

REASONS FOR DECISION

in the matter of a rate application under The Ontario Energy Board Act by

THE CONSUMERS' GAS COMPANY

E.B.R.O. 369-II

April 2, 1980

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IN THE MATTER OF The Ontario Energy Board Act, R.S.O. 1970, Chapter 312;

AND IN THE MATTER OF an application by The Consumers' Gas Company for orders approving rates to be charged for the sale of gas.

BEFORE:

J. C. Butler Presiding Member

H. R. Chatterson Member

I. B. MacOdrum Member

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REASONS FOR DECISION

A. INTRODUCTION

1. The Application

The Consumers' Gas Company ("Consumers'" or the "Company" or the "Applicant") by application dated August 4, 1978, (the "main application") applied to the Ontario Energy Board (the "Board") for an order or orders approving or fixing just and reasonable rates and other charges for its sale of gas. The main application consisted of one proceeding of two phases. In the first phase ("Phase I"), the Board determined rate base, return earned on such rate base and the revenues required to realize such return. In a second phase ("Phase II"), the Applicant has requested the Board to approve or fix rates designed to recover the revenue approved by the Board in Phase I. The Board issued its Reasons for Decision with respect to Phase I on August 31, 1979. The Board determined the rate base to be \$810,678,800 as at September 30, 1979. A net utility income of \$76,057,800 was determined for the fiscal year 1979, the test year in Phase I. The rate of return found reasonable by the Board was 10.34 percent. This rate of return when applied to the above rate base produced a revenue deficiency of \$15,565,000.

Interim Applications

Four interim applications were brought subsequent to the filing of the main application and they have been disposed of by the Board. The first, requesting approval of increased rates to recover an alleged revenue deficiency, was heard prior to hearing of the evidence in support of the Applicant's Phase I evidence; the Board rejected the requested increase. The second interim application sought permission to pass on a gas cost increase that was effective August 1, 1979. permitted the Applicant to increase its rates to recover this gas cost increase and related charges. The third interim application was brought to recover the revenue deficiency found by the Board in its August 31, 1979, Phase I Reasons for Decision. The Board approved interim rate increases effective October 1, 1979, to permit the Applicant to recover this revenue deficiency. The order approving this increase contained a condition that all amounts collected could be subject to retroactive refund or adjustment on the completion of the Phase II proceeding.

On January 21, 1980, Consumers' filed the fourth application for interim relief to recover increased gas costs that commenced on February 1, 1980. The Board approved increased rates arising from this interim that will become effective April 4, 1980.

The Hearing

Phase II was commenced by the filing of an application dated November 15, 1979. Evidence in support of this application was filed with the Board from mid-November through early December. Staff interrogatories and responses were exchanged in December and early January. A procedural pre-hearing conference was held on January 4, 1980.

An intervenor, the Industrial Gas Users Association ("IGUA") brought a motion that the Applicant produce certain additional information. This motion was heard on January 4, 1980, and the Applicant was ordered to produce the requested information. The hearing of evidence commenced on January 15, 1980, and concluded on January 25, 1980. Written argument from the parties was requested in accordance with the following schedule:

Applicant's argument - February 1, 1980,

Board counsel and intervenors argument - February 8, 1980,

Applicant's reply argument - February 15, 1980.

4. Appearances

The following entered appearances in Phase II:

P. Y. Atkinson - for the Applicant

R. W. Macaulay, Q.C. - for the Ontario Energy Board

P.C.P. Thompson	•••	for IGUA and Cyanamid Canada Inc. ("Cyanamid")
S. J. Kawalec	-	for the Urban Development Institute of Ontario, Apartment Group ("UDI")
T. Schrecker	_	for Richard Johnston, MPP
G. M. McGuire	-	<pre>for TransCanada PipeLines Limited ("TransCanada")</pre>

5. Witnesses

The following employees of Consumers' gave evidence during Phase II:

F. D. Re	wbotham -		Manager, Rate Research
D. J. Wa	tt -	-	Manager, Economic Studies
R.E.E. Po	otts -	-	Director, Strategic Planning
D. C. Mo	rton -	- :	Director, Customer and General Accounting
H. R. Gil	bson -	-	Manager, Rate Design
W. B. Tay	ylor -	-	Director, Economics and Statistics
K. A. Wa	lker -	-	Manager, Regulatory Accounting
R. S. Lo	ugheed -	-	Senior Vice President, Gas Supply and Development
J. R. Han	milton -	-	Manager, Gas Supply

The Applicant also called three other witnesses to testify in the area of price elasticity studies. These were:

G. C. Watkins - President, DataMetrics
Limited

Dr. E. R. Berndt - Consulting Associate,
DataMetrics Limited

M. R. Corio - Senior Economic Consultant, National Economic Research Associates, Inc.

Board counsel called the following witness:

R. A. Ransom - Principal Consultant, Ransom and Casazza

No other witnesses were called during Phase II.

A verbatim transcript of the hearing was made, and a copy is available for public scrutiny at the Board's offices. The Board has not, therefore, considered it necessary to summarize the evidence or submissions of the various parties in detail. All of the evidence and the submissions were carefully considered by the Board in deciding the issues.

6. The Applicant's Proposal

The Applicant filed proposed rate schedules that incorporated several changes, most of which were in response to directions from the Board. These directions were set out in the Reasons for Decision, E.B.R.O. 363-II dated October 17, 1978. The Applicant also filed updated cost allocation studies and demonstrated that the proposed new rates would produce the revenues found reasonable in the Board's Phase I decision.

