341 \$4.563 next 350 GJ \$5.046 \$4.269 next 770 GJ \$4.854 \$4.077 next 2,700 GJ \$4.092 \$3.315 over 3,800 GJ \$3.780 \$3.003</div>	

SMALL FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments																								
Consumers Gas Ontario Oct. 1, 1995	Rate 100 Firm Gas Contract	Avail. to cust. using no less than 12,800 GJ/yr.	\$100.00/month	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Commodity Chrg. Delivery Charge (Nov – Mar) (Apr – Oct) First 524 GJ \$1.515 /GJ \$0.928 /GJ next 1,050 GJ \$1.118 \$0.580 over 1,575 GJ \$0.973 \$0.431 Load Balancing \$1.015 /GJ \$0.916 /GJ Gas Supply Chrg \$1.664 /GJ \$1.664 /GJ Total Comm. Chrg. First 524 GJ \$4.194 /GJ \$3.508 /GJ next 1,050 GJ \$3.797 \$3.160 over 1,575 GJ \$3.652 \$3.011	1. Load Balancing Charge 2. Gas Supply Charge (If applicable)																								
Gaz Metropolitan October 1, 1995 CGA Rate Schedule	Rate 3 Moderate Stable Volume	Avail. to cust. using between 12.85 GJ to 386 GJ/day of natural gas		<div>Declining Rate Structure</div> <table><tr><td>Demand Charge</td><td>Southern Zone</td><td>Northern Zone</td></tr><tr><td>12 GJ/day</td><td>\$2.874 /GJ</td><td>\$2.206 /GJ</td></tr><tr><td>375 GJ/day</td><td>\$2.217</td><td>\$1.707</td></tr><tr><td>112 GJ/day</td><td>\$1.856</td><td>\$1.314</td></tr><tr><td>573 GJ/day</td><td>\$1.501</td><td>\$1.069</td></tr><tr><td>Margin</td><td>\$0.649 /GJ</td><td>\$0.627 /GJ</td></tr><tr><td>Cost of Gas</td><td>\$1.237 /GJ</td><td>\$0.627 /GJ</td></tr><tr><td>Total Charge</td><td>\$1.885 /GJ</td><td>\$1.254 /GJ</td></tr></table>	Demand Charge	Southern Zone	Northern Zone	12 GJ/day	\$2.874 /GJ	\$2.206 /GJ	375 GJ/day	\$2.217	\$1.707	112 GJ/day	\$1.856	\$1.314	573 GJ/day	\$1.501	\$1.069	Margin	\$0.649 /GJ	\$0.627 /GJ	Cost of Gas	\$1.237 /GJ	\$0.627 /GJ	Total Charge	\$1.885 /GJ	\$1.254 /GJ	
Demand Charge	Southern Zone	Northern Zone																											
12 GJ/day	\$2.874 /GJ	\$2.206 /GJ																											
375 GJ/day	\$2.217	\$1.707																											
112 GJ/day	\$1.856	\$1.314																											
573 GJ/day	\$1.501	\$1.069																											
Margin	\$0.649 /GJ	\$0.627 /GJ																											
Cost of Gas	\$1.237 /GJ	\$0.627 /GJ																											
Total Charge	\$1.885 /GJ	\$1.254 /GJ																											

SMALL FIRM SALES SERVICE RATES

Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas (Washington) January 7, 1995	Rate 505 Gen. Ind. Serv. Rate	avail to industrial cust. through one or more meters, billed separately.	\$2.72/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 105.5 GJ \$6.415 /GJ All over 105.5 GJ \$5.696 	
	Rate 511 Large Vol. Gen. Ind. Rate	For cust.'s having an min. fuel req. of 5,275 GJ/yr.		<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 422 GJ/mon. \$6.906 /GJ All over 422 GJ/mon. \$5.326 	
Cascade Natural Gas (Oregon) January 7, 1995	Rate 105 Gen. Ind. Serv.	For Ind. cust. through one or more meters at option of the Co.	\$16.32/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.625 /GJ 	
	Rate 111 Large Vol. Gen. Serv.	Avail. to cust. using 5,275 GJ/yr. Cust. major fuel req. for process use.		<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.161 /GJ 	
Wash. Wtr. Pwr. (Washington)	Rate 121 High Annual Load Factor Large Gen. Serv. (Firm)	Avail. to cust. in Wash. where gas used on the premises is supplied at 1 point of del. through a single meter.	\$260.13/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 52.75 GJ \$4.931 /GJ Next 52.75 \$4.854 Next 94.95 \$4.265 All over 1055 \$4.115 	
Wash. Wtr. Pwr. (Oregon) July 21, 1995	Rate 424 Large Gen. and Industrial serv.	Cust. must use minimum of 3,060 GJ/yr.	\$77.52/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.182 /GJ 	For large Comm./Ind. cust. where 75% of gas req. are for uses other than space.
Northwest Natural Gas (Washington) December 1, 1994	Rate 3 Comm. & Ind. Sales Service		\$10.17/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 1.055 GJ \$10.173 /GJ Next 26.38 GJ \$7.606 Next 180 GJ \$6.766 All additional \$6.301 	

SMALL FIRM SALES SERVICE RATES

Rate Summary for American Natural Gas Utilities

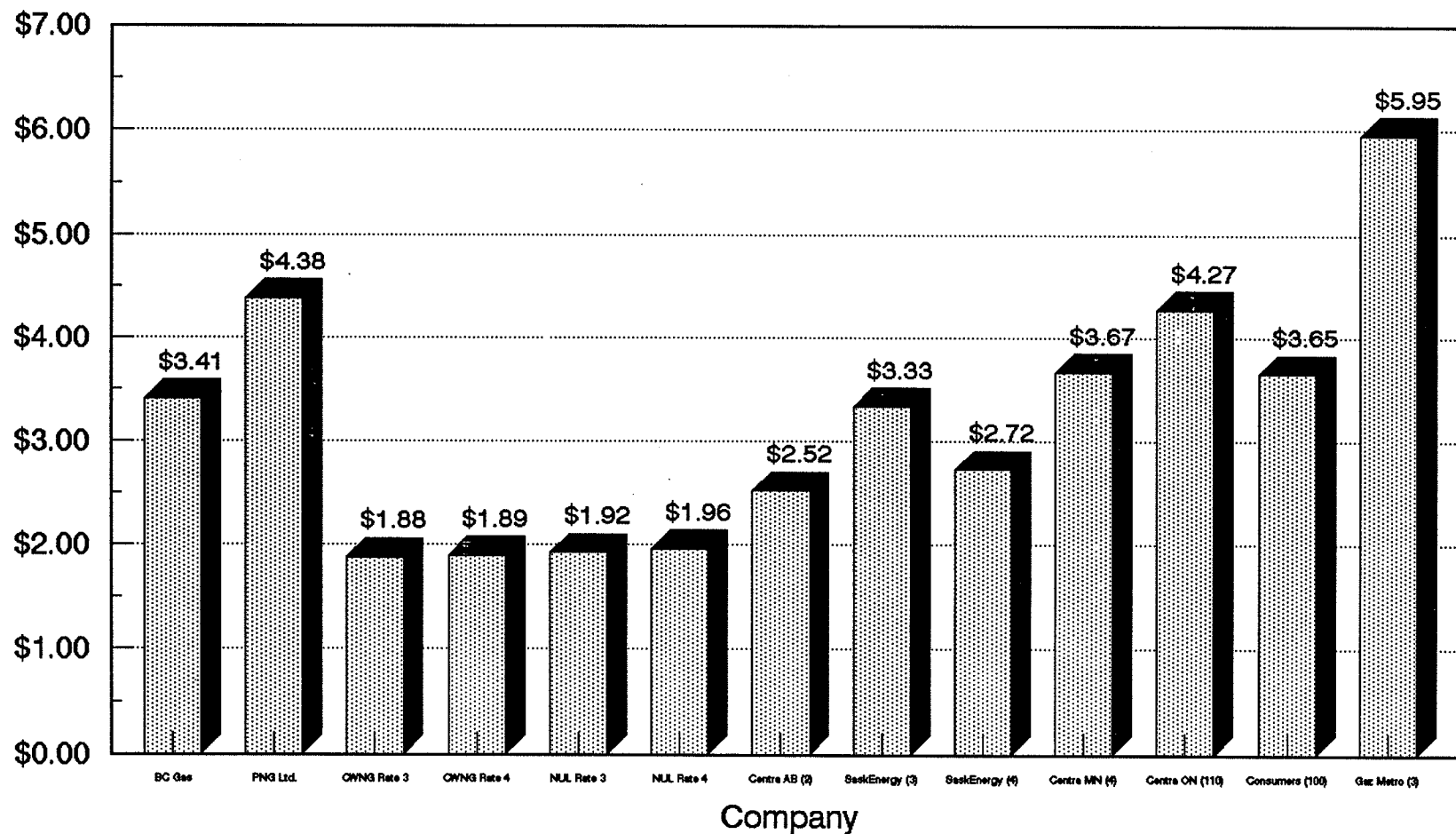
Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Northwest Natural Gas (Washington) December 1, 1994	Rate 4 Large Firm Sales Service		\$1187.70/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 422 GJ \$6.086 /GJ Next 633 GJ \$5.568 All additional \$5.424 	
	Rate 5 High Load Factor Large Firm Sales			<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$5.103 /GJ 	
Northwest Natural Gas (Oregon) January 1, 1995	Rate 3 Comm. & Ind. Sales Serv.		\$8.16/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.109 /GJ 	
	Rate 5 High Load Factor Large Firm Sales Serv.		\$326.40/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$4.929 /GJ 	
Washington Natural Gas May 15, 1995	Rate 31 Comm. & Ind. Gen. Serv.	Avail. to any comm. or ind. customer.	\$13.60/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$6.019 /GJ 	
	Rate 41 Large Vol. High Load Factor Serv.	Avail. to comm. or ind. cust. who has executed a serv. agreement.	\$247.60/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Chrg. First 52.75 GJ \$247.602 Next 474.75 GJ \$4.658 /GJ All over 527.5 GJ \$4.336 Except Excess over Heat Cons. Factor \$6.628 	

COMPARISON OF SMALL FIRM SALES SERVICE

For Major Canadian Utilities

@ April 1996

Avg. Rate (\$/GJ)



COMPARISON OF SMALL FIRM SALES SERVICE For Northwestern U.S. Utilities @ April 1996

Avg. Rate (\$/GJ)

\$10.00

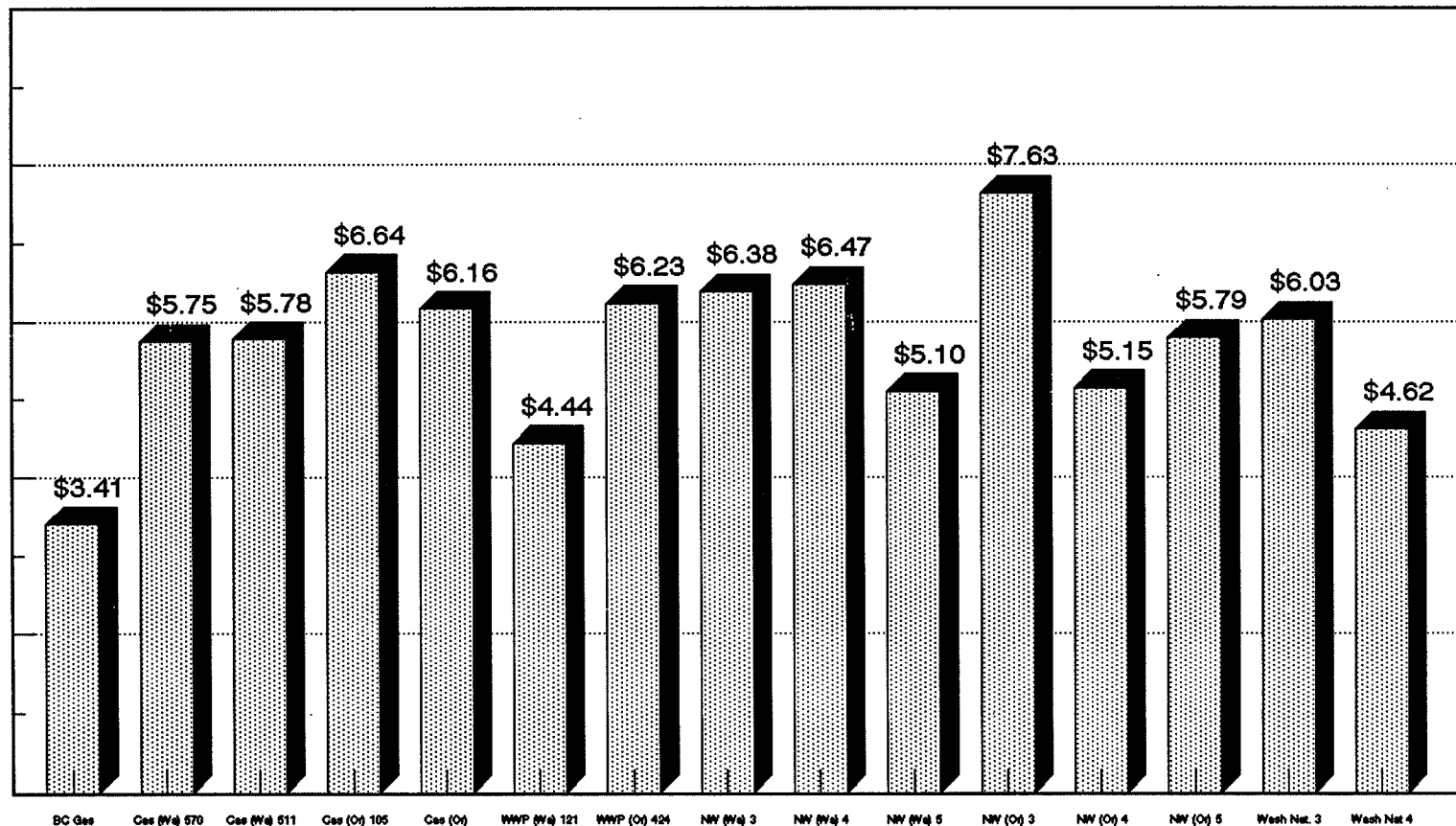
\$8.00

\$6.00

\$4.00

\$2.00

\$0.00



Company

LARGE FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996 BC Gas Tariff	Rate 5 Lower Mainland General Firm	Sale of firm gas to cust. who uses > 50% of its approved connected gas load for applications other than space heating.	\$366.00/month	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.646 /GJ \$0.853 /GJ Cost of Gas \$2.012 \$2.012 Rider 6 (\$0.074) (\$0.074) Total comm. chrg \$3.584 /GJ \$2.791 /GJ	Rider 6: Refund of Deferred Gas Cost Credits.
	Rate 5 Inland General Firm	As above	\$366.00/month	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.645 /GJ \$0.853 /GJ Cost of Gas \$1.880 \$1.880 Rider 2 (\$0.086) (\$0.086) Rider 6 (\$0.074) (\$0.074) Total comm. chrg \$3.365 /GJ \$2.573 /GJ	Rider 2: Deferred Inc. Tax Refund. Rider 6: As above
	Rate 5 Columbia General Firm	As above	\$366.00/month	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.645 /GJ \$0.853 /GJ Cost of Gas \$1.896 \$1.896 Rider 2 (\$0.063) (\$0.063) Rider 6 (\$0.074) (\$0.074) Total Comm. Chrg. \$3.404 /GJ \$2.612 /GJ	Rider 2: As above Rider 6: As above
PNG, B.C. January 1, 1995 CGA Rate Schedule	Rate 5 Small Industrial	For firm gas supplied for use in approved equipment in industrial operations which are those processing &	\$1.162.56/month	• Declining Rate Structure: Total Comm. Chrg. First 320 GJ \$1,162.560 next 6.130 GJ \$3.591 /GJ All additional GJ \$3.487	

LARGE FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
CWNG, Alta November 1, 1995 CWNG Summary	Rate 3 Large Use Sales Service	avail. to cust. using 10,000GJ or more/yr. on an annual contract.	\$250.00/month Demand Charge \$3.25/month/GJ	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.299 /GJ \$0.299 /GJ Cost of Gas \$1.308 \$1.292 Total Comm. Chrg. \$1.607 /GJ \$1.591 /GJ 	Rider "F" is the recovery of gas costs.
Centra Gas, Alta. November 6, 1995 C.G.A. Rate Schedules	Rate No. 3 Opt. Gen. High Load Ser.	Avail. to cust. who use in excess of 50,000 GJ/yr.	\$415.00/month DC \$4.40/mon/GJ of Billing Demand	<ul style="list-style-type: none"> Uniform Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.049 /GJ \$0.049 /GJ Cost of Gas \$1.292 \$1.300 Total Comm. Chrg. \$1.341 /GJ \$1.349 /GJ 	
NUL, Alta November 1, 1995 NUL Summary	Rate A3A Large Use Sales Service	Avail. to cust. using 8,000 GJ/year or more.	\$275.00/month Demand charge \$4.00/month/GJ of billing demand	<ul style="list-style-type: none"> Uniform Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.425 /GJ \$0.425 /GJ Cost of Gas \$1.279 \$1.085 Total Comm. Chrg. \$1.704 /GJ \$1.510 /GJ 	
Centra Gas, MN January 31, 1996 CGA Rate Schedule	Large Gen. Ser. Class 4, 3 and 2	For gas delivered through one meter other than domestic sized meters on a firm basis.	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. Margin T – Service 25,000 GJ/yr. \$2.808 /GJ \$0.826 /GJ 64,000 GJ/yr. \$2.764 \$0.775 127,000 GJ/yr. \$2.731 \$0.754 Total Comm. Chrg. 25,000 GJ/yr. \$3.635 /GJ 64,000 GJ/yr. \$3.539 127,000 GJ/yr. \$3.484 	Class 4 cust. uses up to 25,000 GJ/yr. Class 3 cust. uses up to 64,000 GJ/yr. Class 2 cust. uses up to 127,000 GJ/yr.

