

IN THE MATTER OF the Ontario Energy Board
Act, R.S.O. 1990, c. O.13;

AND IN THE MATTER OF an Application by
Natural Resource Gas Limited to the Ontario Energy
Board for an order or orders approving or fixing just
and reasonable rates for the sale, distribution and
transmission of gas commencing October 1, 1997.

BEFORE: F.A. Drozd
Presiding Member

F.G. Laughren
Chair and Member

S.F. Zerker
Member

DECISION WITH REASONS

August 20, 1998

TABLE OF CONTENTS

1. INTRODUCTION 1

1.1 THE PROCEEDING 1

1.2 APPEARANCES AND WITNESSES 2

1.3 SUMMARY OF THE COMPANY’S PROPOSAL 3

1.4 THE ALTERNATIVE DISPUTE RESOLUTION AGREEMENT 3

2. UTILITY RATE BASE 11

2.1 CAPITAL BUDGET VARIANCES 11

2.2 TOWNSHIP OF YARMOUTH FRANCHISE 13

2.3 NPS 6 LINE TO IMPERIAL TOBACCO 15

2.4 MR. GRAAT’S VEHICLE 20

2.5 IMPACT OF THE BOARD’S FINDINGS ON UTILITY RATE BASE 21

3. UTILITY INCOME 23

3.1 OPERATING REVENUE 23

3.2 COST OF SERVICE 28

3.3 IMPACT OF THE BOARD’S FINDINGS ON UTILITY INCOME 42

4. COST OF CAPITAL 43

4.1 CAPITAL STRUCTURE 43

4.2 COST OF EQUITY 45

4.3 COST OF DEBT 48

4.4 IMPACT OF THE BOARD’S FINDINGS ON COST OF CAPITAL 51

5. RATE DESIGN 53

6. DEFERRAL ACCOUNTS, COMPLETION OF PROCEEDINGS AND COSTS 65

6.1 DEFERRAL ACCOUNTS 65

6.2 COMPLETION OF PROCEEDINGS 67

6.3 COSTS 68

APPENDIX A - Alternative Dispute Resolution Agreement with Impact Statements

APPENDIX B - Impact of the Board’s Findings in this Decision

1. INTRODUCTION

1.1 THE PROCEEDING

1.1.1 Natural Resource Gas Limited (“NRG”, the “Applicant”, or the “Company”) filed an Application with the Ontario Energy Board (“OEB” or the “Board”) dated November 26, 1997 (“Application”) pursuant to section 19 of the Ontario Energy Board Act, R.S.O. 1990, c.O.13 (“Act”), requesting an order or orders approving or fixing just and reasonable rates and other charges for the sale, distribution, transmission and storage of gas for two fiscal years. These are the fiscal 1998 year commencing on October 1, 1997 and ending on September 30, 1998, and the fiscal 1999 year commencing on October 1, 1998 and ending on September 30, 1999.

1.1.2 The Board issued an interim order (EBRO 496-01) on September 26, 1997 directing that the rates and other service charges approved for the fiscal 1997 rate year be declared interim, effective October 1, 1997, for a period of no longer than one year, and subject to change retroactive to that date. The Board issued a Notice of Application dated December 23, 1997 along with directions for service of the Notice.

1.1.3 On January 28, 1998, the Board issued Procedural Order No. 1, which specified dates for a technical conference, the issues day hearing, the filing of interrogatories, the filing of intervenor evidence and the alternative dispute resolution (“ADR”) settlement conference.

- 1.1.4 The technical conference was held on Friday, February 13, 1998, to review NRG’s prefiled evidence and to discuss the issues relevant to the hearing of the Application. On February 19, 1998 the Board issued Procedural Order No. 2, which set out the issues for the proceeding.
- 1.1.5 Procedural Order No. 3, dated April 17, 1998, established the commencement of the hearing on Monday, May 4, 1998.
- 1.1.6 The hearing of the oral evidence began on Monday May 4, 1998 and continued for three days, ending on Wednesday May 6, 1998. The Company’s Argument-in-Chief was filed on May 20, 1998; Board Staff filed its Argument on May 28, 1998; and NRG filed its Reply Argument on June 3, 1998. Copies of all the evidence, exhibits and submissions in this proceeding, together with a verbatim transcript of the hearing are available for public review at the Board’s office.