The Applicant's proposed rates were based upon a different allocation of the Phase I revenue deficiency among the customer classes from that previously approved by the Board on an interim basis. The Applicant claimed that the supporting evidence justified the change and asked the Board to approve the proposed rates.

Metric equivalent rate schedules were submitted to show the effect of a "soft" conversion, together with metric designed rate schedules that would be used in a "hard" conversion. The Board was asked to approve the hard conversion rate schedules.

The Applicant also tendered evidence, at the direction of the Board, on late payment penalty and other charges, unabsorbed demand charges and remedial costs, and its plans for monitoring of returns from system expansion.

B. RATE DESIGN ISSUES

1. Cost Studies

The Applicant submitted in this proceeding a fully allocated cost ("FAC") study for the fiscal year 1978 (ended September 30, 1978) and claimed that, except for minor changes, the methods used in its preparation were the same as had been employed in previous submissions to the Board. The FAC study was entered as Exhibit 110.

In response to a request by Board staff the Applicant also submitted as Exhibit 127, a revised version of Exhibit 110, revised only to reflect the reduced volumes taken by Ontario Hydro in the 1979 fiscal year. The Applicant claimed that, since the reduced volume sold to Ontario Hydro in 1979 was the only really significant change from the data used in the 1978 study, then the revised study would be a reasonable substitute for a FAC study based on 1979 data.

The Applicant also filed, as Exhibit 129, a long-run incremental cost ("LRIC") study, based on forecasts for the period 1979-1983. This study was prepared using the same basic methodology that had been used in the study submitted in a previous proceeding before the Board, with the exception that this study is presented in current dollars and the anticipated future costs of capital in current terms have been used.

It was generally agreed by all participants that the 1978 FAC study and the LRIC study were acceptable and consequently neither the methods used nor the results were challenged. The Board accepts that the assumptions made and the methodology employed by the Applicant in the preparation of the 1978 FAC study, Exhibit 110, and the LRIC study, Exhibit 129, are consistent with those used in preparing studies submitted in previous proceedings.

The revised 1978 FAC study (Exhibit 127) was challenged by Board counsel who claimed that since the Applicant mixed data from two fiscal years, making revisions only in respect of Ontario Hydro even though other known changes have occurred, therefore, Exhibit 127 should be rejected. Mr. Macaulay submitted that the FAC study filed as Exhibit 110 should be used to the extent that reliance is placed on FAC studies.

The Board has noted the many comments made by various parties with respect to the accuracy of such studies, the extent to which judgment has been used in the preparation of each study, and the use that should, or should not, be made of these studies. Frequently, during rate proceedings the Board is urged to adopt either an FAC study or an LRIC study as the basis for approving or fixing rates, and strong arguments are made in favour of either approach. The Board, however, believes that both FAC and LRIC have some value in these matters, but that complete reliance should not be placed

on either one. The Board is satisfied that the results of such studies, and more importantly the trends disclosed by a series of studies, are useful in evaluating the reasonableness of the revenue levels generated by each customer class.

The Board is not prepared to reject completely the revised FAC study because of the objections of Board counsel, but his objections may affect the use that can be made of this study. This will be discussed in the following section.

It was suggested by Board counsel and certain other intervenors that the FAC studies would be of more value in assessing the reasonableness of revenue levels and the rate schedules if the customer categories used in the FAC studies coincided with the various rate schedules used by the Applicant. The Board notes that other utilities under its jurisdiction do rely largely on rate schedules to determine the rate classes used for FAC studies and the Board believes that there may be merit in Consumers' investigating such an approach.

Recovery of Revenue Deficiency

The Applicant's position in this proceeding was that the rates previously in effect, and the revenues produced by those rates, had been approved by this Board in E.B.R.O. 363-II as just and reasonable, so that those rates became the starting point or base from which

changes should be made. The Applicant's submission was, therefore, that the revenue deficiency of \$15,565,000, as found by the Board in Phase I of these proceedings, should be allocated among the various customer classes and that new rates should be designed to produce the increased revenue requirement from each customer class. The Applicant proposed new rate schedules which would accomplish this.

As indicated earlier, as a result of the hearing in October 1979, interim rate increases were approved by the Board to recover the \$15,565,000 revenue deficiency. Reasons for Decision E.B.R.O. 369-I-3 dated October 31, 1979, detailed the interim increases approved for each In its Reasons for Decision the Board rate schedule. rejected the method proposed by the Applicant for allocating the revenue deficiency among the various customer classes because it relied on an untested FAC study, and because an adjustment was made which the Board considered would, on an interim basis, unduly change the status quo. This adjustment, made by the Applicant to maintain the relationship between Rate #6 and Rate #100 considered desirable by the Board in E.B.R.O. 363-II, reduced the deficiency responsibility for Rate #6 customers by over \$2 million and increased the deficiency responsibility of residential customers by the same amount.

In this proceeding the Applicant again submitted that the appropriate allocation of the revenue deficiency would be that which it had proposed in the interim proceeding (Exhibit 110.22.1). In support of this proposal a new calculation of the allocation was submitted (Exhibit 127.18.1) that was based on the following:

- customer class rate base responsibilities from the revised 1978 FAC study, Exhibit 127;
- the Rate #6 revenue deficiency responsibility was reduced by \$2,046,000 to maintain the relationship between Rate #6 and Rate #100;
- the revenue deficiency responsibility to the residential classes were increased by the \$2,046,000 removed from Rate #6;
- 1979 sales volumes were used to determine unit increases for each class.