LARGE FIRM SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments																								
Centra Gas, ON January 1, 1995 CGA Rate Schedule EBRO 474-A	Rate 100 Lrg. Volume High Load Factor Firm Service	Max. daily req. for firm service is > 3,860 GJ and whose annual req. is > its max. daily req. times 256.	\$380.00/month Del. Chrg: \$2.706/Mth/GJ of Daily CD.	<ul style="list-style-type: none">Uniform Rate Structure: Margin \$0.049 /GJ Additional Charges for Sales Service Gas Supply Charge \$8.446/Mth/GJ of Daily Contracted Demand																									
Consumers Gas Ontario Oct. 1, 1995	Rate 115 Large Vol. High Load Factor Serv.	Cust. must trans. an annual supply of gas of not less than 292 times specified max. daily vol. of no less than 108 GJ/yr.	\$500.00/month Demand Charge: \$6.218/GJ C.D.	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Margin (Nov – Mar) (Apr – Oct) <table><tr><td>First 19,300 GJ</td><td>\$0.249 /GJ</td><td>\$0.087 /GJ</td></tr><tr><td>next 19,300 GJ</td><td>\$0.218</td><td>\$0.056</td></tr><tr><td>over 38,600 GJ</td><td>\$0.187</td><td>\$0.025</td></tr></table> <table><tr><td>Gas Load Balancing</td><td>\$0.716 /GJ</td><td>\$0.617 /GJ</td></tr><tr><td>Cost of Gas</td><td>\$1.664 /GJ</td><td>\$1.664 /GJ</td></tr></table>	First 19,300 GJ	\$0.249 /GJ	\$0.087 /GJ	next 19,300 GJ	\$0.218	\$0.056	over 38,600 GJ	\$0.187	\$0.025	Gas Load Balancing	\$0.716 /GJ	\$0.617 /GJ	Cost of Gas	\$1.664 /GJ	\$1.664 /GJ	Gas Load Balancing chrg. is offset by a credit, Rider A* at \$0.886/GJ, which pays the cust. back for the charge the cust. pays to contract on TransCanada Pipeline.									
First 19,300 GJ	\$0.249 /GJ	\$0.087 /GJ																											
next 19,300 GJ	\$0.218	\$0.056																											
over 38,600 GJ	\$0.187	\$0.025																											
Gas Load Balancing	\$0.716 /GJ	\$0.617 /GJ																											
Cost of Gas	\$1.664 /GJ	\$1.664 /GJ																											
Union Gas, Ontario January 1, 1996	Rate M7 Special Large Volume Industrial and Commercial Contract Rate	Min. term of one year with a combined max. daily req't for firm, inter- ruptible & seasonal serv. of > 5,483 GJ & an annual vol. of > 1,093,454 GJ.	Demand charge of \$5.58/GJ of daily contracted firm demand.	<ul style="list-style-type: none">Uniform Rate Structure: Cost of Gas \$2.251 /GJ Margin \$0.114 Total Comm. Chrg. \$2.366 /GJ																									
Gaz Metropolitan Quebec October 1, 1995 CGA Rate Schedule	Rate 4 Large Stable Ser.	For cust. using at least 386 GJ/day of firm natural gas.	N/A	<ul style="list-style-type: none">Declining Rate Structure <table><tr><td>Demand Charge</td><td>Southern Zone</td><td>Northern Zone</td></tr><tr><td>375 GJ/day</td><td>\$1.509 /GJ</td><td>\$1.129 /GJ</td></tr><tr><td>1125 GJ/day</td><td>\$1.142</td><td>\$0.919</td></tr><tr><td>3,745 GJ/day</td><td>\$0.970</td><td>\$0.834</td></tr><tr><td>11,235 GJ/day</td><td>\$0.855</td><td>\$0.807</td></tr><tr><td>over 11,235GJ/day</td><td>\$0.816</td><td>\$0.780</td></tr></table> <table><tr><td>Delivery Charge</td><td>\$0.649 /GJ</td><td>\$0.627 /GJ</td></tr><tr><td>Cost of Gas</td><td>\$1.237 /GJ</td><td>\$1.237 /GJ</td></tr></table> Total Comm. Chrg. \$1.886 /GJ \$1.864 /GJ	Demand Charge	Southern Zone	Northern Zone	375 GJ/day	\$1.509 /GJ	\$1.129 /GJ	1125 GJ/day	\$1.142	\$0.919	3,745 GJ/day	\$0.970	\$0.834	11,235 GJ/day	\$0.855	\$0.807	over 11,235GJ/day	\$0.816	\$0.780	Delivery Charge	\$0.649 /GJ	\$0.627 /GJ	Cost of Gas	\$1.237 /GJ	\$1.237 /GJ	AOR (100% to 115% of subscribed vol.) – 3.5 times the avg. daily unit price of min. obligation from Nov 1 – Apr 30 or by 1.75 times from May 1 – Oct 31. UOR (withdrawals beyond 115%) – unit price of AOR + from Nov 1 – Apr 30, a penalty = to 7 times the avg. daily unit price of minimum obligation.
Demand Charge	Southern Zone	Northern Zone																											
375 GJ/day	\$1.509 /GJ	\$1.129 /GJ																											
1125 GJ/day	\$1.142	\$0.919																											
3,745 GJ/day	\$0.970	\$0.834																											
11,235 GJ/day	\$0.855	\$0.807																											
over 11,235GJ/day	\$0.816	\$0.780																											
Delivery Charge	\$0.649 /GJ	\$0.627 /GJ																											
Cost of Gas	\$1.237 /GJ	\$1.237 /GJ																											

LARGE FIRM SALES SERVICE RATES

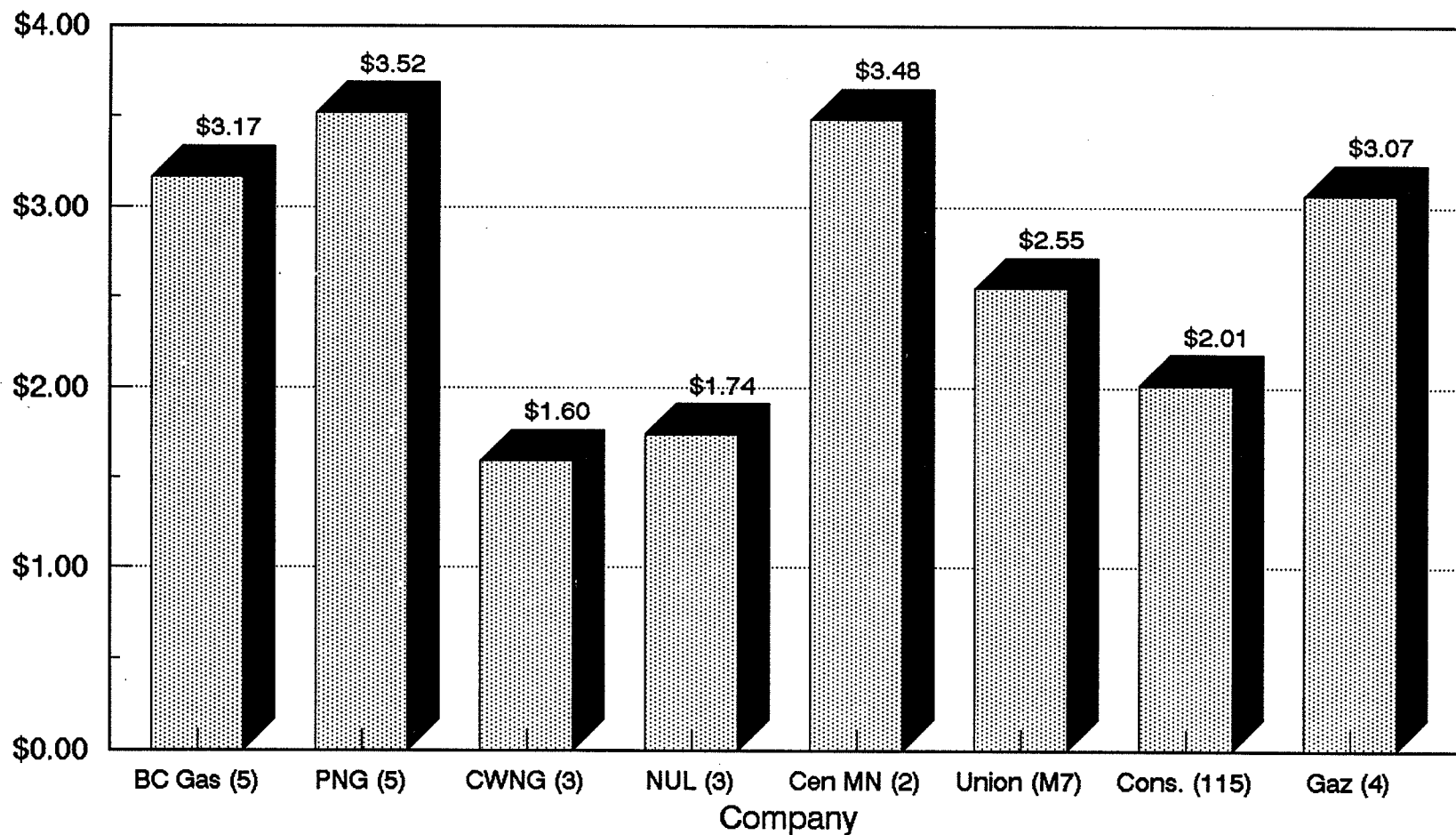
Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas February 1, 1996 Washington	Rate 570 Large Volume General Service	Avail. to cust.'s using an annual fuel requirement > 5,275 GJ/year.	N/A	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 4,000 GJ \$7.007 /GJ All over 4,000 GJ \$5.427 	
Cascade Natural Gas January 15, 1996 Oregon	Rate 111 Large Volume General Service	Avail. to cust.'s using an annual fuel requirement > 5,275 GJ/year and where fuel requirement if for process use.	N/A	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. All GJ \$5.557 /GJ 	
Wash. Wtr. Pwr. Washington December 22, 1995	Rate 121 Annual High Load Factor Lrg. Gen. Service – Firm	Avail. for firm gas service for any purpose subject to contract of one year or longer.	\$223.65/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 52.75 GJ \$4.240 /GJ Next 52.75 GJ \$4.163 Next 949.5 GJ \$3.574 All over 1,055 GJ \$3.424 	
Northwest Natural Gas Company Washington January 1, 1995	Rate 4 Large Firm Service	Avail. to cust. for firm gas service at one point of delivery through one meter.	\$1187.70/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. First 422 GJ \$6.086 /GJ Next 633 GJ \$5.568 All additional \$5.424 	
Wash. Natural Gas May 15, 1995	Rate 41 Large Volume High load Factor Service	Available to industrial customer.	\$247.60/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 52.75 GJ \$247.602 Next 474.75 GJ \$4.658 /GJ All over 527.5 GJ \$4.336 	

COMPARISON OF LARGE FIRM SALES SERVICE For Major Canadian Utilities

@ April 1996

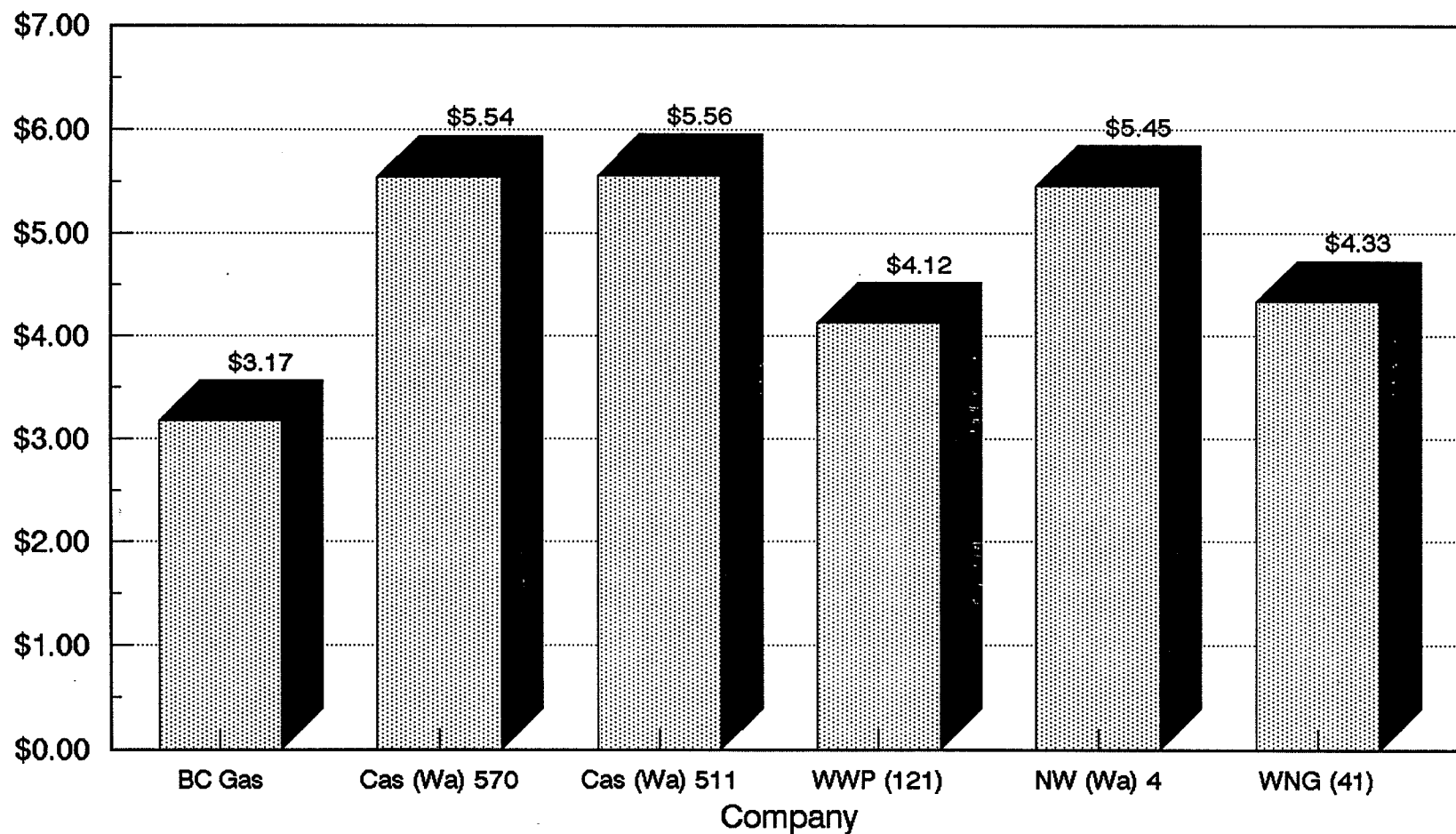
Avg. Rate (\$/GJ)



COMPARISON OF LARGE FIRM SALES SERVICE For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



SMALL INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996	Rate 7 Lower Mainland Gen. Interruptible	Avail. for the sale of interruptible gas through one meter station to one customer.	\$829.50/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.159 /GJ \$0.853 /GJ Cost of Gas \$1.850 \$1.350 Rider 4 (\$0.030) (\$0.022) Total Comm. Chrg. \$2.979 /GJ \$2.181 /GJ 	i. First 5% of specified Quantity \$5.126/GJ ii. over 5% of specified quantity \$20.00/GJ Rider 4: Deferred Non- Core Margin Increase
	Rate 7 Columbia & Inland Gen. Interruptible	As above.	\$829.50/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.159 /GJ \$0.853 Cost of Gas \$1.850 \$1.350 Rider 4 (\$0.030) (\$0.022) Rider 6 (\$0.072) (\$0.072) Total Comm. Chrg. \$2.907 /GJ \$2.109 /GJ 	i. First 5% of specified Quantity \$4.939/GJ ii. over 5% of specified quantity \$20.00/GJ Rider 2: Deferred Inc. Tax Refund. Rider 4: As above.
Centra Gas, Alta. November 6, 1995 C.G.A. Rate Schedules	Rate No. 3 Opt. Gen. High Load Ser.	Avail. to cust. who use in excess of 50,000 GJ/y.	\$415.00/month DC \$4.40/mon/GJ of Billing Demand	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.049 /GJ \$0.049 /GJ Cost of Gas \$1.292 \$1.300 Total Comm. Chrg. \$1.341 /GJ \$1.349 /GJ 	
Centra Gas, MN January 31, 1996	Interr. Sales Serv. Class 4, 3 and 2	Cust. gas requirements must equal or exceed 12,733 GJ/yr.	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. Cost of Gas T-Service 25,000 GJ/yr. \$2.166 /GJ \$0.609 /GJ 64,000 GJ/yr. \$2.088 \$0.549 127,000 GJ/yr. \$2.067 \$0.531 Total Comm. Chrg. 25,000 GJ/yr. \$2.775 64,000 GJ/yr. \$2.637 127,000 GJ/yr. \$2.598 	Peaking Supply \$0.585/GJ Class 4 cust. uses up to 25,000 GJ/yr. Class 3 cust. uses up to 64,000 GJ/yr. Class 2 cust. uses up to 127,000 GJ/yr.