1.2 APPEARANCES AND WITNESSES

1.2.1 The participants and their representatives were:

NRG	Peter Budd Judy Goldring
Board Staff	Jennifer Lea
Heating, Ventilation and Air Conditioning Contractors Coalition Inc. (“HVAC Coalition”)	Ian Mondrow

- 1.2.2 Although not an active participant, The Consumers’ Gas Company Limited (“Consumers Gas”) intervened and was represented by Barbara Bodnar.
- 1.2.3 Union Gas Limited (“Union”) was also registered as an intervenor but did not participate.
- 1.2.4 Because of the absence of other active intervenors, Board Staff was an active party in the proceedings.

1.2.5 As a witness, counsel to NRG called W. Blake, President and General Manager.

1.2.6 In addition, NRG called the following expert consultants to testify on behalf of the Company:

- | | |
|--------------|--|
| R. Aiken | Principal, Aiken and Associates |
| G. Bowman | Partner, Crosbie Houlihan Lokey Inc. |
| C. McLelland | Associate, Crosbie Houlihan Lokey Inc. |
| K.C. McShane | Foster Associates, Inc. |
| W.E. Suchard | Chartered Accountant |

Mr. Suchard gave his evidence via a telephone conference call.

1.3 SUMMARY OF THE COMPANY’S PROPOSAL

1.3.1 The Applicant’s prefiled evidence was:

	Fiscal 1998	Fiscal 1999
Utility Income	\$1,121,637	\$1,045,705
Utility Rate Base	\$8,258,977	\$8,937, 281
Overall Rate of Return	11.10%	10.85%
Rate of Return on Equity	10.30%	10.10%
Revenue Sufficiency	\$369,850	\$137,174

1.4 THE ALTERNATIVE DISPUTE RESOLUTION AGREEMENT

1.4.1 The ADR settlement conference was held at the Board’s offices from April 7 to 9, 1998. It was attended by the Applicant, Board Staff and counsel for the HVAC Coalition. An ADR Agreement (“Agreement”) was drafted by NRG’s counsel in consultation with the parties and filed with the Board Secretary on April 16, 1998. The Presiding Member informed the parties at the beginning of the hearing that the

Agreement provided sufficient evidence for the Board to render a decision on all issues settled in the Agreement.

1.4.2 The ADR Agreement in its entirety is included as Appendix A to this decision.

1.4.3 Approximately 26 of the total of 41 major issues were settled between the parties, subject to the Board's approval, leaving 15 that remained unresolved in part or total. The settled issues and agreed positions corresponding to the issues identified on the Issues List were:

A. GENERAL

- With regard to Economic Feasibility Model Revisions, NRG would consider the EBO 188 Report and, if appropriate, make adjustments to its discounted cash flow model and provide the Board with a detailed description of the model by October 1, 1998.
- NRG has adequately addressed the Board's directives from EBRO 491.

B. RATE BASE

- The methodology used by NRG in the working cash study and the resulting revenue and expense lags were appropriate.
- NRG's analysis of its performance in the area of capital expenditures for fiscal 1996 and fiscal 1997 was accurate.
- NRG's proposed fiscal 1998 capital budget should be reduced by:
 - 8 meters for new customer additions;
 - 25 regulators; and
 - 11 residential water heaters.
- NRG's proposed fiscal 1999 capital budget should be reduced by:

- 4 service additions;
 - \$99 to reflect the forecast number of customer attachments;
 - 15 regulators; and
 - 11 residential water heaters.
- NRG's methodology and determination of working capital were appropriate.
 - NRG should continue to expand service wherever the Company can maintain a project profitability index ("PI") of 1.0 according to its current and future economic feasibility studies.