The deficiency allocation proposed by the Company in Exhibit 110 had been based on different data and a different method from that used in Exhibit 127, but in both cases the results were substantially the same. The Applicant, therefore, concluded that its proposal was justified.

A comparison of the Applicant's proposed allocation of revenue deficiency with the allocation used by the Board in E.B.R.O. 369-I-3 indicates that the significant difference is the Board's treatment of the amount of the

revenue deficiency re-allocated from Rate #6 and its use of 1980 sales volumes. If the revised rate base responsibilities from Exhibit 127 were substituted in any of the above calculations it would not result in any significant change. The rate base responsibility factors from Exhibit 127 are therefore not required for the allocation of the revenue deficiency in these proceedings.

The Board in E.B.R.O. 369-I-3 elected to use 1980 volumes to determine unit increases on the basis that the revenue deficiency would in fact be collected over those volumes. The Board is persuaded by the Applicant's arguments that since the test year in these proceedings is 1979, the 1979 volumes should be used for determination of the unit increases for each class.

The major issue remaining is the adjustment required to maintain the relationship between Rates #6 and #100. Should all of the revenue removed from Rate #6 be applied to the residential rates as proposed by the Applicant; or on the basis of rate base as in E.B.R.O. 369-I-3; or should it be distributed on some other basis?

Mr. R. A. Ransom appeared on behalf of Board staff and presented several alternatives for the allocation of the revenue deficiency, all based on the Applicant's LRIC study. The resulting increases for the residential class were all lower than that proposed by the Applicant, in some cases by a considerable amount. Mr. Ransom suggested that the frequency of hearings could be reduced

if the recovery of future revenue deficiencies were based on LRIC studies.

The evidence before the Board suggests that a lower increase to the residential class would adversely affect the Applicant's prospects of achieving its authorized rate of return in the future. Therefore it does not appear that the frequency of rate hearings could be reduced by adopting Mr. Ransom's proposal. The Board is not convinced that any of his alternatives would be appropriate.

In its submissions the Applicant claims to have considered non-cost factors before deciding on its proposal. However, most of the non-cost considerations that have been used to justify deviation from cost-based rates in previous proceedings are not specifically referred to, instead it appears that the Applicant's justification of its proposed non-cost revenue adjustment has been summarized by the testimony of Mr. Gibson which states:

"In the first place, it [the residential class] is the only major customer classification for which gas prices are substantially below the main competitive fuel. It is also the only class that has shown an under-contribution in every year since cost studies were first made. Another reason for making an adjustment at this time is that there has been only one upstream gas cost increase this year. In the last five years the average annual increase to the residential class has been about 3.5¢/Ccf mostly due to upstream increases. Since this year's increase has only amounted to about 1.4¢/Ccf it appears to be a reasonable time to make an adjustment to the residential

undercontribution by passing along 1.6¢/Ccf as opposed to 1.31¢/Ccf deficiency indicated by the cost study."

The Board does not find these reasons to be persuasive. However, the Board has reviewed the evidence adduced at the hearing with particular reference to the levels of return for each customer class, and the extensive discussions as to risk and elasticity for each class. The effect on the return from Rate #6 and residential classes that would result from implementation of the Applicant's proposal were particularly noted. The Board concludes that the change in return would not be unreasonable in view of the other non-cost factors. On the basis of that evidence, the Board concludes that the Applicant's proposed allocation of the revenue deficiency is not unreasonable and the Board accepts that allocation.

3. Elasticity Study

In the Board's Reasons for Decision, E.B.R.O. 302-II dated September 4, 1975, the Applicant was requested to prepare and submit a price elasticity study. In E.B.R.O. 363-II, such a study was submitted. The Board found that the study in the form presented in that case was "of very little value". The Applicant was directed "to present for the next Phase II hearing a more complete analysis of the short-run and intermediate-run price

elasticities of demand" (Reasons for Decision, E.B.R.O. 363-II, p. 24).

Consumers' Manager of Economic Studies,

Mr. D. J. Watt, testified in the current proceeding with
respect to; the Applicant's efforts to meet the Board's
directions; the use the Applicant made of elasticity
studies; the potential uses of such studies and the
Applicant's intent with respect to future studies.

Two studies were commissioned by Consumers' to comply with the Board's directive. First, DataMetrics Limited ("DataMetrics") was selected to prepare estimates of the price elasticity of demand in the apartment, commercial and industrial sectors of the market served by Consumers'. Mr. G. C. Watkins and Dr. E. R. Berndt testified with respect to this study. Secondly, National Economic Research Associates, Inc. ("NERA") prepared a study on price elasticity of demand in the residential sector and Ms. M. R. Corio testified concerning that study.

The DataMetric's report was based on econometric modelling techniques which distinguished between:

". . . demand that is potentially variable because it is not committed to existing equipment and demand that is inflexible because it is tied to past investments."

The former was labelled "flexible" demand and the latter "captive" demand. In each of the three market sectors studied in the report four variants of energy price

variables were specified. Statistically meaningful results were produced for only two of the variants, and for one of these two variants such results were produced in only one market sector.