SMALL INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas, Ontario January 1, 1995 CGA Rate Schedule EBRO 474-A	Rate 216 Small Vol. Interr. Fort Frances	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.788 /GJ \$1.788 /GJ Cost of Gas <u>\$2.113</u> <u>\$1.971</u> Total Comm. Chrg. \$3.902 /GJ \$3.759 /GJ	
	Rate 116 Small Vol. Interr. Western Zone	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.788 /GJ \$1.788 /GJ Cost of Gas <u>\$2.390</u> <u>\$1.994</u> Total Comm. Chrg. \$4.179 /GJ \$3.782 /GJ	
	Rate 316 Small Vol. Interr. Northern Zone	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.788 /GJ \$1.788 /GJ Cost of Gas <u>\$2.824</u> <u>\$2.052</u> Total Comm. Chrg. \$4.612 /GJ \$3.840 /GJ	
	Rate 616 Small Vol. Interr. Eastern Zone	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none">Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.788 /GJ \$1.788 /GJ Cost of Gas <u>\$3.079</u> <u>\$2.089</u> Total Comm. Chrg. \$4.867 /GJ \$3.877 /GJ	

SMALL INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Consumers Gas Ontario Oct. 1, 1995	Rate 145 Seasonal Interr. Service	For cust. using Co.'s gas dist'n network for transportation of spec. daily max. vol. of gas to one location which can accommodate interruption of gas under discretion of Co. Appl't must agree to transport min. vol. of 12,733 GJ/yr.	\$100.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: <ul style="list-style-type: none"> Delivery Charge (Dec - Mar) (Apr - Nov) First 525 GJ \$1.182 /GJ \$0.640 /GJ next 1,050 GJ \$0.830 \$0.288 All over 1,575 GJ \$0.685 \$0.143 Load Balancing \$0.841 /GJ \$0.742 /GJ Gas Supply Chrg \$1.664 /GJ \$1.664 /GJ Total Comm. Chrg. First 525 GJ \$3.688 /GJ \$3.047 /GJ next 1,050 GJ \$3.336 \$2.695 All over 1,575 GJ \$3.191 \$2.550 	Load Balancing Charge Gas Supply Charge (If applicable)
Union Gas, Ontario January 1, 1996 EBRO 476/03/04	Rate M5A Interruptible Ind. & Comm. Contract	For the purchase or transportation of gas for a min. of 1 yr. at a spec. daily contracted dem. between 185 GJ to 5483 GJ.	n/a	<ul style="list-style-type: none"> Declining Rate Structure: <ul style="list-style-type: none"> Margin <ul style="list-style-type: none"> 180-650 \$0.482 /GJ 650 - 1,125 \$0.448 1,125 - 1,875 \$0.431 1,875 - 2,620 \$0.418 2,620 - 3,745 \$0.409 3,745 - 5,275 \$0.400 Cost of Gas \$2.251 /GJ Total Comm. Chrg. <ul style="list-style-type: none"> 180-650 \$2.733 /GJ 650 - 1,125 \$2.700 1,125 - 1,875 \$2.682 1,875 - 2,620 \$2.670 2,620 - 3,745 \$2.661 3,745 - 5,275 \$2.652 	For 75 days use of cd \$0.014/GJ For additional days use of c.d. up to max. 275 days \$0.001/GJ

SMALL INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge			Comments																																													
Gaz Metropolitan Quebec October 1, 1995	Rate 5 Interruptible Sales Service	Sum of the subscribed vol. at a stable vol. rate and one three hundred and sixty fifth of the min. vol. is at least 125 GJ/day.		<ul style="list-style-type: none">Declining Rate Structure: <table><thead><tr><th>Margin</th><th>Southern Zone</th><th>Northern Zone</th></tr></thead><tbody><tr><td>0 – 115 GJ</td><td>\$3.851 /GJ</td><td>\$2.970 /GJ</td></tr><tr><td>115 – 390 GJ</td><td>\$2.931</td><td>\$2.459</td></tr><tr><td>390 – 1,160 GJ</td><td>\$2.416</td><td>\$2.163</td></tr><tr><td>1,160 – 3,860 GJ</td><td>\$2.195</td><td>\$2.027</td></tr><tr><td>3,860 – 11,580 GJ</td><td>\$1.990</td><td>\$1.931</td></tr><tr><td>Over 11,580 GJ</td><td>\$1.892</td><td>\$1.892</td></tr><tr><td>Cost of Gas</td><td>\$1.237 /GJ</td><td>\$1.237 /GJ</td></tr><tr><td colspan="3">Total Comm. Chrg.</td></tr><tr><td>0 – 115 GJ</td><td>\$5.088 /GJ</td><td>\$4.207 /GJ</td></tr><tr><td>115 – 390 GJ</td><td>\$4.168</td><td>\$3.695</td></tr><tr><td>390 – 1,160 GJ</td><td>\$3.653</td><td>\$3.400</td></tr><tr><td>1,160 – 3,860 GJ</td><td>\$3.432</td><td>\$3.264</td></tr><tr><td>3,860 – 11,580 GJ</td><td>\$3.227</td><td>\$3.168</td></tr><tr><td>Over 11,580 GJ</td><td>\$3.129</td><td>\$3.129</td></tr></tbody></table>			Margin	Southern Zone	Northern Zone	0 – 115 GJ	\$3.851 /GJ	\$2.970 /GJ	115 – 390 GJ	\$2.931	\$2.459	390 – 1,160 GJ	\$2.416	\$2.163	1,160 – 3,860 GJ	\$2.195	\$2.027	3,860 – 11,580 GJ	\$1.990	\$1.931	Over 11,580 GJ	\$1.892	\$1.892	Cost of Gas	\$1.237 /GJ	\$1.237 /GJ	Total Comm. Chrg.			0 – 115 GJ	\$5.088 /GJ	\$4.207 /GJ	115 – 390 GJ	\$4.168	\$3.695	390 – 1,160 GJ	\$3.653	\$3.400	1,160 – 3,860 GJ	\$3.432	\$3.264	3,860 – 11,580 GJ	\$3.227	\$3.168	Over 11,580 GJ	\$3.129	\$3.129	
Margin	Southern Zone	Northern Zone																																																		
0 – 115 GJ	\$3.851 /GJ	\$2.970 /GJ																																																		
115 – 390 GJ	\$2.931	\$2.459																																																		
390 – 1,160 GJ	\$2.416	\$2.163																																																		
1,160 – 3,860 GJ	\$2.195	\$2.027																																																		
3,860 – 11,580 GJ	\$1.990	\$1.931																																																		
Over 11,580 GJ	\$1.892	\$1.892																																																		
Cost of Gas	\$1.237 /GJ	\$1.237 /GJ																																																		
Total Comm. Chrg.																																																				
0 – 115 GJ	\$5.088 /GJ	\$4.207 /GJ																																																		
115 – 390 GJ	\$4.168	\$3.695																																																		
390 – 1,160 GJ	\$3.653	\$3.400																																																		
1,160 – 3,860 GJ	\$3.432	\$3.264																																																		
3,860 – 11,580 GJ	\$3.227	\$3.168																																																		
Over 11,580 GJ	\$3.129	\$3.129																																																		

SMALL INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas (Washington) January 7, 1995	Rate 570 Interruptible Service	Avail. for cust. using min. of 6,330 GJ/yr.	N/A	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Charge First 3,165 GJ \$5.184 /GJ All over 3,165 GJ \$4.372 	
Cascade Natural Gas (Oregon) Jan. 7, 1995	Rate 170 Interruptible Service	Avail. to cust. using a minimum fuel req. of 18,990 GJ/yr.		<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$5.580 /GJ 	
Wash. Wtr. Pwr. (Washington)	Rate 131 Interruptible Serv. (Off-Peak)	Must exceed 26,375 GJ of gas per year.	\$8649.26/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.936 /GJ 	GT&C stipulates that: Vol. of excess is avail., Co. has access to trans. cap. on interconnected pipelines and Co.'s dist. sys. has capacity.
Wash. Wtr. Pwr. (Oregon) July 21, 1995	Rate 440 Interruptible Serv. for Lrg. Comm. & Ind. Customers	Applicable for large ind. & comm. cust. whose min. use is 23,738 GJ/yr.	\$2,060/meter/mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$5.147 /GJ 	avail. where capacity use is in excess of existing req. of firm sales & trans. cust. exist in Co.'s system.
Northwest Natural Gas (Washington) December 1, 1994	Rate 23 Interruptible Sales Service (Optional)		\$3146.73/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 738.5 GJ \$3,146.720 Next 738.5 GJ \$4.056 /GJ Next 9073 GJ \$3.948 Next 158,250 GJ \$3.876 All additional GJ \$3.786 	

SMALL INTERRUPTIBLE SALES SERVICE RATES

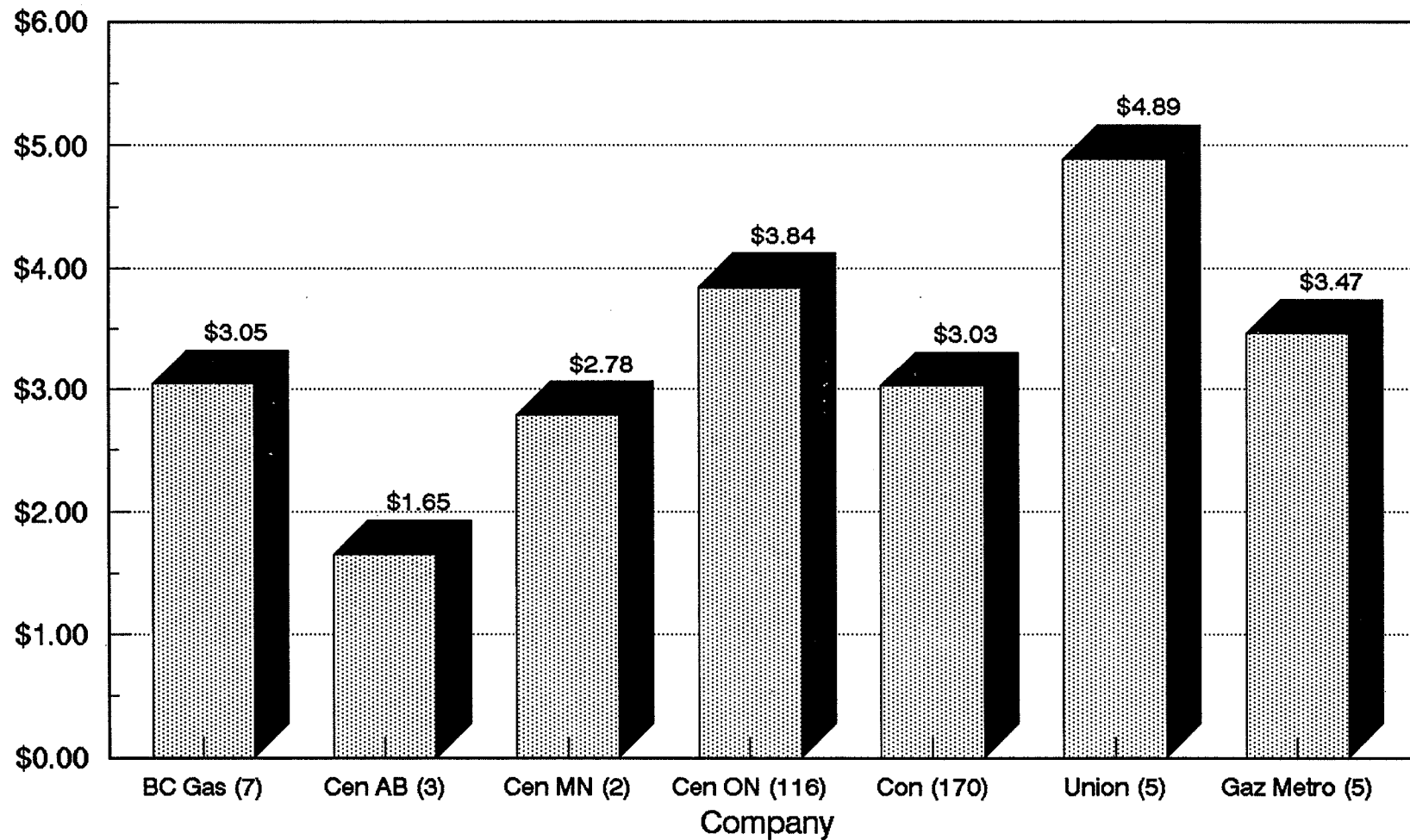
Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Wash. Natural Gas May 15, 1995	Rate 85 Interruptible gas Serv. w/Firm Option	Avail. to any non- res. buyer subject to curtailment to protect serv. to higher priority cust.	Mth. bill \$1.37/Mth + Firm Demand chrg. of \$25.78/GJ/day.	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 2638 GJ \$4.108 /GJ Next 2638 GJ \$3.703 All over 5275 GJ \$3.380 	Unauthorized use of gas during period of curtailment invokes a penalty of \$25.78/GJ in addition to basic chrg.
	Rate 86 Ltd. Interr. Serv. w/Firm Option	Avail. to non-res buyer for steam & hot wtr. boilers, gas engines, gas turbines or student occupied buildings.	Monthly bill \$2856.00/Mth + Firm Dem. Chrg. of \$25.78/GJ/day.	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 105.5 GJ \$5.443 /GJ All over 105.5 GJ \$4.541 	

COMPARISON OF SMALL INTERRUPTIBLE SALES SERVICE For Major Canadian Utilities

@ April 1996

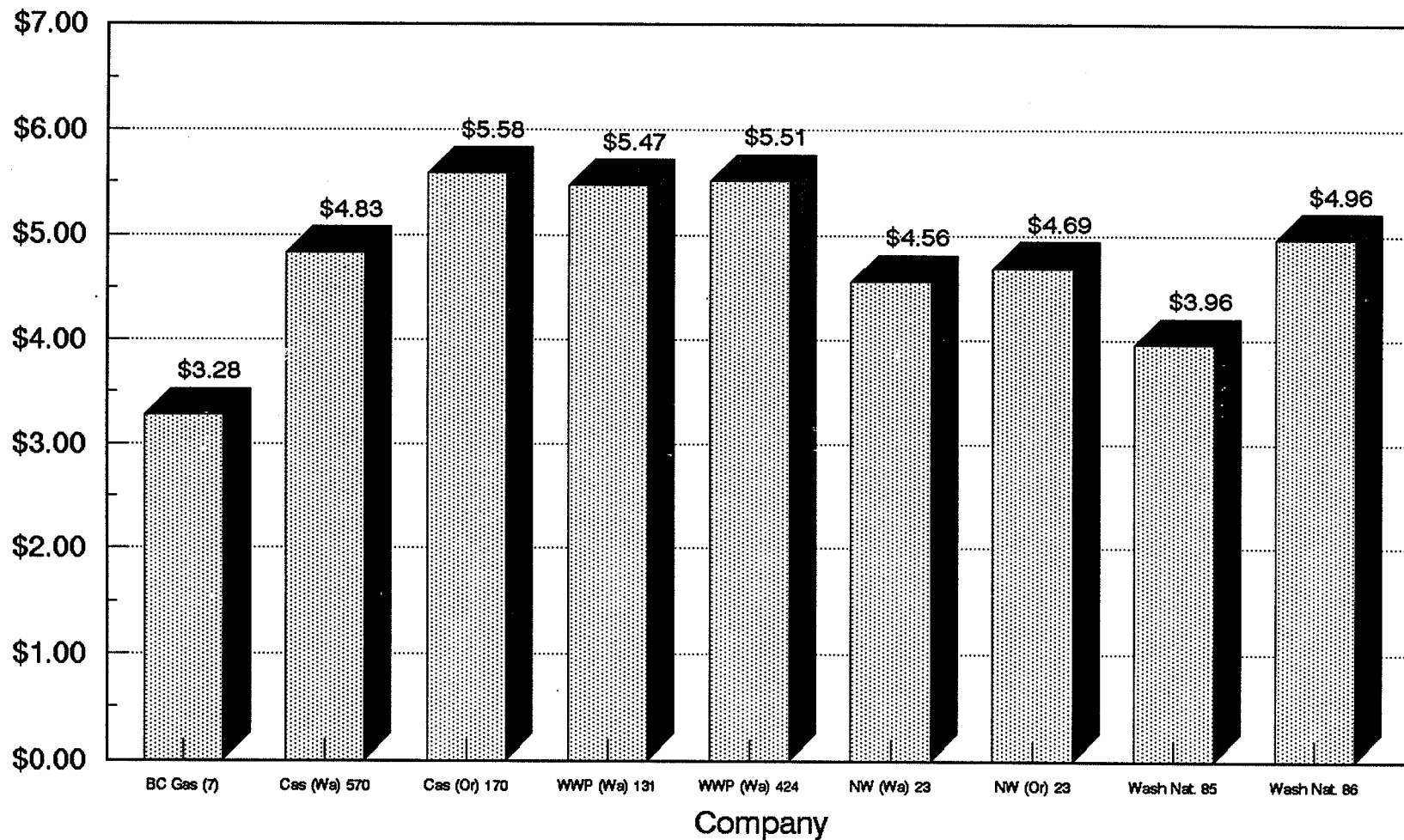
Avg. Rate (\$/GJ)