C. OPERATING REVENUE

- C The five-year weighted average forecast as supported by the statistical data entered into evidence was appropriately used in the degree day forecast methodology.
- C NRG's proposed customer attachments should be increased by 10 residential attachments in each of 1998 and 1999.
- C In 1998, NRG should increase the estimated volume throughput by 14,955 m³ and the estimated capital budget by \$3,470 because of the increased number of customer attachments.
- C In 1999, NRG should increase the estimated volume throughput by 59,662 m³ and the estimated capital budget by \$3,540 because of the increased number of customer attachments.
- C NRG's amended estimated volume throughput and gas sales revenue for residential, commercial, industrial, seasonal and contract customers for 1998 were acceptable, but were acceptable for 1999 only as they relate to residential, commercial, seasonal and contract customers.

- C NRG's forecasts of net operating revenue from the water heater rental program, the contract work program, customer service charges and delayed payment charges for 1998 and 1999 were acceptable.

- C With regard to allocation of costs to ancillary programs and the impact on rates of return, NRG would investigate a change to fully allocated costing for ancillary programs, and file its proposals in this respect in its next rates case. The Company would provide the necessary data, including cost allocations to the ancillary programs based on a fully allocated methodology as mandated by the Board for Consumers Gas in EBRO 495, to enable immediate application of a fully allocated costing methodology for its ancillary programs, if approved by the Board.

D. COST OF SERVICE

- C NRG's updated, corrected forecasts of Union's gas transportation costs for 1998 and 1999 were acceptable.

- C NRG's 1998 and 1999 forecasts of unaccounted for gas of 1.4 percent and 1.9 percent respectively were acceptable.

- C With respect to wages and benefits, NRG committed to moving in the direction of adopting employee performance policies before its next rates case.

- C NRG's proposed staff levels for 1998 and 1999 were acceptable.

- C NRG would limit its costs for intervening in Union's main rates case to \$25,000 for 1998 and would record costs for participating in other Union proceedings and in generic proceedings in a newly opened Regulatory Expenses Deferral Account.

- C Reductions in various forecast cost of service expenses would be:
 - C travel and expenses - \$15,000 for each of 1998 and 1999;

- C consulting fees - \$1,800 for 1999;
 - C automotive expenses - \$2,500 for 1998 and \$5,000 for 1999; and
 - C bank charges - \$250 for 1998.
- C Estimated cost of service expenses that were acceptable would be NRG's forecasts of:
- C management fees for 1998 and 1999, as updated;
 - C office rent for 1998 and 1999;
 - C consulting fees for 1998;
 - C insurance costs for 1998 and 1999, as updated; and
 - C bank charges for 1999, as updated.
- C The total service life and salvage rate of plastic mains would remain unchanged as would the depreciation rate of 2.25 percent. The methodology and results of the depreciation study for the remaining categories of assets were also acceptable.
- The proposed disposition of the Purchased Gas Variance Account ("PGVA") was appropriate.
 - NRG would proactively manage its gas volumes under Union's bundled T-Service during 1998 and 1999 by (i) ongoing monitoring of its balance position; (ii) where appropriate, making cost effective purchases of gas to address its balance situation; and (iii) considering alternative gas supply/transportation options to help manage balancing and demand charges on the Union system.
 - NRG would split the PGVA into commodity and transportation components with respective reference prices, but the two-step threshold point would remain based on the aggregate amount.
 - The Company would discontinue its Demand Side Management ("DSM") Initiatives Deferral Account and transfer the balance of \$4,627.88 to 1998 cost of service.

- NRG's proposed disposition of the Long-term Financing Strategy Deferral Account was appropriate.
- C NRG would conduct a DSM survey, which would include an adequate group of commercial customers, with the results to be presented in the Company's next rates case.

E. COST OF CAPITAL

- C The cost of short-term debt for fiscal 1998 and fiscal 1999 would be 7.53 percent and 7.75 percent respectively.
- C Although the cost of long-term debt might change depending on the Board's finding on the issue of the Junsen standby fee, subject to that finding, the cost for fiscal 1998 and fiscal 1999 would be 11.85 percent and 11.72 percent respectively.