The variant for which significant results were obtained for all sectors studied specified the price of gas as the only price variable affecting flexible demand.

Representative results indicated the following coefficients of price elasticity:

	Apartment Sector	Commercial Sector	Industrial Sector
Short-run (1 year)	-0.1	-0.2	-0.25
<pre>Intermediate-run (3 year)</pre>	-0.25	-0.4	-0.6
Long-run	-0.7	-1.1	-1.5

A second variant specified both the price of gas and the price of alternative fuels as variables affecting flexible demand. Based on results approaching statistical significance and values achieved in other studies a cross-price elasticity of fuel oil of 0.5 was assigned.

The NERA report contained basically two types of models for determining gas price elasticity in the residential market only. The first set of models was directed at determining elasticity coefficients for the short-run and intermediate-run where the stock of gas consuming appliances was assumed to be fixed. The other set of models to determine the elasticity applicable to

long-run gas demand varied the stock of gas consuming appliances. The short-run elasticities were found to be in the range of -0.12 to -0.21. An intermediate-run elasticity of -0.34 was determined. These values were not out of line with those found by DataMetrics for the apartment sector and determined in other studies for the residential market. Due to data limitations, Ms. Corio did not recommend any reliance be placed by the Board on her long-run elasticity study. The major weakness of the long-run models according to Ms. Corio was "due to the limited degree of variability of gas and oil prices in the data base these long-run results were statistically unsatisfactory." In the Board's view, the NERA study tends to confirm certain values obtained by DataMetrics for the short-run and intermediate-run.

Two essential questions remain. First, what use should be made of the studies in the present case given their admitted shortcomings? Secondly, what is the benefit of studies on this subject in the future?

The Applicant and its witnesses were adamant in stating that the tendered elasticity studies were not used in rate design and that these studies should not be so employed.

The results were stated to be too aggregated to be useful in assessing specific rates or blocks within rates. The major use of the studies was identified by Mr. Watkins "to investigate the relationship between any

increase in rates by class of customer and the volume of consumption" and to see "what impact that will have on revenues". Ms. Corio agreed with Mr. Watkins and the other witnesses on this subject when she said ". . . in terms of the distortion or disruption in volume caused by an increase in the prices, you can get a general idea what will happen to revenues. That is as far as I take it." This appears to be the future use the Applicant intends for these efforts when it speaks of "developing elasticity models into forecasting models." Mr. Watt indicated that future efforts would involve largely in-house skills. He noted that a large portion of the costs related to such studies had been spent -- "the fixed costs have been incurred and a great deal of the data has been collected."

Board counsel emphasized the inherent neutrality of elasticity studies and urged the improvement of the econometric models developed for the Applicant as additional useful data becomes available.

Submissions to the Board in respect of competitive conditions are of necessity a subjective assessment based on the Applicant's marketing experience so that a neutral verification provided by such studies might well be of assistance in justifying rate proposals. The Board would caution, however, that econometric analysis, like many quantitative tools, are often attributed unwarranted

virtues of precision while less scientific approaches are dismissed as judgmental.

The Board has, and continues to, place great weight on the utilities' actual experience and the collective judgment of management that they bring to bear when proposing rates to the Board. In view of the lack of confidence currently shown by those who produce the studies, it is not surprising that to date elasticity studies have not been used in either designing or justifying rates. The Board however believes such studies may, in the future, be useful for more than just forecasting revenue effects. As confidence levels improve, subsequent studies may provide an additional guide in assessing proposed rates. The Applicant is commended for its stated intent to continue to improve its efforts with respect to such studies.

4. Risk

The Applicant was directed in the previous proceeding before the Board to:

". . . make a submission with the next Phase II application which will attempt to quantify the risk elements associated with each of the customer classes contained in the fully allocated cost of service study."

The Applicant submitted that it was unable to provide a study, or produce any other evidence that would quantify the elements of risk associated with each class of

service. The treatment of this subject during the course of these proceedings did, however, prove helpful in improving the Board's perspective on risk, and illustrated a possible ranking of customer classes on the basis of risk.

Mr. Rewbotham during this and the previous proceeding was of the opinion that residential customers represent the least overall risk and that large interruptible customers represent the greatest risk. It was submitted by Mr. Macaulay that the elasticity study bears this out and he recommended that the elasticity study should be "accepted as a quantified surrogate for risk", and where the risk is greatest the rewards (return on rate base) should also be greatest.

Although risk was not quantified and therefore cannot be used directly in assessing the reasonableness of rates of return by class, Mr. Rewbotham submitted that a range of reasonableness might be indicated by the cost of the various components of capital. He pointed out that equity capital is currently allowed 14 percent and that other capital costs approximately 8.39 percent. It was his opinion that no customer class should have all the benefits associated with the least cost funding nor should any class be assessed the full burden of the cost of equity capital.

The Board is satisfied that risk cannot be quantified but finds the Applicant's subjective ranking

of customer classes in accordance with perceived risk to provide further guidance in assessing the reasonableness of the returns by class.

C. THE RATE SCHEDULES

The Board has already acknowledged the reasonableness of the allocation of increased costs to the various
customer classifications. The Board is satisfied that
the revenue requirement allocated to each of the classes
of service is acceptable and that the rates of return by
class of service as indicated by the FAC studies are
within a range of reasonableness. The rate schedules now
proposed are purported to yield the revenues required in
order that the Company will realize its authorized rate
of return.