COMPARISON OF SMALL INTERRUPTIBLE SALES SERVICE For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



LARGE INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996	Rate 7 Lower Mainland Gen. Interruptible	Avail. for the sale of interruptible gas through one meter station to one customer.	\$829.50/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.159 /GJ \$0.853 /GJ Cost of Gas \$1.850 \$1.350 Rider 4 (\$0.030) (\$0.022) Total Comm. Chrg. \$2.979 /GJ \$2.181 /GJ 	i. First 5% of specified Quantity \$5.126/GJ ii. over 5% of specified quantity \$20.00/GJ Rider 4: Deferred Non- Core Margin Increase
	Rate 7 Columbia & Inland Gen. Interruptible	As above.	\$829.50/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$1.159 /GJ \$0.853 Cost of Gas \$1.850 \$1.350 Rider 4 (\$0.030) (\$0.022) Rider 6 (\$0.072) (\$0.072) Total Comm. Chrg. \$2.907 /GJ \$2.109 /GJ 	i. First 5% of specified Quantity \$4.939/GJ ii. over 5% of specified quantity \$20.00/GJ Rider 2: Deferred Inc. Tax Refund. Rider 4: As above.
Centra Gas, Alta. November 6, 1995 C.G.A. Rate Schedules	Rate No. 3 Opt. Gen. High Load Ser.	Avail. to cust. who use in excess of 50,000 GJ/y.	\$415.00/month DC \$4.40/mon/GJ of Billing Demand	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Margin \$0.049 /GJ \$0.049 /GJ Cost of Gas \$1.292 \$1.300 Total Comm. Chrg. \$1.341 /GJ \$1.349 /GJ 	
Centra Gas, MN January 31, 1996	Interr. Sales Serv. Class 4, 3 and 2	Cust. gas requirements must equal or exceed 12,733 GJ/yr.	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. Cost of Gas T-Service 25,000 GJ/yr. \$2.166 /GJ \$0.609 /GJ 64,000 GJ/yr. \$2.088 \$0.549 127,000 GJ/yr. \$2.067 \$0.531 Total Comm. Chrg. 25,000 GJ/yr. \$2.775 64,000 GJ/yr. \$2.637 127,000 GJ/yr. \$2.598 	Peaking Supply \$0.585/GJ Class 4 cust. uses up to 25,000 GJ/yr. Class 3 cust. uses up to 64,000 GJ/yr. Class 2 cust. uses up to 127,000 GJ/yr.

LARGE INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas ON. January 1, 1995	Rate 25 Large Volume Interruptible Serv.	For cust.'s whose daily req. is > 540GJ/day & whose operations can accept interruption and restoration of service.	\$245.00/month	<ul style="list-style-type: none">Delivery Charge: No less than \$0.233 /GJ & no greater than \$0.505 Cost of Gas No less than \$2.072 /GJ & no greater than \$3.902	Price based on 75% load factor. Interrupt about 5 days/yr. due to storage delivery and pipeline capacity. Centra does have access to cust. gas supply.
Union Gas, Ontario January 1, 1996	Rate M5A Interruptible Ind. & Comm. Contract	For the purchase or transportation of gas for a min. of 1 yr. at a spec. daily contracted dem. between 185 GJ to 5,483 GJ.	For 75 days of CD Union will discount \$1.373/GJ	<ul style="list-style-type: none">Declining Rate Structure: Margin 180-650 \$0.482 /GJ 650 - 1,125 \$0.448 1,125 - 1,875 \$0.431 1,875 - 2,620 \$0.416 2,620 - 3,745 \$0.409 3,745 - 5,275 \$0.400 Cost of Gas \$2.251 /GJ Total Comm. Chrg. 180-650 \$2.733 /GJ 650 - 1,125 \$2.699 1,125 - 1,875 \$2.682 1,875 - 2,620 \$2.667 2,620 - 3,745 \$2.660 3,745 - 5,275 \$2.651	Price based on 65% load factor. Usually interrupt cust. about 5 days/yr. based on storage delivery and to a lesser degree pipeline capacity. Union does have access to cust. gas supply.
Consumers Gas Ontario Oct. 1, 1995	Rate 170 Interruptible Service	> 1,100 GJ daily > 187,250 GJ annually	\$200.00/month Demand Charge \$0.777/GJ/month of C.D.	<ul style="list-style-type: none">Declining Seasonal Rate Structure: Margin (Nov - Mar) (Apr - Oct) First 38,600 GJ \$0.241 /GJ \$0.156 /GJ All over 38,600 GJ \$0.189 \$0.104 Gas Load Balancing \$0.841 /GJ \$0.742 /GJ Cost of Gas \$1.664 /GJ \$1.664 /GJ	Gas Load Balancing chrg. is offset by a credit, Rider "A" at \$0.886/GJ, which pays the cust. back for the charge the cust. pays to contract on TransCanada Pipeline.

LARGE INTERRUPTIBLE SALES SERVICE RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge			Comments
Gaz Metropolitan Quebec October 1, 1995	Rate 5 Interruptible Sales Service	Sum of the subscribed vol. at a stable vol. rate and one three hundred and sixty fifth of the min. vol. is at least 125 GJ/day.	N/A	<ul style="list-style-type: none"> Declining Rate Structure: 			
				Margin	Southern Zone	Northern Zone	
				0 – 115 GJ	\$3.856 /GJ	\$2.970 /GJ	
				115 – 390 GJ	\$2.931	\$2.459	
				390 – 1,160 GJ	\$2.416	\$2.163	
				1,160 – 3,860 GJ	\$2.195	\$2.027	
				3,860 – 11,580 GJ	\$1.990	\$1.931	
				Over 11,580 GJ	\$1.892	\$1.892	
				Cost of Gas	\$1.237 /GJ	\$1.237 /GJ	
				Total Comm. Chrg.	\$5.093 /GJ	\$4.207 /GJ	
					\$4.168	\$3.695	
					\$3.653	\$3.400	
					\$3.432	\$3.264	
					\$3.227	\$3.168	
					\$3.129	\$3.129	

LARGE INTERRUPTIBLE SALES SERVICE RATES

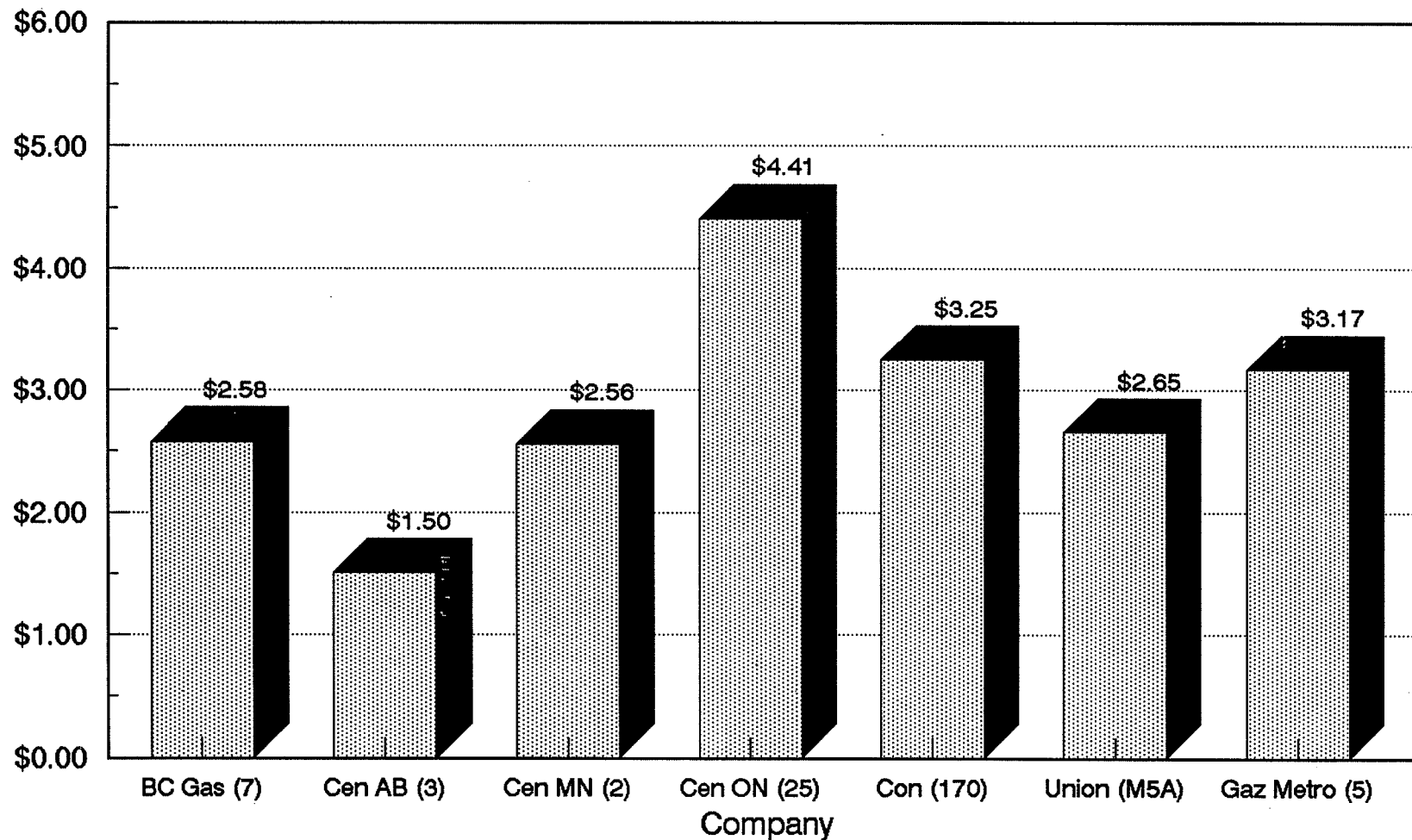
Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas (Washington) January 7, 1995	Rate 570 Interruptible Service	Avail. for cust. using min. of 6,330 GJ/yr.	N/A	<ul style="list-style-type: none"> Declining Rate Structure: Total Commodity Charge First 3,165 GJ \$5.184 /GJ All over 3,165 GJ \$4.372 	
Cascade Natural Gas (Oregon) Jan. 7, 1995	Rate 170 Interruptible Service	Avail. to cust. using a minimum fuel req. of 18,990 GJ/yr.		<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$5.580 /GJ 	
Wash. Wtr. Pwr. (Washington)	Rate 131 Interruptible Serv. (Off-Peak)	Must exceed 26,375 GJ of gas per year.	\$8649.26/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.936 /GJ 	GT&C stipulates that: Vol. of excess is avail., Co. has access to trans. cap. on interconnected pipelines and Co.'s dist. sys. has capacity.
Northwest Natural Gas (Washington) December 1, 1994	Rate 23 Interruptible Sales Service (Optional)		\$3146.73/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 738.5 GJ \$3,146.720 Next 738.5 GJ \$4.056 /GJ Next 9073 GJ \$3.948 Next 158,250 GJ \$3.876 All additional GJ \$3.786 	
Wash. Natural Gas May 15, 1995	Rate 85 Interruptible gas Serv. w/Firm Option	Avail. to any non- res. buyer subject to curtailment to protect serv. to higher priority cust.	Mth. bill \$0.00/Mth + Firm Demand chrg. of \$25.78/GJ/day.	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 2638 GJ \$4.108 /GJ Next 2638 GJ \$3.703 All over 5275 GJ \$3.380 	Unauthorized use of gas during period of curtailment invokes a penalty of \$25.78/GJ in addition to basic chrg.

COMPARISON OF LARGE INTERRUPTIBLE SALES SERVICE For Major Canadian Utilities

@ April 1996

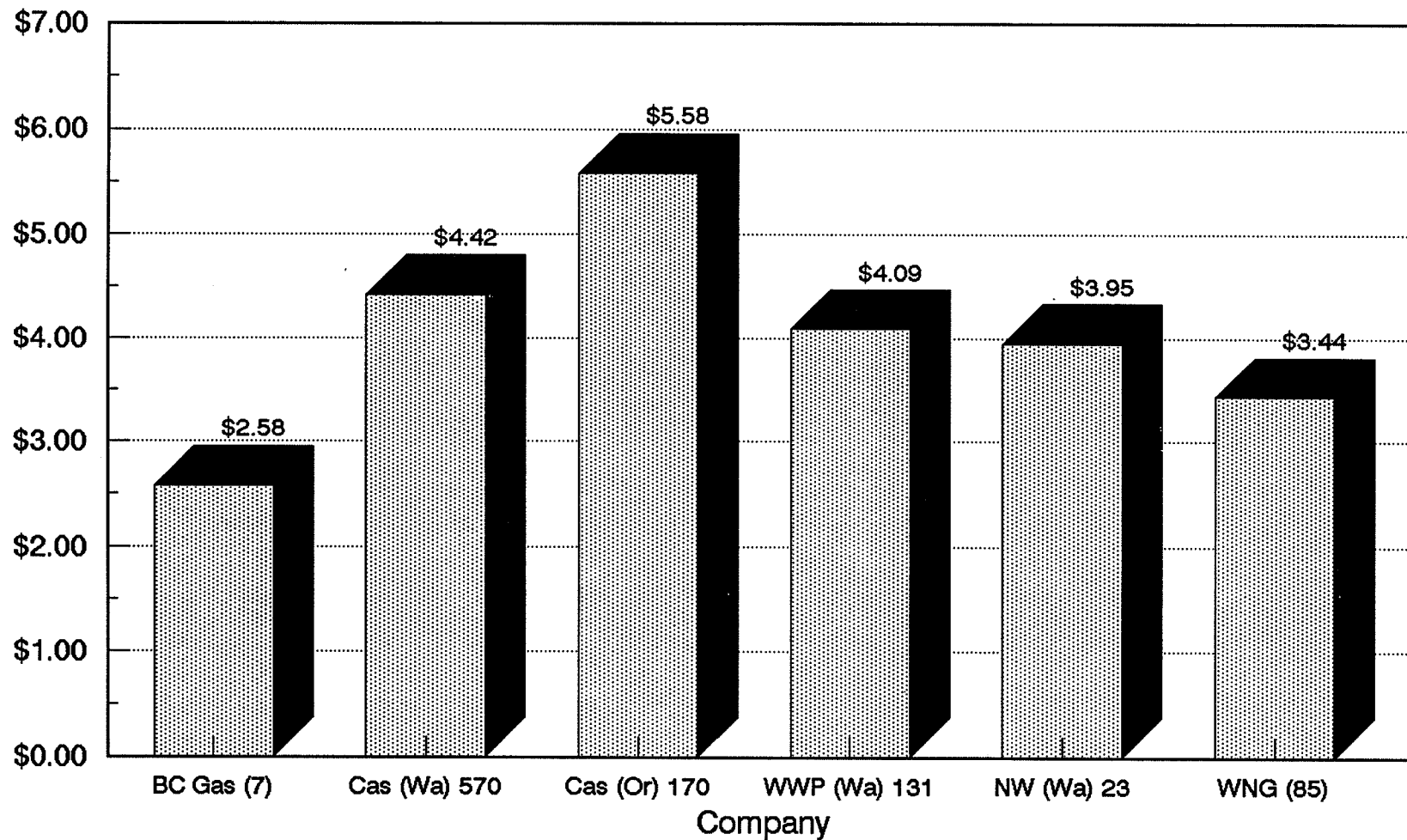
Avg. Rate (\$/GJ)