F. COST ALLOCATION

- C The revised results of the zero intercept study, based on the inclusion of the mains additions undertaken in 1996 and 1997 had been accurately reflected by the Company. NRG would update the zero intercept study and refile the study results in the Company's next rates case.
- The revised results of the weighted customer allocators for customer billing, meters and services were appropriate.
- NRG's proposal to unbundle the gas commodity costs for gas received from the transmission and storage costs incurred on the Union system was appropriate.
- DSM costs had been appropriately assigned to Rate 1 customers (residential, commercial and industrial) and allocated to these categories on the basis of the number of customers.

Board Findings

1.4.4 Based on the evidence and the submissions of the parties, the Board accepts the positions agreed to by the parties in the ADR settlement conference and NRG’s commitments.

1.4.5 After giving effect to the ADR Agreement, the calculations of amounts considered significant for this hearing were:

	Fiscal 1998	Fiscal 1999
Utility Income	\$1,184,820	\$1,090,133
Utility Rate Base	\$8,264,722	\$8,967,741
Overall Rate of Return	11.10%	10.84%
Rate of Return on Equity	10.30%	10.10%
Revenue Sufficiency	\$483,527	\$213,749

2. UTILITY RATE BASE

2.0.1 The issues discussed in this Chapter are:

- capital budget variances;
- the appropriate amount to include in rate base for the Township of Yarmouth franchise;
- the prudence of the costs related to the construction of the NPS 6 line to Imperial Tobacco; and
- the inclusion in rate base of Mr. Graat's vehicle.

2.1 CAPITAL BUDGET VARIANCES

2.1.1 The substance of this issue related to the results of the capital budgeting process used by NRG to arrive at the Company's capital budget forecasts. The specific methodology in and of itself was not in question. The problem was that previous Board-approved capital budgets (EBRO 491) and actual results had been at significant variance.

2.1.2 NRG's capital budget process began with a review of all the accounts. Pipelines had traditionally comprised the largest component of this budget. The Applicant utilized a zero-based methodology for other expenditures in preparing its capital budget.

2.1.3 The following table illustrates the issue of variances:

Fiscal Year	Board-approved	Actual	Variance
1995	\$1,325,119	\$842,870	(\$482,249)
1996	\$1,390,658	\$1,168,889	(\$221,769)
1997	\$1,216,260	\$883,421	(\$332,839)

Positions of the Parties

2.1.4 Board Staff submitted that the net revenue sufficiencies in fiscal 1996 and 1997 were achieved in part by overstating the proposed capital budget expenditures in the EBRO 491 rates proceeding. Hence, Board Staff recommended that NRG should be directed to inform the Board Secretary if the variance in the capital budget expenditures for either the 1998 or 1999 test year exceeded 10 percent of the Board-approved budget. Board Staff also argued that NRG should be required to provide an explanation for the variance.

2.1.5 NRG argued that these variances arose because several large capital projects were delayed or canceled due to the delay in obtaining franchise approval for service to even a portion of the Township of Yarmouth. NRG submitted that these developments should be viewed as one-time occurrences, and should not be taken as indicative of the Company’s current budgeting proposals, since NRG was not forecasting any capital expenditures in either of the test years for areas for which it did not hold a valid franchise agreement.

2.1.6 NRG stated that Board Staff had agreed that a good forecast should have an equal chance of being too high or too low. Over the past 8 years, NRG’s actual expenditures had been higher than the Board-approved levels in four years, and lower in four years, thus meeting Board Staff’s own criterion. Taking the recent 8 years as the measure, the actual historical record of expenditures averaged 107.1 percent of the Board-approved capital budget.

2.1.7 NRG also informed the Board that the Company was in the process of improving the methodology for capital budget forecasting and preparation. This involved

longer term forecasting with a 5-year planning horizon, a more formal approach to the operation, and a more methodical scheduling of building projects.