In this section the Board will consider the proposed rate schedules and assess the appropriateness of each with respect to prevailing conditions and the rate design modifications recommended in past Board decisions. The proposed rate schedules were filed by the Applicant as Exhibit 131, Schedule 4 during the proceeding. This schedule was subsequently updated during E.B.R.O. 369-II-1 by the filing of Exhibit 169, Schedule 4. These updated rate schedules embodied the interim increases in rates resulting from a gas cost increase together with the rate proposals contained in Exhibit 131, Schedule 4 but indicated an effective date of March 25, 1980. The effective date will, however, be April 4, 1980, as discussed in a subsequent section.

1. Residential - Rate #1

The Applicant proposed several revisions to the residential rate. The revisions are interrelated in that any one of the proposed modifications is dependent upon the implementation of a related modification if the desired objective is to be realized. The objective is to eliminate an "end use" feature presently contained in the residential rate.

The Company proposed to delete clause (b) as contained in the present rate schedules. This clause provided for rate concessions for air conditioning and off-peak uses such as water heating for swimming pools. This modification was held to be in accordance with previous urgings of the Board.

The Company proposed to introduce a seasonal price differential for customers consuming 60 Ccf per month or more. Those consuming in excess of 60 Ccf per month will pay one cent per Ccf less during the period of May through October.

It also proposed to insert a rate block which includes the 31st to 60th Ccf of monthly consumption. This in effect confines the seasonal differential to levels of consumptions in excess of 60 Ccf, a level of consumption that satisfies requirements for basic uses.

Mr. Atkinson reminded the Board in his argument that there was no opposition to the elimination of the concession now extended to customers with high summer use. The

Board regards the elimination of an end use rate as desirable in itself. The seasonal differential at one cent per Ccf is regarded as a reasonable reflection of the Company's cost of service.

The Board approves Rate #1 as proposed by the Applicant in Exhibit 131.4.1, and updated in Exhibit 169.4.1.

2. Residential "Flat Rate Low Input" Water Heating Service (closed) - Rate #3

This rate is not available to new customers and is being phased out. The rate schedule proposed in Exhibit 169.4.2 is approved.

3. Residential "Flat Rate" Water Heating Service - Rate #4

In a previous proceeding before the Board it was impossible to deduce from the evidence the reasonableness of this rate. The Applicant has now submitted evidence indicating that annual costs exceed revenue by some \$21.00 per customer.

This rate is available for customers taking water heating service only. The Applicant reported that such business is not being actively promoted; that such service is unmetered and that every such customer is a potential space heating customer which can be acquired at minimal cost.

The rate schedule is approved as filed in Exhibit 169.4.3.

4. General Service - Rate #6

This rate schedule is available to those nonresidential customers who, because of load factor and/or
annual volumes, cannot qualify for service on any other
rate schedule.

As in the residential service, it is proposed to discontinue the end use rate for air conditioning and accommodate such customers with a seasonal differential. The differential proposed is one cent per Ccf and this is regarded as a reasonable reflection of the cost of selling gas in the summer. The differential becomes effective after the first 500 Ccf and this is also regarded as reasonable.

Conservation efforts undertaken by some customers have resulted in them no longer qualifying for service under one of the other rate schedules so that they are obliged to take service under Rate #6. The Applicant has maintained the relationship between Rates #6 and #100 close to that previously approved by the Board, and consequently the economic impact upon reclassification is modest.

Mr. Kawalec pointed out that there may be a problem with interruptible customers who, because of their conservation efforts, disqualify themselves under the

proposed Rate #145 and as a consequence are assessed charges under Rate #6. He claimed that this was an injustice in that the dual fuel equipment required to accommodate interruption becomes redundant in these circumstances. This issue will be dealt with under Rate #145.

The Board approves proposed Rate #6 as filed in Exhibit 169.4.4.

5. Firm Gas Contract Service - Rate #100

This schedule is available to customers whose consumption is not less than 12 million cubic feet per annum. There are no structural changes proposed and an acceptable relationship between this rate and Rate #6 has been maintained.

The Board approves Rate #100 as proposed in Exhibit 169.4.5.

6. Demand and Commodity Firm Contract Service (High Load Factor) - Rate #110

This rate is available to large users with a high annual load factor. Customers who qualify for this rate tend to be industrial processing or feedstock customers.

Mr. Thompson challenged the reasonableness of this rate and particularly as it applied to Cyanamid.

Cyanamid is now the largest single customer of the Applicant taking approximately seven Bcf per year.

In response to an interrogatory from this intervenor, the Applicant submitted Exhibit 144 which, among other things, sets out the rate of return realized from the two sub-classes of this rate. Schedule 2 of this exhibit indicates an over-contribution of \$369,000 in the test year. The assigned revenue requirement was exceeded by 1.2 percent.

Mr. Thompson made an appeal for rate relief for Cyanamid on the basis of the FAC studies which, he claimed, showed an over-contribution of approximately \$300,000 based on the authorized rate of return for the Company as a whole being the appropriate return for each customer class.

This over-contribution amounts to about 4.0 cents per Mcf and the Board notes that several other customer classes exceed this and that the apparent rate of return for those classes exceeds the return indicated for the group of which Cyanamid is a part. The Board is of the opinion that the rate available to Cyanamid is within an acceptable range of reasonableness and this customer is not being treated unfairly.