COMPARISON OF LARGE INTERRUPTIBLE SALES SERVICE For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



LARGE VOLUME TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996 BC Gas Tariff	Rate 22 Lower Mainland Large Vol. Trans	For firm or interruptible transportation service via BC Gas system subject to min. of 12,000 GJ/Mth.	\$1,585.50/month Admin Charge. \$608.00/month Charges for UOR Gas i. first 5% \$2.591/GJ ii. Over 5% \$20.00/GJ iii. Dem. Surcharge \$20.00/GJ	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Del. chrg. of MTQ \$0.976 /GJ \$0.671 /GJ Rider 2 \$0.000 \$0.000 Rider 4 (\$0.025) (\$0.017) Total Comm. Chrg. \$0.951 /GJ \$0.654 /GJ	Price based on discount from firm Rate 25. The number of interruptible days varies. Interrupt service due to gas supply and pipeline capacity constraints. BC Gas has access to customers gas.
	Rate 22 Inland Large Volume Trans.	As above.	\$1,585.50/month Admin Charge \$608.00/month Charges for UOR Gas i. first 5% \$2.404/GJ ii. Over 5% \$20.00/GJ iii. Dem. Surcharge \$20.00/GJ	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Del. chrg. of MTQ \$0.976 /GJ \$0.671 /GJ Rider 2 (\$0.024) (\$0.024) Rider 4 (\$0.025) (\$0.017) Total Comm. Chrg. \$0.927 /GJ \$0.630 /GJ	As above.
	Rate 22 Columbia Large Volume Trans.	As above.	\$1,585.50/month Admin Charge \$608.00/month Charges for UOR Gas i. first 5% \$2.433/GJ ii. Over 5% \$8.00/GJ iii. Demand Surcharge \$8.00/GJ	• Uniform Seasonal Rate Structure: Commodity Chrg. (Nov – Mar) (Apr – Oct) Del. chrg. of MTQ \$0.976 /GJ \$0.671 /GJ Rider 2 (\$0.020) (\$0.020) Rider 4 (\$0.025) (\$0.017) Total Comm. Chrg. \$0.931 /GJ \$0.634 /GJ	As above.
CWNG, AB November 1, 1995 CWNG Summary	Rate 13 Transportation Serv. from Co.'s Main Transmission Sys. to Lrg. Ind. End-Users	Avail. under an annual contract for the trans. of gas for firm service.	\$300.00/month Contract Demand \$4.00/GJ/day	• Uniform Rate Structure Total Comm. Chrg. \$0.120 /GJ UAF Charge *0.8%	

LARGE VOLUME TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
CWNG, AB November 1, 1995 CWNG Summary	Rate 24 Interr. Trans. Serv. from Co.'s Main Transmission Sys. Lrg. Industrials.	Interr. serv. agreement for trans. of gas for cust.s consuming in excess of 1,000 GJ/day.	\$500.00/month	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$0.181 /GJ UAF Charge *0.8% 	Price based on 80% load factor of large firm rate. Interrupt based on facility constraints. No access to customer's gas.
NUL, Alta November 1, 1995 NUL Summary	Rate 13 Trans. Serv. from NUL to Industrial	Avail. under annual contract for firm trans. of gas owned by others.	\$400.00/month Contract Demand \$5.00/GJ/day	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$0.057 /GJ UAF Charge *0.8% 	
	Rate 24 Interruptible Trans Serv. from NUL's main transmission system to Large Ind. End-Users	Avail under Interruptible serv. w/a min. term of 1 calender month provided that cust.'s daily req't are in excess of 1,000 GJ at P. of D.	\$600.00/month	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$0.128 /GJ UAF Charge *0.8% 	Price based on 80% load factor. Interrupt on avg. < 5 days/yr. Cust. must demonstrate that they have alternate source of energy. NUL does not have access to cust.'s gas.
Centra Gas, AB November 6, 1995 CGA Rate Schedules	Rate No. 10 Transportation Ser - Producer	Avail. to large Ind. cust on a firm basis. Service under this rate is subject avail. system capacity.	\$425.00/month + demand chrg/GJ billing demand/Mth 1 yr. term \$5.00/GJ 2 yr. term \$4.75/GJ 3 yr. term \$4.50/GJ	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$0.019 /GJ 	Co. reserves the right to restrict gas received & delivered to the CD. Co. has never restricted serv., but has right to restrict if Co. has ltd. amount of gas
Centra Gas, MN January 31, 1996 CGA Rate Schedule	Large Gen. Serv. Class 1	For gas del. through 1 meter on a firm basis. (Class 1 cust. consumes over 127,000 GJ/yr.)	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. T-Service 127,000 GJ/yr. \$0.826 /GJ 	
	Interr. Sales Ser. Class 1	Cust. gas requirements must equal or exceed 12,733 GJ/yr. (Class 1 cust. consumes over 127,000 GJ/yr.)	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. T-Service 127,000 GJ/yr. \$0.609 /GJ 	Based on COS. Cust. interrupted about 1 or 2 days/yr. based on both pipeline cap. or supply. Looking at redesigning rate. No access to cust. gas supply.

LARGE VOLUME TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Consumers Gas Ontario Oct. 1, 1995	Rate 110 Large Vol. Load Factor Service	> 186 time specified max. daily volume of not less than 108 GJ/yr. or 18,300 GJ	\$500.00/month Demand: \$5.181/GJ C.D.	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov – Mar) (Apr – Oct) First 19,300 GJ \$0.370 /GJ \$0.204 /GJ next 19,300 GJ \$0.344 \$0.178 over 38,600 GJ \$0.318 \$0.151 Gas Load Balancing \$0.787 /GJ \$0.688 /GJ 	Gas Load Balancing chrg. is offset by a credit, Rider "A" at \$0.886/GJ, which pays the cust. back for the charge the cust. pays to contract on TransCanada Pipeline.
	Rate 115 Large Vol. High Load Factor Serv.	Cust. must trans. an annual supply of gas of not less than 292 times specified max. daily vol. of no less than 108 GJ/yr.	\$500.00/month Demand Charge: \$6.218/GJ C.D.	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov – Mar) (Apr – Oct) First 19,300 GJ \$0.249 /GJ \$0.087 /GJ next 19,300 GJ \$0.218 \$0.056 over 38,600 GJ \$0.187 \$0.025 Gas Load Balancing \$0.716 /GJ \$0.617 /GJ 	Gas Load Balancing as above.
	Rate 170 Interruptible Service	> 1,100 GJ daily > 187,250 GJ annually	\$200.00/month Demand Charge \$0.777/GJ/month of C.D.	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov – Mar) (Apr – Oct) First 38,600 GJ \$0.241 /GJ \$0.156 /GJ All over 38,600 GJ \$0.189 \$0.104 Gas Load Balancing \$0.841 /GJ \$0.742 /GJ 	Price driven off COS tempered w/discount to firm. Interr. largely due to gas supply constraints. Budget avg. 10–15 days of interruption.
Centra Gas ON. January 1, 1995	Rate 20 Large Vol. Firm Service	Available to any cust. whose total daily req. for firm service is > 540.4 GJ/day.	\$200.00/month Delivery Charges: Demand \$2.872/month/GJ of C.D.	<ul style="list-style-type: none"> Uniform Rate Structure: Margin \$0.127 /GJ 	
	Rate 100 Lrg. Volume High Load Factor Firm Service	Max. daily req. for firm service is > 3,860 GJ and whose annual req. is > its max. daily req. times 256.	\$380.00/month Del. Chrg: \$2.706/month/GJ of C.D.	<ul style="list-style-type: none"> Uniform Rate Structure: Margin \$0.049 /GJ 	

LARGE VOLUME TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas ON. January 1, 1995	Rate 25 Large Volume Interruptible Serv.	For cust.'s whose daily req. is > 540GJ/day & whose operations can accept interruption and restoration of service.	\$245.00/month	<ul style="list-style-type: none"> Rate Structure between: No less than \$0.233 /GJ & no greater than \$0.505 	Price based on 75% load factor. Interrupt about 5 days/yr. due to storage delivery and pipeline capacity. Centra does have access to cust. gas supply.
Union Gas, Ontario January 1, 1996	Rate M4 Firm Indust. & Commercial Contract Rate	For cust. who enter into a contract for purpose of purch. or transp. of 185-5483 GJ of gas for a min. of 1 year.	N/A	<ul style="list-style-type: none"> Declining Rate Structure: Monthly Demand Charge First 325 GJ \$7.094/GJ of CD Next 760GJ \$6.322/GJ of CD Over 1,085 GJ \$5.550/GJ of CD Margin First 16,000 GJ \$0.249 /GJ vol=15 day cd \$0.249 Remainder \$0.157 	
	Rate M5A Interruptible Ind. & Comm. Contract	For the purchase or transportation of gas for a min. of 1 yr. at a spec. daily contracted dem. between 185 GJ to 5,483 GJ.	For 75 days of CD Union will discount \$1.373/GJ	<ul style="list-style-type: none"> Declining Rate Structure: Margin 180-650 \$0.482 /GJ 650 - 1,125 \$0.448 1,125 - 1,875 \$0.431 1,875 - 2,620 \$0.416 2,620 - 3,745 \$0.409 3,745 - 5,275 \$0.400 	Price based on 65% load factor. Usually interrupt cust. about 5 days/yr. based on storage delivery and to a lesser degree pipeline capacity. Union does have access to cust. gas supply.
	Rate M7 Special Large Volume Industrial and Commercial Contract Rate	Min. term of one year with a combined max. daily req't for firm, inter- ruptible & seasonal serv. of > 5,483 GJ & an annual vol. of > 1,093,454 GJ.	Demand charge of \$5.58/GJ of daily contracted firm demand.	<ul style="list-style-type: none"> Uniform Rate Structure: <u>Firm Service</u> Margin \$0.114 /GJ <u>Interruptible Service</u> Margin No less than \$0.026 /GJ & no greater than \$0.387 	Price based on 75% load factor. Interrupt about 5 days/yr. due to storage delivery and pipeline capacity. Union does have access to cust. gas supply.

LARGE VOLUME TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge			Comments																					
Gaz Metropolitan Quebec October 1, 1995 CGA Rate Schedule	Rate 4 Large Stable Ser.	For cust. using at least 386 GJ/day of firm natural gas.	N/A	<ul style="list-style-type: none">Declining Rate Structure <table><tr><td>Demand Charge</td><td>Southern Zone</td><td>Northern Zone</td></tr><tr><td>375 GJ/day</td><td>\$1.509 /GJ</td><td>\$1.129 /GJ</td></tr><tr><td>1125 GJ/day</td><td>\$1.142</td><td>\$0.919</td></tr><tr><td>3,745 GJ/day</td><td>\$0.097</td><td>\$0.834</td></tr><tr><td>11,235 GJ/day</td><td>\$0.855</td><td>\$0.807</td></tr><tr><td>over 11,235GJ/day</td><td>\$0.816</td><td>\$0.780</td></tr><tr><td>Delivery Charge</td><td>\$0.649 /GJ</td><td>\$0.627 /GJ</td></tr></table>			Demand Charge	Southern Zone	Northern Zone	375 GJ/day	\$1.509 /GJ	\$1.129 /GJ	1125 GJ/day	\$1.142	\$0.919	3,745 GJ/day	\$0.097	\$0.834	11,235 GJ/day	\$0.855	\$0.807	over 11,235GJ/day	\$0.816	\$0.780	Delivery Charge	\$0.649 /GJ	\$0.627 /GJ	AOR (100% to 115% of subscribed vol.) – 3.5 times the avg. daily unit price of min. obligation from Nov 1 – Apr 30 or by 1.75 times from May 1 – Oct 31. UOR (withdrawals beyond 115%) – unit price of AOR + from Nov 1 – Apr 30, a penalty = to 7 times the avg. daily unit price of minimum obligation.
	Demand Charge	Southern Zone	Northern Zone																									
375 GJ/day	\$1.509 /GJ	\$1.129 /GJ																										
1125 GJ/day	\$1.142	\$0.919																										
3,745 GJ/day	\$0.097	\$0.834																										
11,235 GJ/day	\$0.855	\$0.807																										
over 11,235GJ/day	\$0.816	\$0.780																										
Delivery Charge	\$0.649 /GJ	\$0.627 /GJ																										
	Rate 5 Interruptible Sales Service	Sum of the subscribed vol. at a stable vol. rate and one three hundred and sixty fifth of the min. vol. is at least 125 GJ/day.	N/A	<ul style="list-style-type: none">Declining Rate Structure: <table><tr><td>Margin</td><td>Southern Zone</td><td>Northern Zone</td></tr><tr><td>0 – 115 GJ</td><td>\$3.856 /GJ</td><td>\$2.970 /GJ</td></tr><tr><td>115 – 390 GJ</td><td>\$2.931</td><td>\$2.459</td></tr><tr><td>390 – 1,160 GJ</td><td>\$2.416</td><td>\$2.163</td></tr><tr><td>1,160 – 3,860 GJ</td><td>\$2.195</td><td>\$2.027</td></tr><tr><td>3,860 – 11,580 GJ</td><td>\$1.990</td><td>\$1.931</td></tr><tr><td>Over 11,580 GJ</td><td>\$1.892</td><td>\$1.892</td></tr></table>			Margin	Southern Zone	Northern Zone	0 – 115 GJ	\$3.856 /GJ	\$2.970 /GJ	115 – 390 GJ	\$2.931	\$2.459	390 – 1,160 GJ	\$2.416	\$2.163	1,160 – 3,860 GJ	\$2.195	\$2.027	3,860 – 11,580 GJ	\$1.990	\$1.931	Over 11,580 GJ	\$1.892	\$1.892	Price based on discount from firm & COS. Gaz Metro interrupts larger customers who pay less about 4 mths. this year. Interrupt due to both cap. constraints & sometimes, but rarely, due to gas supply. Gaz Metropolitan has access to cust. gas supply.
Margin	Southern Zone	Northern Zone																										
0 – 115 GJ	\$3.856 /GJ	\$2.970 /GJ																										
115 – 390 GJ	\$2.931	\$2.459																										
390 – 1,160 GJ	\$2.416	\$2.163																										
1,160 – 3,860 GJ	\$2.195	\$2.027																										
3,860 – 11,580 GJ	\$1.990	\$1.931																										
Over 11,580 GJ	\$1.892	\$1.892																										

LARGE VOLUME TRANSPORTATION RATES

Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas February 1, 1996 Washington	Rate 663 Dist. Sys. Trans. Service	Serv. in conjunction w/serv. provided under optional gas supply rates 681, 682, 683 & 684.	Dispatching serv. charge \$680.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Margin First 1055 GJ \$1.716 /GJ Next 1055 GJ \$1.560 Next 3165 GJ \$1.473 Next 5275 GJ \$0.949 Next 42,200 GJ \$0.540 Over 52,750 GJ \$0.258 	No interruptible trans. rate available for large industrial customers. Interruptible serv. avail. for bundled rates only.
Cascade Natural Gas January 15, 1996 Oregon	Rate 163 Gen. Dist. Sys. Trans. Serv.	Serv. shall be in conjunction with service provided under optional gas supply rates 181, 182, or 185.	Dispatching Serv. Charge \$680.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Margin First 1055 GJ \$1.671 /GJ Next 1055 GJ \$1.515 Next 3165 GJ \$1.428 Next 5275 GJ \$0.906 Over 10,550 GJ \$0.495 	As above.
Wash. Wtr. Pwr. Washington December 22, 1995	Rate 146 Transportation Serv. for Customer Owned Gas.	Gas requirements must exceed 26,375 GJ/yr. provided that the Co.'s existing distribution sys. has capacity.	\$224.24/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$0.641 /GJ 	Essentially a firm rate. Co. will interrupt service only if customer owned gas does not arrive.
	Rate 148 High Vol. Trans. Service	Cust. requirements must exceed 422,000 GJ/yr. & load factor is > 60% .	\$272.00/Mth	<ul style="list-style-type: none"> Rate Structure between: No less than \$0.270 /GJ & no greater than \$0.648 	Rarely interrupt on this rate. If interrupt, based on distribution capacity. Cust. must have alternate source of energy. Floor rate based on full margin price, ceiling rate based on COS. Only 3 accts. on this rate.
Northwest Natural Gas Company Washington January 1, 1995	Rate 21 Firm Service High Load Factor Transportation (Optional)	Avail. to lrg. ind. cust.'s using > 1,055 GJ/day on a firm basis.	\$336.25/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 52.75 GJ \$240.421 Next 158.25 GJ \$3.657 /GJ Next 10,339 GJ \$3.317 All additional GJ \$3.210 	Most cust.'s on this rate have moved to Rate 90. (See below)