- 2.1.8 In sum, NRG submitted that there was no credible reason or evidence for requiring variance explanations, should NRG's actual capital expenditures exceed the 10 percent variance.

Board Findings

- 2.1.9 The Board is concerned that inaccurate capital budget forecasts may lead to inappropriate rates in the latter years of a multi-year rate approval. The Board believes that reporting of variances from the capital budget forecasts that form the basis of the rate proposal would allow the Board to determine whether rate adjustments were necessary. The Board therefore directs NRG to inform the Board Secretary if the variance in annual capital budget expenditures exceeds 10 percent of a Board-approved budget. The Board also directs NRG to provide reasons for the variance to the Board Secretary at the time that the Company informs the Board of the variance.

2.2 TOWNSHIP OF YARMOUTH FRANCHISE

- 2.2.1 In 1993, NRG began to attempt to secure a franchise to provide natural gas to the Township of Yarmouth ("Township" or "Yarmouth"). In EBRO 480, issued on January 25, 1994, the Board noted the absence of a franchise and certificate for Yarmouth, although NRG was serving two customers in this area. The Board directed the Company to "proceed expeditiously to file appropriate franchise and certificate applications."

- 2.2.2 Pursuant to Board directions contained in EBRO 491, NRG indicated that the actual Yarmouth franchise costs transferred to the construction work in progress ("CWIP") account as of October 1, 1995 were \$44,578. Since that date, a further \$16,789 in costs were incurred, of which \$15,316 were legal costs. In addition, the CWIP account attracted \$5,888 of interest in fiscal 1996 and a further \$7,352 of interest in fiscal 1997, resulting in a balance as at October 1, 1997 of \$74,607.

2.2.3 On August 12, 1996, Yarmouth gave final reading to a by-law that provided NRG with a franchise for part of the Township, with Union receiving a franchise for the other portion. The franchise obtained by NRG included the area containing the two customers for whom the Company had previously provided service.

2.2.4 NRG stated that, as a result of receiving the franchise from Yarmouth, the Company had connected, to March 19, 1998, 19 new industrial, commercial or seasonal customers, which according to the Company's analysis was equivalent to about 80 residential customers. In addition, NRG was forecasting an incremental load over the next five years equivalent to that of about 160 residential customers.

2.2.5 The Company also said that the net present value benefit of this project was approximately \$211,000. Compared with \$74,000 in franchise costs, the residual overall net present value was \$137,000.

Positions of the Parties

2.2.6 Board Staff agreed that the customers of NRG would benefit from its partial expansion into the Township, but argued that the \$15,316 of legal costs incurred in fiscal 1996 appeared to be excessively high. Board Staff argued for a reduction of \$10,000, to compensate for what they believed were "excessive legal fees incurred in the preparation for the EBA 730/EBC 242 proceeding." The result, Board Staff submitted, would be that \$64,607 should be allowed in the rate base as of October 1, 1997.

2.2.7 NRG noted that Board Staff presented no evidence to support its submission that legal fees were excessive and argued that the Company "would have been at a serious disadvantage without legal counsel when the other parties involved [Yarmouth] had legal counsel assisting them."

Board Findings

2.2.8 The Board notes that the total historic cost of acquiring the 14 other existing franchises for NRG was about \$76,272, or approximately the cost of obtaining the

Yarmouth franchise. It also notes, however, that the resolution of this issue took from fall 1993 to fall 1996, a period of three years.

2.2.9 The Board considers the costs of obtaining the Yarmouth franchise to have risen to such unprecedented heights due to unique circumstances. The inclusion in the Company's rate base of costs of this magnitude to obtain a single franchise should not be considered as an example to be cited in support of future actions by the Company.

2.2.10 The Board finds that, in the specific circumstances under which the franchise was obtained for the Township, it is appropriate to include \$74,607 in NRG's rate base as of October 1, 1997.