The Board approves the proposed Rate #110 as filed in Exhibit 169.4.6.

7. Override Firm Gas Contract Service - Rate #120_____

This rate provides for a supplementary supply for customers already taking service under Rate #110. The proposed rate was not challenged.

The Board approves Rate #120 as proposed in Exhibit 169.4.8.

8. Seasonal Firm Contract Service - Rate #130

This rate is intended to accommodate summer peaking customers.

The Board approves Rate #130 as proposed in Exhibit 169.4.9.

9. Interruptible Gas Contract Service - Rate #145

The Applicant, in response to suggestions of the Board, has proposed to merge the present Rates #140 and #150 into a single rate identified as Rate #145 which will be applicable to both commercial and industrial customers without distinction.

Both Mr. Thompson and Mr. Kawalec were critical of the proposed merging of the two rates, claiming that it was in fact an extension of the range rate philosophy which they claim the Board has been striving to eliminate. It was also regarded by these intervenors as

providing the Applicant with a further opportunity for undue discrimination and also as a strategy to facilitate negotiations with a view to increasing charges to contract customers.

Mr. Atkinson pointed out that the negotiating liberties remain much as they were in the past and that the fully allocated cost studies show that to date these customers have not been treated unfairly.

The Board notes Mr. Kawalec's suggestion that
Rate #150 should be merged with Rate #140 as this would
result in transferring a smaller number of customers to a
new rate. However, the Board is satisfied that the
difference between the proposal put forward by the
Applicant and Mr. Kawalec's suggestion would be insignificant.

The Board is concerned, as is Mr. Kawalec, with the possible injustice arising out of situations where customers because of their conservation efforts disqualify themselves under Rate #145 and consequently are moved to Rate #6. The Board is satisfied, however, that these customers can best be protected by adding to Rate #145 a clause similar to that now contained in Rate #140. The clause required would be as follows:

Any Rate #145 customer whose annual consumption is reduced to less than 12 million cubic feet due primarily to energy conservation measures may take service at the next applicable rate or continue to purchase gas hereunder. If service is continued under this schedule all of the provisions of Rate #145 shall apply except that the price for all gas taken shall be 25.846¢ per Ccf.

The Board has noted the criticism with respect to the negotiating latitude inherent in the new Rate #145. However since the total range encompassed by the old Rates #140 and #150 was the same as that now covered by the new Rate #145, the Board does not consider that the negotiating latitude has been increased unduly. The Board therefore finds the rate to be acceptable as to principle and form.

The Board will approve the proposed Rate #145 as filed in Exhibit 169.4.10 with the above modifications.

10. Special Large Volume Contract Service - Rate #160

This rate is applicable only to the R. L. Hearn

Generating Station of Ontario Hydro. Service is offered

under both a firm and interruptible service contract.

The Applicant's contract with Ontario Hydro has in the past provided benefits to all customers of Consumers' through seasonal purchases that contributed to a higher system load factor than would have otherwise been experienced. Mr. Potts testified that the rate recently negotiated with Ontario Hydro is within the range for large volume high load factor sales under Rate #110, although the sale to Ontario Hydro will not achieve the load factor to qualify it for service under that rate. The Board notes that the evidence is that the new rate negotiated with Ontario Hydro for firm sales is such that

the previous under-contribution has been eliminated. In addition there are potential benefits to the Consumers' system through interruptible sales in excess of the firm contract. Any such interruptible sales would recover all variable costs and could make some contribution to fixed costs which would otherwise have to be borne by other customers of the Applicant. Therefore, in the opinion of the Board the continuation of the Special Large Volume Contract service to Ontario Hydro is justified.

The Board finds the rate to be acceptable and Rate #160 is approved as filed in Exhibit 169.4.12.

11. Metric Conversion

The Applicant submitted additional rate schedules expressed in metric measure. Exhibit 133 provides a soft conversion to metric for information purposes only. The Applicant also submitted rate schedules for the approval of the Board where the rate blocks have been modified slightly to achieve a hard conversion to metric.

The Applicant also filed evidence indicating that hard conversion can be achieved with insignificant changes in the annual cost to customers. Residential customers should experience an increase or decrease in annual bills of less than twenty-five cents. The economic consequence of metric conversion to the Company

as a whole is expected to be a reduction in gross revenues amounting to less than \$4,000 per annum.

Mr. Gibson speculated that bills would not be issued in metric units until December of 1980. The Board finds the timing acceptable but would suggest that an earlier implementation date might be preferable. The Board does require that metric billing be introduced at a time which will not coincide with any other rate changes.

The Board has been assured that all conversions are mathematically correct, and will therefore approve the rate schedules for eventual implementation as filed in Exhibit 169, Schedule 8.

12. Effective Date

As indicated earlier in these Reasons for Decision, the Board has approved an interim increase in rates effective April 4, 1980, to permit the Applicant to recover increased gas costs. In order to minimize the number of rate changes the Board considers that it would be appropriate to implement the rate schedules approved herein effective that same date, April 4, 1980.