LARGE VOLUME TRANSPORTATION RATES

Rate Summary for American Natural Gas Utilities

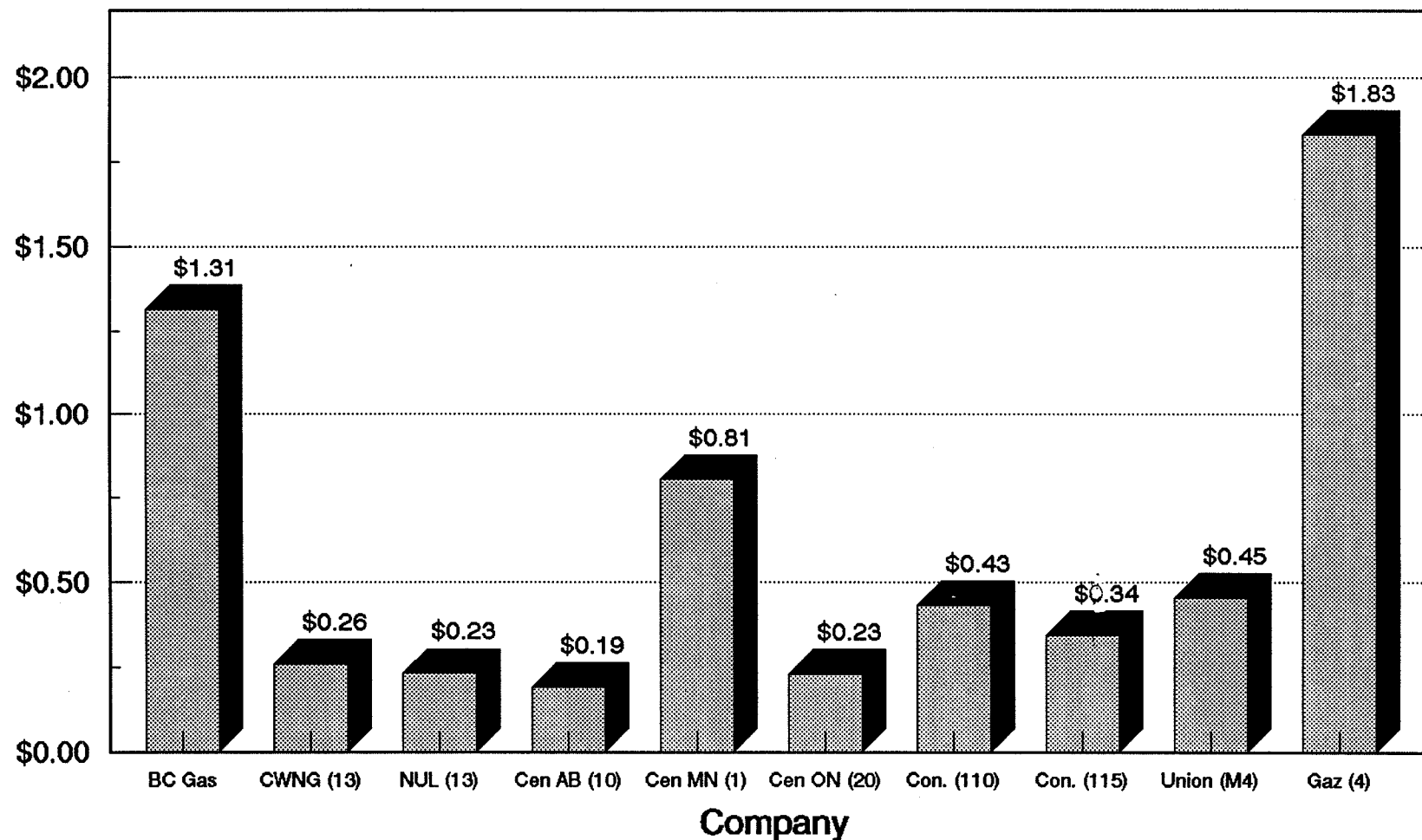
Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Northwest Natural Gas Company Washington April 19, 1995	Rate 23 Interruptible Trans. Service (Optional)	Avail. for customers who transport > 1,055 GJ/day on an interruptible basis.	\$1727.30/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 738.5 GJ \$1,727.295 Next 738.5 GJ \$2.109 /GJ Next 9073 GJ \$2.001 Next 158,250 GJ \$1.930 All additional GJ \$1.841 	Price based on both COS & discount from firm. Co. does not buy gas for or hold interstate capacity, so Co. can interrupt based on cold weather. Co. may interrupt serv. 2 to 3 times per year. Most cust.'s on this rate have moved to Rate 91.
	Rate 90 Firm Capacity Trans. Service Cust.-Owned Gas Supply	Avail. for customers who transport > 1,055 GJ/day on a firm basis.	\$340.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 738.5 GJ \$2,849.622 Next 738.5 GJ \$1.819 /GJ Next 9073 GJ \$1.580 Next 158,250 GJ \$1.341 All additional GJ \$0.927 	This rate was forced on Co. by large industrials wanting a strictly trans. rate. Co. performed COS study as did Lrg. Ind. Ass'n Compromised between results of the two studies.
	Rate 91 Basic Interruptible Transporation Service	Avail. for customers who transport > 1,055 GJ/day on an interruptible basis.	\$340.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 738.5 GJ \$2,441.622 Next 738.5 GJ \$1.432 /GJ Next 9073 GJ \$1.193 Next 158,250 GJ \$0.954 All additional GJ \$0.540 	This rate was forced on Co. by large industrials wanting a strictly trans. rate. Co. performed COS study as did Lrg. Ind. Ass'n Compromised between results of the two studies.
Wash. Natural Gas May 15, 1995	Rate 57 Distribution Sys. Transportation (w/Firm Option)	Avail. to any customer for transportation services on an interr. basis unless otherwise contracted for.	\$884.00/Mth Firm Demand Chrg. \$12.89/GJ/day	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 2,638 GJ \$1.391 /GJ Next 2,638 GJ \$0.980 Next 5,275 GJ \$0.632 Next 10,550 GJ \$0.413 Next 31,350 GJ \$0.310 All over 52,750 GJ \$0.245 	Price based on COS. Co. may interrupt service based on limitation to distribution system. Rate too new to determine # of interruptible days. Co. estimates to interrupt serv. about 10-20 days during normal winter. Co. does not have acces to cust. gas yet.

COMPARISON OF LRG. FIRM TRANSPORTATION RATES

For Major Canadian Utilities

@ April 1996

Avg. Rate (\$/GJ)

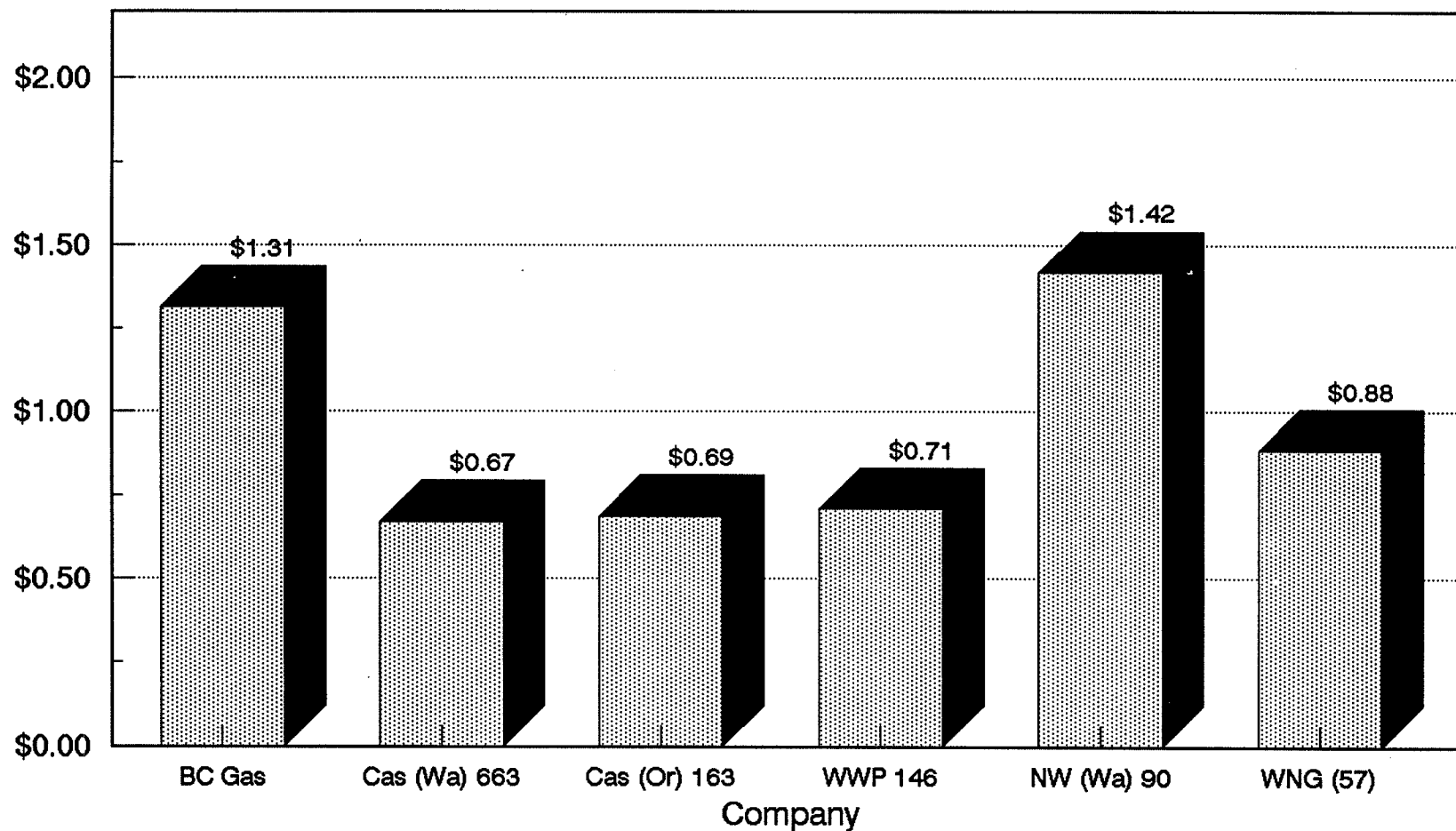


COMPARISON OF LRG. FIRM TRANS. RATES

For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)

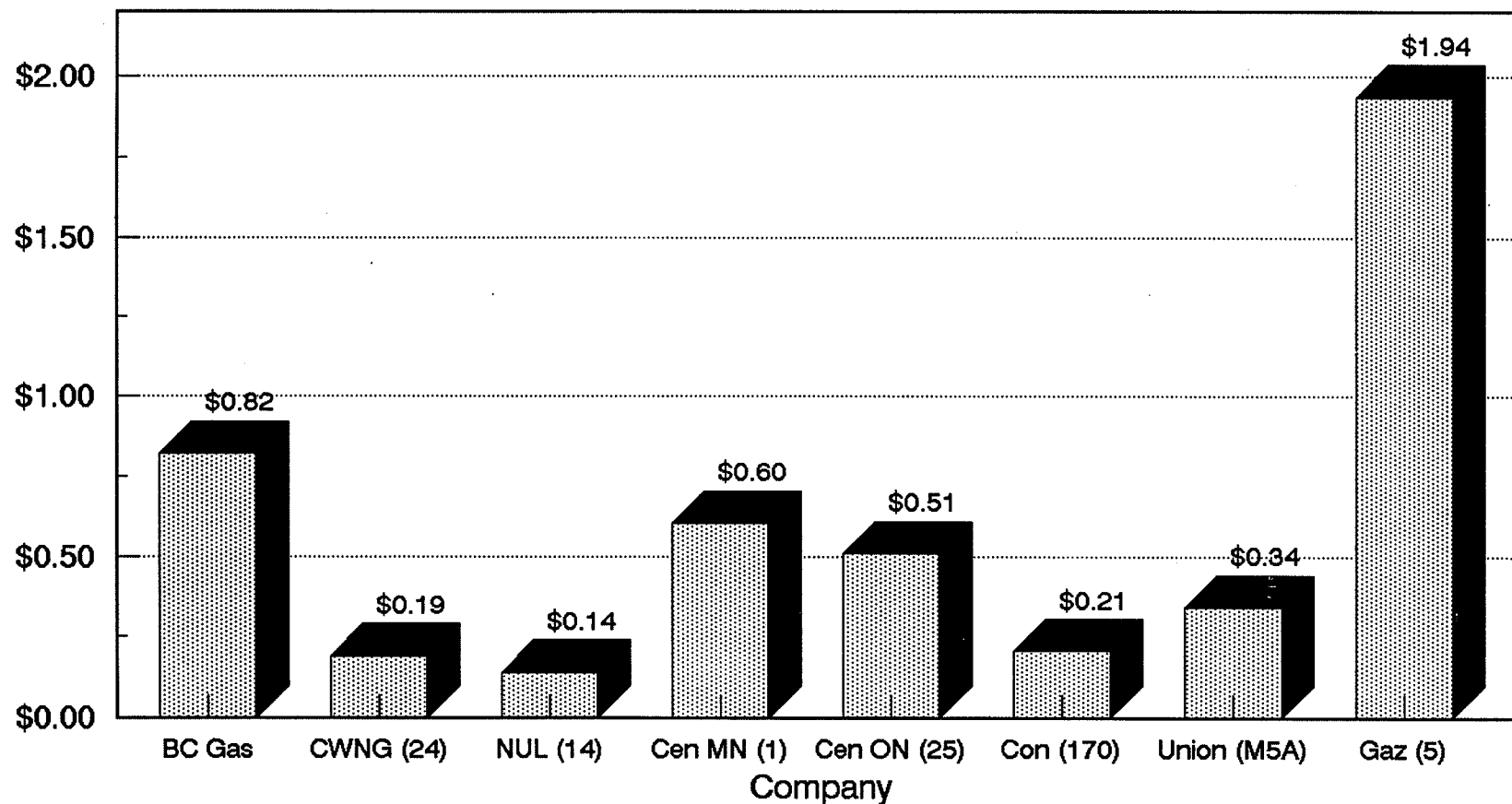


COMPARISON OF LRG. INTERRUPTIBLE TRANS. RATES

For Major Canadian Utilities

@ April 1996

Avg. Rate (\$/GJ)



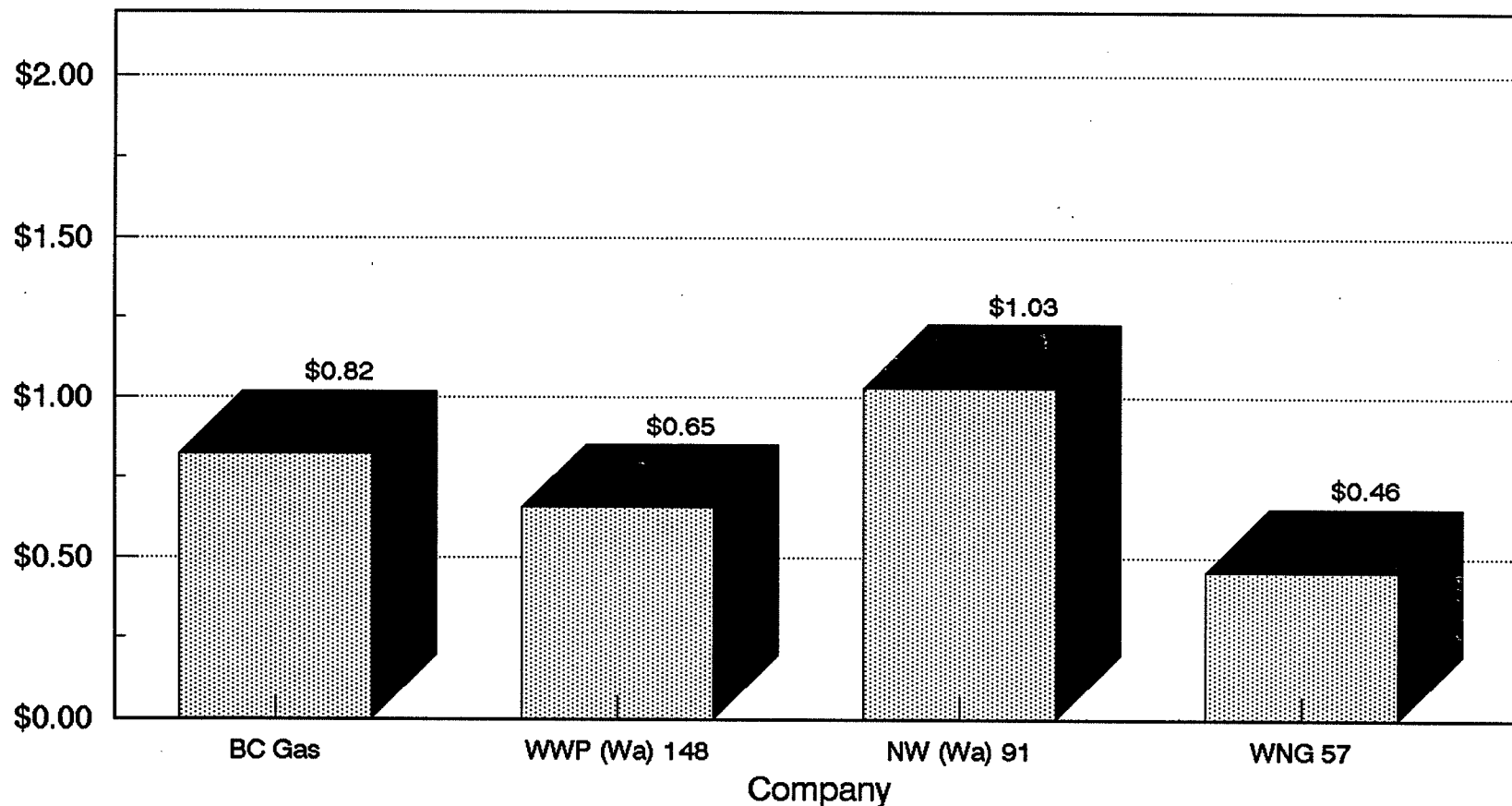
* Cen ON Rate 25 shows the ceiling price only,
the floor price is \$0.237/GJ incl. basic chrg.