2.3 NPS 6 LINE TO IMPERIAL TOBACCO

2.3.1 The Company included \$671,083 in its fiscal 1998 capital expenditures budget for the construction of 14,350 metres of 6 inch pipeline ("NPS 6") from the 7th concession line to the Imperial Tobacco plant in Aylmer. This amount was after receipt of \$50,000 from Imperial Tobacco as an aid to construction. The project had a PI of 1.0.

2.3.2 The pipeline was constructed in November and December, 1997, by Ayerswood Development Corporation ("Ayerswood"), an affiliate of NRG. The contract with Ayerswood was for \$493,200. Another \$51,245 of the total project cost was paid to Ayerswood for change orders, transportation and early completion of the project. Of the remainder, \$162,330 was budgeted for consulting, legal, surveying, easements, etc. and \$14,308 was for contingencies related to these activities.

2.3.3 According to NRG's witnesses, the project was sole-sourced to Ayerswood because of "the urgency of ... getting this pipeline built". NRG stated that the Company does not have a policy of soliciting competitive bids for pipelines as the Company usually constructs these itself.

2.3.4 The Company stated that Imperial Tobacco committed to additional volumes of gas on October 20, 1997 and wanted to receive these volumes during the 1998 winter

season. Consequently, the Ayerswood contract included a performance bonus of \$1,800 per day for each day that the project was completed prior to December 24, 1997.

2.3.5 The cost of the line was calculated by NRG to be \$34.56 per metre. Some \$20 of this was identified by the Company as being the cost of materials.

Positions of the Parties

2.3.6 Board Staff noted that both Consumers Gas and Union are required to comply with undertakings established by the Lieutenant-Governor-in-Council as a condition of approval for changes in ownership. One of the undertakings requires that these utilities obtain prior Board approval for any affiliate transaction aggregating \$100,000 or more annually. While this condition did not apply to NRG, Board Staff submitted that the spirit of this undertaking should be observed by NRG. Specifically, Board Staff submitted that contracts for capital projects should not be signed with any affiliate without competitive bids being sought so that NRG could determine whether the affiliate provided the lowest price.

2.3.7 Board Staff also submitted that:

- “the costs for constructing the NPS 6 line to Imperial Tobacco were excessive and unnecessarily inflated by the desire to have the project completed by December 24, 1997”;
- there was “no corroboration that the project was undertaken at a price [which was] fair to NRG’s existing ratepayers, since no competitive bids were sought”;
- the Ayerswood contract price of \$493,200 should be replaced with a figure of \$446,000 (a difference of \$47,200), calculated by multiplying 14,350 metres of pipeline by \$31.08 per metre, which was NRG’s historical cost of constructing NPS 6 pipelines;

- the amount paid to consultants on the project appeared “to offer excellent value”;
- the legal and survey costs appeared to be reasonable;
- the average unit price paid to acquire easements could be considered high, but not excessive; and
- the allowance for contingency should be reduced by \$39,508, which included \$25,200 paid for the early completion of the project.

2.3.8 As a result of the proposed reductions of \$47,200 and \$39,508, Board Staff argued that \$86,708 should not be included in NRG’s rate base, effective January 1, 1998.

2.3.9 NRG argued that, despite the lack of competitive bidding, the Company obtained the services of Ayerswood at a competitive price to the benefit of its ratepayers. NRG did not agree that all construction of capital projects should be put out for competitive tender because this could constrain the Company from moving as expeditiously as required to deal with customers needs.

2.3.10 NRG replied that the required project completion date was driven by their client's requirements and the potential for the Company to lose future revenue if it did not meet this need on a timely basis, i.e., the fact that:

.....Imperial Tobacco required the increased capacity to operate their plant during the 1997/98 winter. If natural gas had not been available, Imperial Tobacco would have used another fuel. If Imperial Tobacco incurred the expense related to providing the infrastructure necessary to use another fuel, such as propane or oil storage tanks, NRG would run the risk of losing this additional load for not just the current year, but for several years in the future.