D. OTHER ISSUES

Unabsorbed Demand Charges

During Phase I of these proceedings, the Applicant had advised the Board that it did not expect to take all of the gas contracted for under its CD contract, so that part of the demand charges paid to TransCanada would not be absorbed through the volumes of gas purchased. The Board in Reasons for Decision, E.B.R.O. 369-I, approved the deferral and amortization over a three-year period of such costs or charges and said:

"The Applicant will however be required to file with the Board for approval in Phase II of these proceedings its proposal as to the specific mechanics of amortizing the annual unabsorbed demand charges. Since the Board will be required to approve any rate changes introduced to recover these costs, the Board will be in a position to monitor the account set up for the unabsorbed demand charges and its amorization."

Evidence submitted by the Applicant during this proceeding indicated that Consumers' had taken all gas contracted for in 1979 and anticipated that the same situation would continue throughout fiscal 1980.

However, it was disclosed that this had been achieved through the efforts of Consumers' personnel in disposing of the otherwise surplus gas and that additional costs had been incurred by the Company as a result. During the hearing these additional costs were referred to as

"remedial costs". The Applicant advised that the remedial costs incurred in 1979 were relatively insignificant and that it would not seek to recover these costs. The Applicant forecasts, however, that in 1980 remedial costs will be incurred and in response to a Board staff interrogatory the Applicant indicated that such remedial costs could be in the order of \$2.2 million for fiscal 1980.

Mr. Macaulay noted the nature of these costs and suggested that perhaps they should be shared between customers and shareholders, but he concluded that in any event the whole question of remedial costs should be deferred to a subsequent Phase I proceeding.

Mr. Kawalec submitted that the Company should not be allowed to defer and amortize either unabsorbed demand charges or remedial costs unless the contract customers of the Company are relieved from their minimum bill obligations. Mr. Kawalec sees the Applicant's situation as being similar to those contract customers who have to pay a minimum bill regardless of volumes taken.

The Board sees the relationship between the Applicant and its large volume contract customers as being very different to that of the Applicant and TransCanada. The Applicant must enter into long-term contracts with TransCanada with little opportunity to change quantities. The Applicant's customers have the opportunity to renegotiate their contracts more

frequently or to cancel their contracts after a price increase. The customers therefore are able to react to changes in circumstances far more readily than is the Applicant.

The Applicant has submitted a proposal for the rate treatment of unabsorbed demand charges and remedial costs and requests the Board's views on this proposal. The Board notes, however, that no unabsorbed demand charges have been incurred with respect to gas purchased in 1979 and that, at this time, the Applicant anticipates that no charges will be incurred with respect to gas supply purchases in 1980. The Board acknowledges that the avoidance of unabsorbed demand charges involves the possible incurrence of remedial costs and since only remedial costs are anticipated to be incurred, the Board restricts its opinion to such costs in these Reasons for Decision.

In the opinion of the Board, the incurrence of the remedial costs would benefit the customers and therefore some portion of those costs could appropriately be included in rates. However, the prudent management of the gas supply of a natural gas utility and the ability to deal with unexpected events, is an integral part of the conduct of its business. It is arguable therefore that, since management acts for the shareholders, some portion of remedial costs should also be borne by the shareholders.

In view of the lack of evidence on this subject the Board has concluded that it would be premature to dispose conclusively of this matter at this time.

2. Monitoring Returns from System Expansion

In Phase I of these proceedings, the Applicant's witnesses were examined at some length with respect to the magnitude of the system expansion program and the return that the Company was forecasting on this investment. In Reasons for Decision, E.B.R.O. 369-I, the Board said:

"The Board is concerned, however, that there should be some method of establishing whether the investment in system expansion has in fact produced the projected sales and, on average, the required return. The Board will monitor both investment and results over the next several years and will, during Phase II of these proceedings, determine how this can be accomplished."

The Applicant was directed to prepare and submit in Phase II its proposal for obtaining each year, on a cumulative basis, the necessary data from which the return and net present value can be calculated on new sales that result from the investment in the system expansion.

Exhibit 137 (subsequently revised by 137A) was filed by Mr. Taylor as the Company's proposal for meeting the Board's requirements. He proposed that initially,

because of computer limitations, a statistically significant sampling would be made of construction projects each year and these sample projects would be updated in subsequent years as additional customers are added.

Mr. Taylor advised that the sample would consist of some 90 projects selected from a total of about 600 projects undertaken each year. He reported that the Company has already undertaken preliminary studies based on this approach using 60 projects from 1977 additions and he reported that the rate of return ranged between 9.62 percent and 11.98 percent with a 95 percent confidence level.

It is also understood that the Company is installing a new customer accounting system late in 1980, and that it hopes to have certain links integrated into the system to provide better data for such evaluation. It is possible that ultimately this will permit monitoring 100 percent of the new additions to the system.

The Board is satisified that the Applicant's proposed program, and the progressive improvement thereto will provide a satisfactory means of monitoring system expansion projects and their contribution to the Company's rate of return. The Board is of the opinion that the proposed monitoring plan should meet the concerns expressed in E.B.R.O. 369-I.

3. Motion by the Urban Development Institute

Mr. Kawalec represented the Urban Development
Institute ("UDI"), Apartment Group, brought a motion
before the Board requiring the Applicant to fully answer
his Interrogatories #8 and #18. The Board denied the
motion but indicated written reasons would follow.

Interrogatories #8 and #18 requested information as to the Applicant's procedure for determining the rate level for specific customers on Rates #140, #150, and the proposed Rate #145. The Applicant provided answers to the interrogatories but Mr. Kawalec considered that the answers were incomplete in that the Company had not provided the pricing matrices used by Consumers' sales personnel in the administration of these interruptible rates.