COMPARISON OF LRG. INTERRUPTIBLE TRANS. RATES

For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



* WWP Rate 148 shows the ceiling price only, the floor price is \$0.275/GJ incl. basic charge.

SMALL FIRM TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge		Comments
BC Gas Utility Ltd. January 1, 1996	Rate 25 Lower Mainland General Firm Transportation	Provision of firm gas transportation service through 1 meter station to 1 shipper.	\$366.00/month + Admin. Charge \$213.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Comm. Chrg. (Nov - Mar) (Apr - Oct) Del. chrg. of MTQ \$1.645 /GJ \$0.853 /GJ Rider 2 \$0.000 \$0.000 Rider 4 (\$0.042) (\$0.022) Total Charge \$1.603 /GJ \$0.831 /GJ 		Rider 2: DIT Refund Rider 4: Deferred Non- Core Margin Increase Authorized OR Gas. \$5.126/GJ \$2.865/GJ Charges for UOR Gas i. First 5% \$5.126/GJ ii. over 5% \$20.00/GJ
	Rate 25 Inland General Firm Trans.	As above.	\$366.00/month + Admin. Charge \$213.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Comm. Chrg. (Nov - Mar) (Apr - Oct) Del. chrg. of MTQ \$1.645 /GJ \$0.853 /GJ Rider 2 (\$0.078) (\$0.078) Rider 4 (\$0.042) (\$0.022) Total Charge \$1.525 /GJ \$0.753 /GJ 		Rider 2: DIT Refund Rider 4: As above. Authorized OR Gas. \$4.939/GJ \$2.733/GJ Charges for UOR Gas i. First 5% \$4.939/GJ ii. over 5% \$20.00/GJ
	Rate 25 Columbia General Firm Trans.	As above.	\$366.00/month + Admin. Charge \$213.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Comm. Chrg. (Nov - Mar) (Apr - Oct) Del. chrg. of MTQ \$1.645 /GJ \$0.853 /GJ Rider 2 (\$0.059) (\$0.059) Rider 4 (\$0.042) (\$0.022) Total Charge \$1.544 /GJ \$0.772 /GJ 		Rider 2: DIT Refund Rider 4: As above. Authorized OR Gas. \$4.968/GJ \$2.749/GJ Charges for UOR Gas i. First 5% \$4.968/GJ ii. over 5% \$8.00/GJ

SMALL FIRM TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
CWNG, AB November 1, 1995 CWNG Summary	Rate 12 Transportation Serv. for gas del. from Co's system to Ind. End-Users	Avail. for the transport of gas owned by others through CWNG's pipeline & an exclusive contract exists.	\$300.00/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$0.480 /GJ Rider "D" x 0.8% 	Rider "D": Recovery of UAF Gas. Must supply 100.8% of gas at P. of D. or pay (0.8% Vol. * Gas Cost Recovery)
	Rate 13 Trans. Serv. for gas del. from Co.'s system to Ind. End -Users.	Avail. for the transport of gas owned by others through CWNG's pipeline & an exclusive contract exists.	\$300.00/month Demand Charge \$4.00/mon/GJ of 24 hr. CD.	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$0.120 /GJ Rider "D" x 0.8% 	Rider "D": As Above.
NUL, Alta November 1, 1995 NUL Summary	Rate 12 Transportation Serv. for gas del. from Co's system to Ind. End-Users	Avail. for the transport of gas owned by others through CWNG's pipeline & an exclusive contract exists.	\$300.00/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$0.600 /GJ Rider "D" x 0.8% 	Rider "D": Recovery of UAF Gas. Must supply 100.8% of gas at P. of D. or pay (0.8% Vol. * Gas Cost Recovery)
	Rate 13 Trans. Serv. from NUL to Industrial	Avail. under annual contract for firm trans. of gas owned by others.	\$400.00/month Contract Demand \$5.00/GJ/day	<ul style="list-style-type: none"> Uniform Rate Structure Total Comm. Chrg. \$0.057 /GJ UAF Charge *0.8% 	As above
Centra Gas, MN January 31, 1996 CGA Rate Schedule	Large Gen. Ser. Class 4, 3 and 2	For gas delivered through one meter other than domestic sized meters on a firm basis.	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. T-Service 25,000 GJ/yr. \$0.826 /GJ 64,000 GJ/yr. \$0.775 127,000 GJ/yr. \$0.754 	Class 4 cust. uses up to 25,000 GJ/yr. Class 3 cust. uses up to 64,000 GJ/yr. Class 2 cust. uses up to 127,000 GJ/yr.
Centra Gas, Ontario January 1, 1995 CGA Rate Schedule	Rate 210 Large Volume General Service Fort Frances Zone	>2,000 GJ/yr and Combined firm and interruptible requirement less than 1,000 GJ/day	\$14.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Margin (Nov - Mar) (Apr - Oct) First 38 GJ \$2.469 /GJ \$2.469 /GJ next 350 GJ \$1.130 \$1.130 next 770 GJ \$0.388 \$0.388 next 2,700 GJ \$0.183 \$0.183 over 3,800 GJ \$0.073 \$0.073 	

SMALL FIRM TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Centra Gas, Ontario January 1, 1995 CGA Rate Schedule	Rate 110 Large Volume General Service Western Zone	>2,000 GJ/yr and Combined firm and interruptible requirement less than 1,000 GJ/day	\$25.00/month	• Declining Seasonal Rate Structure: Comm. Chrg. (Nov – Mar) (Apr – Oct) First 38 GJ \$2.092 /GJ \$2.092 /GJ next 350 GJ \$1.561 \$1.561 next 770 GJ \$1.266 \$1.266 next 2,700 GJ \$1.074 \$1.074 over 3,800 GJ \$0.312 \$0.312	
	Rate 310 Large Volume General Service Northern Zone	>2,000 GJ/yr and Combined firm and interruptible requirement less than 1,000 GJ/day	\$25.00/month	• Declining Seasonal Rate Structure: Comm. Chrg. (Nov – Mar) (Apr – Oct) First 38 GJ \$2.092 /GJ \$2.092 /GJ next 350 GJ \$1.561 \$1.561 next 770 GJ \$1.266 \$1.266 next 2,700 GJ \$1.074 \$1.074 over 3,800 GJ \$0.312 \$0.312	
	Rate 610 Large Volume General Service Eastern Zone	>2,000 GJ/yr and Combined firm and interruptible requirement less than 1,000 GJ/day	\$25.00/month	• Declining Seasonal Rate Structure: Comm. Chrg. (Nov – Mar) (Apr – Oct) First 38 GJ \$2.092 /GJ \$2.092 /GJ next 350 GJ \$1.561 \$1.561 next 770 GJ \$1.266 \$1.266 next 2,700 GJ \$1.074 \$1.074 over 3,800 GJ \$0.312 \$0.312	
Consumers Gas ON. October 1, 1995	Rate 300 Firm Trans.	For transportation to a single terminal of a spec. max. daily vol. of gas.	\$2,000.00/month	• Declining Seasonal Rate Structure: Total Comm. Chrg. (Dec – Mar) (Apr – Nov) First 525 GJ \$0.210 /GJ \$0.145 /GJ next 1,050 GJ \$0.158 \$0.093 All over 1,575 GJ \$0.067 \$0.041 Demand Charge First 3,745 GJ \$1.554 /GJ next 3,745 GJ \$1.036 All over 7,490 GJ \$0.518	

SMALL FIRM TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Union Gas, Ontario January 1, 1996 EBRO 476/03/04	Rate M4 Firm Indust. & Commercial Contract Rate	For cust. who enter into a contract for purpose of purch. or transp. of 185-5483 GJ of gas for a min. of 1 year.		<ul style="list-style-type: none"> Declining Rate Structure: Commodity Charge First 16,000 GJ \$0.249 /GJ vol=15 day cd \$0.249 Remainder \$0.157 Monthly Demand Charge Fst 325 GJ \$7.094 /GJ of CD Next 760GJ \$6.322 Over 1,085 GJ \$5.550 	
Gaz Metropolitan October 1, 1995 CGA Rate Schedule	Rate 3 Moderate Stable Volume	Avail. to cust. using between 12.85 GJ to 386 GJ/day of natural gas		Declining Rate Structure Demand Charge Southern Zone Northern Zone 12 GJ/day \$2.874 /GJ \$2.206 /GJ 375 GJ/day \$2.217 \$1.707 112 GJ/day \$1.856 \$1.314 573 GJ/day \$1.501 \$1.069 Margin \$0.649 /GJ \$0.627 /GJ	

SMALL FIRM TRANSPORTATION RATES

Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas Washington January 7, 1995	Rate 663 Dist. Sys. Trans. Service	Serv. in conjunction w/serv. provided under optional gas supply rates 681, 682, 683 & 684.	Dispatching serv. charge \$680.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 1055 GJ \$1.716 /GJ Next 1055 GJ \$1.560 Next 3165 GJ \$1.473 Next 5275 GJ \$0.949 Next 42,200 GJ \$0.540 Over 52,750 GJ \$0.258 	
Cascade Natural Gas Oregon January 7, 1995	Rate 163 Gen. Dist. Sys. Trans. Serv.	Serv. shall be in conjunction with service provided under optional gas supply rates 181, 182, or 185.	Dispatching Serv. Charge \$680.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 1055 GJ \$1.767 /GJ Next 1055 GJ \$1.515 Next 3165 GJ \$1.428 Next 5275 GJ \$0.906 Over 10,550 GJ \$0.495 	
Wash. Wtr. Pwr. Washington	Rate 146 Transportation for Cust. owned Gas (Firm)	Avail. to comm. and ind. customers whose req. exceed 26,375 GJ/year. To transportation serv. for customer-owned supply of natural gas.	\$224.24/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$1.010 /GJ 	
Wash. Wtr. Pwr. Oregon July 21, 1995	Rate 455 Firm Trans. of Cust.-Owned Gas for Lrg. Gen. & Ind. serv.	Appl. to firm trans. of cust-owned gas where at least 75% of gas req. are for uses other than space heating. Cust. must transport over min. of 3,060 GJ/yr.	\$340.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 1055 GJ \$2.755 /GJ Next 2110 GJ \$1.871 Next 2110 GJ \$1.633 Next 21,100 GJ \$1.398 All additional GJ \$0.971 	
Northwest Natural Gas Company Washington December 1, 1994	Rate 4 Large Firm Trans. Service		\$340.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 422 GJ \$4.122 /GJ Next 633 GJ \$3.589 All additional \$3.460 	

SMALL FIRM TRANSPORTATION RATES

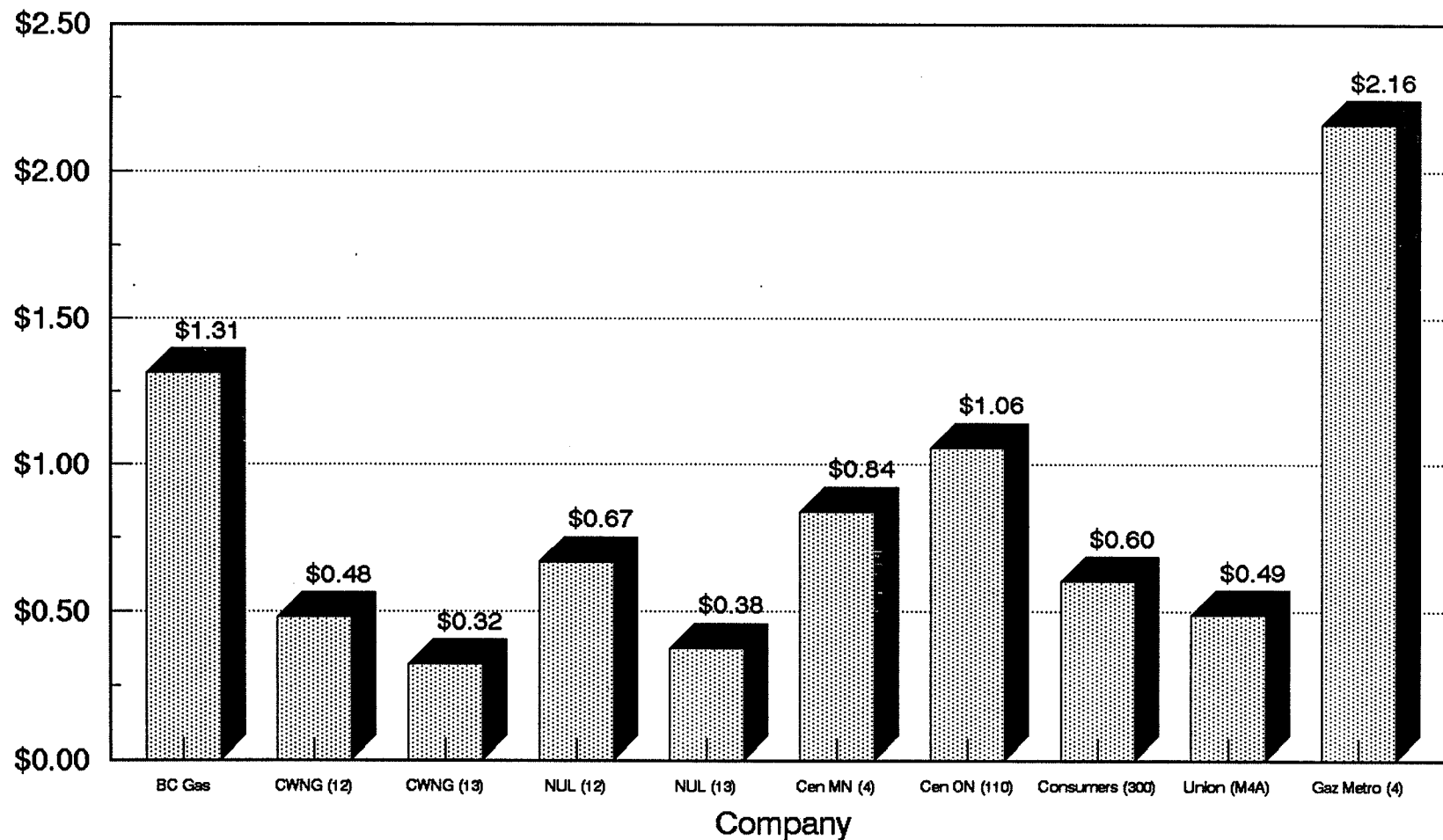
Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Northwest Natural Gas Company Washington December 1, 1994	Rate 5 High Load Factor Large Firm Trans.		\$340.00/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$3.138 /GJ 	
Northwest Natural Gas Company Oregon January 1, 1995	Rate 5 High Load Factor Lrg. Firm Trans. Serv.		Monthly Rate \$326.40/Mth Telemetry Charge \$172.72/Mth Customer Charge \$340.00/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$2.965 /GJ 	