Mr. Kawalec, supported by Mr. Thompson, argued that the matrices should be produced in order that customers and prospective customers could establish that the prices charged by the Applicant are fair. Mr. Kawalec argued that the factors used in the pricing matrices were not the only factors considered by the Company in establishing the price to be charged for interruptible gas so that the other factors would provide the flexibility and confidentiality required by the Company even if the pricing matrices were made public in this proceeding.

Mr. Thompson submitted that the Board could not judge the reasonableness of Rates #140, #150 or #145, without the matrices and an understanding of how they work.

Mr. Macaulay suggested that the matrices should be filed with the Board on a confidential basis in order for the Board to establish their usefulness.

The Applicant's position was that the energy market is currently very volatile and that although gas may currently have a competitive advantage the position could be reversed quite rapidly. The Applicant also claimed that the Applicant's marketing position for interruptible gas could be weakened by the publication of the pricing matrices.

It is generally accepted that the sale of gas on an interruptible basis is important to both the Company and to all other customers on the system since interruptible sales enables an improved load factor, resulting in a lower unit cost of purchased gas. The Board is reluctant, therefore, to require the filing of any information that may adversely affect the sale of interruptible gas unless that information is essential to the Board's deliberations. The Board recognized that flexibility to negotiate prices is desirable. Interruptible customers have the equipment in place to use alternative energy sources and as such tend to purchase almost solely on the basis of cost. Since the Board did not consider the pricing matrices to be essential for purposes of its deliberations in this Phase II proceeding, the motion for production of this information was denied.

4. Other Charges

Section 19(1) of the Act empowers the Board to make orders "approving or fixing just and reasonable rates and other charges for the sale of gas."

Three subjects related to "other charges" were discussed in the current proceeding (i) late payment penalties, (ii) security deposits, and (iii) credit checks.

The Board invited parties interested in these subjects to address the scope of the Board's jurisdiction with respect to these matters.

First, it is clear from paragraph (c) of subsection 7 of section 19 that "prompt payment discounts or delayed-payment penalties" fall within the scope of what the Legislature intended by the words "other charges". Secondly, the Board's jurisdiction with respect to security deposits was dealt with in E.B.R.O. 314-II dated November 24, 1977, where the Board found that it had no jurisdiction to adjudicate on the subject of security deposits.

Mr. Morton testified, that the majority of credit checks are obtained when the Applicant is selling merchandise to customers. Since such credit checks are not in the nature of a charge for the sale of gas the Company's practises with respect to credit checks do not, in the opinion of the Board, fall within the Board's jurisdiction.

As part of Exhibit 136, the Applicant filed its proposal for changes respect to late payment penalties. These changes arise from guidelines issued as the result of discussions among the gas utilities in Ontario and the Ministry of Energy. In accordance with the guidelines, Consumers' proposes that Rate Schedules #1, #3, #4 and #6 be changed so that the time period before a late payment penalty is charged will be 16 days instead of 10 days.

The above guidelines also dealt with the subject of security deposits and credit checks and the Board notes the Applicant's undertaking to abide by these guidelines.

5. General Review

Mr. Johnston, M.P.P. in his submission observed that there might be value in a proceeding concerned with a general review of the principles "of costing and pricing with respect to natural gas". This observation may arise, in part, from the fact that the Board has completed such a review in the case of electricity. That review arose from a reference by the Minister of Energy to the Board of the principles of power costing and ratemaking appropriate for use by Ontario Hydro. The Board had not considered such matters prior to that reference. However, in the case of natural gas distributors in Ontario, the Board examines in detail the basis of cost allocation and rate design for each company

at regular intervals, as it is doing in the case of Consumers' in the current proceeding. The Board does not believe that a general review of the principles such as that suggested by Mr. Johnson is necessary at this time.

6. Costs

Mr. Kawalec submitted that:

". . . the Board should award reasonable costs to responsible intervenors who have actively participated at these hearings, and assisted the Board in their Decision."

Having now reviewed all of the evidence submitted, the Board has concluded that there are no special circumstances which would justify the awarding of costs to intervenors.

An order will be issued charging the costs and expenses of the Board to the Applicant.

E. CONFIRMATION OF INTERIM ORDERS

The Board, in approving increased rates in response to certain interim applications, required the Applicant to maintain records to permit subsequent refund or adjustment if so ordered at the conclusion of the main proceeding.

The Board now finds that no refund or adjustment is necessary in respect of any of the interim increases approved and confirms the interim rate increases as ordered. The Applicant is relieved of any further requirement to maintain records of amounts collected as required by those orders.

F. COMPLETION OF THE PROCEEDINGS

The Board expects the Applicant to draft an order with imperial and metric rate schedules attached incorporating modifications, revisions and corrections in conformity with these Reasons for Decision. The Applicant shall file a copy of the draft order with the Board Secretary and arrange a meeting with the Board to settle the terms. The Applicant shall then deliver a copy of the draft order and give notice of the meeting to all counsel and other persons who participated in the hearing. A Board order will be issued as soon as possible after the meeting held to consider the Applicant's draft.

DATED at Toronto this 2nd day of April, 1980.

ONTARIO ENERGY BOARD

J. C. Butler Presiding Member

W Wal

Member

I. B. MacOdrum

Member