COMPARISON OF SMALL FIRM TRANSPORTATION RATES For Major Canadian Utilities

@ April 1996

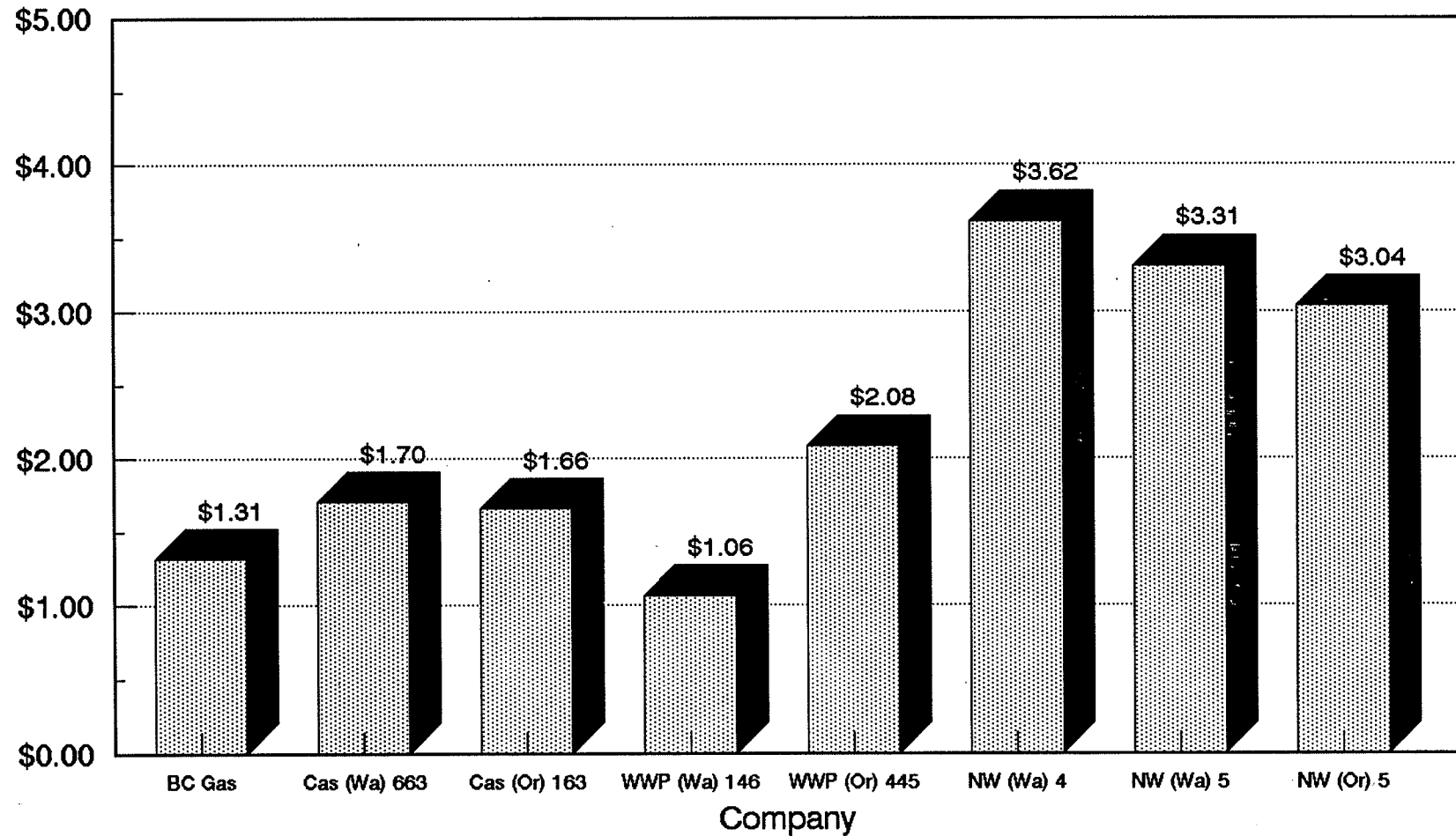
Avg. Rate (\$/GJ)



COMPARISON OF SMALL FIRM TRANSPORTATION RATES For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)



SMALL INTERRUPTIBLE TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
BC Gas Utility Ltd. January 1, 1996 BC Gas Tariff	Rate 27 Lower Mainland Gen. Interr. Serv.	Applies to the provision of interruptible trans. service through 1 meter station to one shipper.	\$851.00/month + Admin. Charge \$213.00/month	• Uniform Seasonal Rate Structure: Comm. Chrg. (Nov - Mar) (Apr - Oct) Del. chrg. of MTQ \$1.159 /GJ \$0.853 /GJ Rider 2 \$0.000 \$0.000 Rider 4 (\$0.030) (\$0.022) Total Charge \$1.129 /GJ \$0.831 /GJ	Rider 2: DIT Refund Rider 4: Deferred Non- Core Margin Increase Authorized OR Gas. \$5.126/GJ \$2.865/GJ Charges for UOR Gas i. First 5% \$5.126/GJ ii. over 5% \$20.00/GJ
	Rate 27 Inland General Interruptible Trans.	As above.	\$851.00/month + Admin. Charge \$213.00/month	• Uniform Seasonal Rate Structure: Comm. Chrg. (Nov - Mar) (Apr - Oct) Del. chrg. of MTQ \$1.159 /GJ \$0.853 /GJ Rider 2 (\$0.072) (\$0.072) Rider 4 (\$0.030) (\$0.022) Total Charge \$1.057 /GJ \$0.759 /GJ	Rider 2: DIT Refund Rider 4: As above. Authorized OR Gas. \$4.939/GJ \$2.733/GJ Charges for UOR Gas i. First 5% \$4.939/GJ ii. over 5% \$20.00/GJ
	Columbia Gen. Interruptible Trans Rate No. 27	As above.	\$851.00/month + Admin. Charge \$213.00/month	• Uniform Seasonal Rate Structure: Comm. Chrg. (Nov - Mar) (Apr - Oct) Del. chrg. of MTQ \$1.159 /GJ \$0.853 /GJ Rider 2 (\$0.072) (\$0.072) Rider 4 (\$0.030) (\$0.022) Total Charge \$1.057 /GJ \$0.759 /GJ	Rider 2: DIT Refund Rider 4: As above. Authorized OR Gas. \$4.968/GJ \$2.749/GJ Charges for UOR Gas i. First 5% \$4.968/GJ ii. over 5% \$8.00/GJ
CWNG, AB November 1, 1995 CWNG Summary	Rate 14 Interruptible Trans Service	Minimum term of one month for trans. owned by others. Cust. daily gas req.t at Point of Del. must be > 50GJ.	\$300.00/month	• Uniform Rate Structure: Total Comm. Chrg. \$0.284 /GJ Rider "D" x 0.8%	Rider "D": Recovery of UAF Gas. Must supply 100.8% of gas at P. of D. or pay (0.8% Vol. * Gas Cost Recovery)

SMALL INTERRUPTIBLE TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
NUL, Alta June 1, 1995 NUL Summary	Rate 14 Interruptible Trans. Serv. from NUL's sys. to Ind. End- User.	Avail. under interruptible serv. agreement with a minimum term of one calendar month for the trans. of gas owned by others provided that cust. daily req't exceeds 50GJ.	\$400.00/month	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$0.265 /GJ Rider "D" x 0.8% 	Rider "D": As above
Centra Gas, MN January 1, 1996	Interr. Service Class 4, 3 and 2	Cust. gas requirements must equal or exceed 12,733 GJ/yr.	\$50.00/month	<ul style="list-style-type: none"> Declining Rate Structure: Commodity Chrg. T-Service 25,000 GJ/yr. \$0.609 /GJ 64,000 GJ/yr. \$0.549 127,000 GJ/yr. \$0.531 	Peaking Supply \$0.585/GJ Class 4 cust. uses up to 25,000 GJ/yr. Class 3 cust. uses up to 64,000 GJ/yr. Class 2 cust. uses up to 127,000 GJ/yr.
Centra Gas, Ontario January 1, 1995	Rate 216 Small Vol. Interr. Fort Frances	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.788 /GJ \$1.788 /GJ 	
	Rate 116 Small Vol. Interr. Western Zone	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.788 /GJ \$1.788 /GJ 	
	Rate 316 Small Vol. Interr. Northern Zone	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.788 /GJ \$1.788 /GJ 	
	Rate 616 Small Vol. Interr. Eastern Zone	Cust. Max daily Interr. gas requirements must exceed 112 GJ but less than 524 GJ	\$30.00/month	<ul style="list-style-type: none"> Uniform Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) Margin \$1.788 /GJ \$1.788 /GJ 	

SMALL INTERRUPTIBLE TRANSPORTATION RATES

Rate Summary for Canadian Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Consumers Gas, Ontario Oct. 1, 1995	Rate 145 Seasonal Interr. Service	For cust. using Co.'s gas dist'n network for transportation of spec. daily max. vol. of gas to one location which can accommodate interruption of gas under discretion of Co. Appl't must agree to transport min. vol. of 12,733 GJ/yr.	\$100.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Commodity Chrg. (Nov - Mar) (Apr - Oct) First 525 GJ \$1.182 /GJ \$0.640 /GJ next 1,050 GJ \$0.830 \$0.291 All over 1,575 GJ \$0.685 \$0.143 	
	Rate 305 Interr. Trans Serv.		\$2,000.00/month	<ul style="list-style-type: none"> Declining Seasonal Rate Structure: Total Comm. Chrg. (Nov - Mar) (Apr - Oct) First 525 GJ \$0.210 /GJ \$0.145 /GJ next 1,050 GJ \$0.158 \$0.093 All over 1,575 GJ \$0.067 \$0.041 	
Union Gas, Ontario January 1, 1996 EBRO 476/03/04	Rate M5A Interruptible Ind. & Comm. Contract	For the purchase or transportation of gas for a min. of 1 yr. at a spec. daily contracted dem. between 185 GJ to 5,483 GJ.	n/a	<ul style="list-style-type: none"> Declining Rate Structure: Margin 180-650 \$0.482 /GJ 650 - 1,125 \$0.448 1,125 - 1,875 \$0.431 1,875 - 2,620 \$0.416 2,620 - 3,745 \$0.409 3,745 - 5,275 \$0.400 	For 75 days use of cd \$0.014/GJ For additional days use of c.d. up to max. 275 days \$0.001/GJ
Gaz Metropolitan Quebec October 1, 1995 CGA Rate Schedule	Rate 5 Interruptible Sales Service	Sum of the subscribed vol. at a stable vol. rate and one three hundred and sixty fifth of the min. vol. is at least 125 GJ/day.	N/A	<ul style="list-style-type: none"> Declining Rate Structure: Margin Southern Zone Northern Zone 0 - 115 GJ \$3.856 /GJ \$2.970 /GJ 115 - 390 GJ \$2.931 \$2.459 390 - 1,160 GJ \$2.416 \$2.163 1,160 - 3,860 GJ \$2.195 \$2.027 3,860 - 11,580 GJ \$1.990 \$1.931 Over 11,580 GJ \$1.892 \$1.892 	Price based on discount from firm & COS. Gaz Metro interrupts larger customers who pay less about 4 mths. this year. Interrupt due to both cap. constraints & sometimes, but rarely, due to gas supply. Gaz Metropolitan has access to cust. gas supply.

SMALL INTERRUPTIBLE TRANSPORTATION RATES

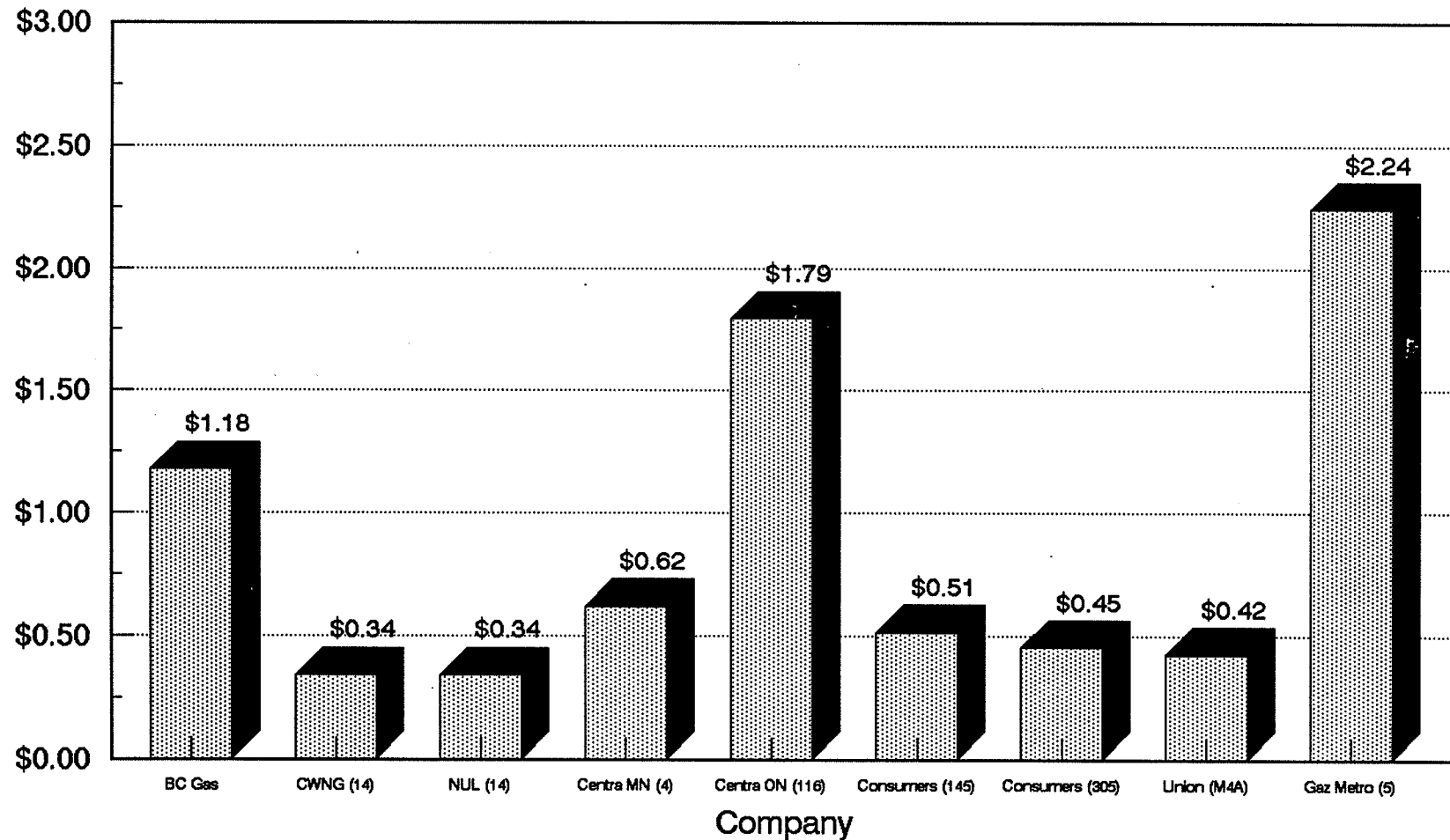
Rate Summary for American Natural Gas Utilities

Utility Effective Date/Source	Rate Number & Name	Applicability	Basic Minimum or Demand Charge	Rate Structure & Commodity Charge	Comments
Cascade Natural Gas Co. Oregon	Rate 164 Market Based Dist. Sys. Interr. Trans. Serv.	Serv. shall be in conj. w/serv. provided under Opt. Gas Supply rates 181, 182, or 183.	Dispatching Serv. Charge \$680.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 1055 GJ \$1.671 /GJ Next 1055 GJ \$1.515 Next 3165 GJ \$1.428 Next 5275 GJ \$0.906 Next 42,200 GJ \$0.495 Over 10,550 GJ \$0.258 	
Wash. Wtr. Pwr. Washington	Rate 146 Interruptible Trans. Service		\$1824.10/year	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$0.830 /GJ 	
Wash. Wtr. Pwr. Oregon July 21, 1995	Rate 456 Interruptible Trans. of Cust-Owned Gas for Lrg. Comm. & Ind. Serv.	Applicable for trans. of cust-owned gas for lrg. comm. & ind. use. Cust. must transport min. of 23,738 GJ/yr.	\$340.00/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 1055 GJ \$2.264 /GJ Next 2110 GJ \$1.380 Next 2110 GJ \$1.143 Next 21,100 GJ \$0.904 All additional GJ \$0.480 	
Northwest Natural Gas Company Washington December 1, 1994	Rate 23 Interruptible Trans. Service (Optional)		\$1727.30/Mth	<ul style="list-style-type: none"> Declining Rate Structure: Total Comm. Chrg. First 738.5 GJ \$1,727.295 Next 738.5 GJ \$2.109 /GJ Next 9073 GJ \$2.001 Next 158,250 GJ \$1.930 All additional GJ \$1.841 	
Northwest Natural Gas Company Washington January 1, 1995	Rate 5 High Load Factor Lrg. Firm Trans. Serv.	n/a	Monthly Rate \$326.40/Mth Telemetry Charge \$172.72/Mth Customer Charge \$340.00/Mth	<ul style="list-style-type: none"> Uniform Rate Structure: Total Comm. Chrg. \$2.965 /GJ 	

COMPARISON OF SMALL INTERRUPTIBLE TRANS. RATES For Major Canadian Utilities

@ April 1996

Avg. Rate (\$/GJ)



COMPARISON OF SMALL INTERRUPTIBLE TRANS. RATES For Northwestern U.S. Utilities

@ April 1996

Avg. Rate (\$/GJ)