2.3.11 The Company estimated that, if the project had not been undertaken until the spring of 1998, the lost revenue in fiscal 1998 would have been \$140,000 and that "the inclusion of the \$671,000 in rate base for 9 months in fiscal 1998 has a cost of service that is considerably less than the benefit of \$140,000." NRG submitted that the resulting lost revenue and the potential loss of future revenue would not have been offset by lower construction costs.

2.3.12 NRG argued that, while the historical cost of constructing NPS 6 lines was \$31.08 per metre, the \$34.57 cost per metre associated with the Ayerswood contract reflected the fact that the project "required a substantial amount of boring under environmentally sensitive areas, creek crossings, municipal drains, railroad crossings, and major roads."

2.3.13 The Company argued that no reduction was required in the amount included in the budget for contingencies as this amount applied "not only to the Ayerswood portion of the costs, but also to the soft costs (consulting, legal, easements, etc.) as well as the costs associated with NRG labour and equipment, and the regulator station."

Board Findings

2.3.14 The Board notes that the potential for cross-subsidization and inappropriate asset transfer pricing always exists. Utility costs associated with affiliate transactions must be transparently reasonable and not detrimental to the utility ratepayers.

2.3.15 The Board understands the Company's rationale for seeking to commence construction of the NPS 6 pipeline to Imperial Tobacco as quickly as possible in order to capture the revenue expected to flow from the additional capacity. The Board wonders, however, since the project was contemplated for some time and was completed earlier than the required deadline, if it might have been possible to seek competitive bids for planned pipeline construction during the period of contemplation. This action on the part of NRG would have:

- provided evidence that the construction costs incurred, even if paid in a non-arm's length transaction, were the least-cost option for NRG's ratepayers; and
- avoided the bonus payment made for early completion of the project.

2.3.16 To provide a degree of assurance that capital project costs are prudently incurred, the Board directs NRG to develop and implement a policy requiring the Company to seek competitive bids on all capital expenditure projects over \$50,000 that would otherwise be sole-sourced to an affiliate.

2.3.17 Based on the evidence that the NPS 6 pipeline project has a PI of 1.0 over the five-year life of the existing contract with Imperial Tobacco and that the per metre cost appears reasonable in the circumstances, the Board finds that \$671,083 is properly included in NRG's rate base.

2.4 MR. GRAAT'S VEHICLE

2.4.1 The Company proposed to include the vehicle of the Chairman and sole owner of NRG, Mr. Graat, in rate base. This cost had been removed in the Board's EBRO 491 Decision.

2.4.2 The Company's witnesses indicated that there had been no changes in circumstances since EBRO 491. The rationale given for inclusion of the vehicle in the rate base was that Mr. Graat required transportation to do his job at NRG and that provision of a vehicle, as part of his compensation package, was not unreasonable.

2.4.3 Mr. Suchard, the Company's witness on Mr. Graat's compensation, stated that 71 percent of the full-time executives included in the Morneau Sobeco Coopers & Lybrand survey were provided with a company vehicle, but that he had no "particular knowledge of part-time executives and what perks they might be provided."

Positions of the Parties

2.4.4 Board Staff submitted that nothing had changed since EBRO 491 and that the Board should confirm its previous decision to exclude the costs of Mr. Graat's vehicle from rate base.

2.4.5 NRG argued that Mr. Graat required transportation to do his job at the Company and should not be expected to manage the Company from his office.

Board Findings

2.4.6 The Board notes that NRG indicated that basically nothing has changed relative to the use of Mr. Graat's vehicle. Additionally, Mr. Suchard was unable to provide any information about "perks" for part-time executives.

2.4.7 The Board therefore finds that the cost of Mr. Graat's vehicle should not be included in rate base. The Board, however, agrees with NRG that Mr. Graat should not be required to manage the Company from his office. The Board deals with this matter, along with the depreciation expense implications of excluding Mr. Graat's vehicle from rate base, in Chapter 3 of this Decision.

2.4.8 Excluding Mr. Graat's vehicle from rate base will decrease NRG's gross plant in fiscal 1998 by \$37,891 and in fiscal 1999 by \$39,946. This finding will also result

in a reduction of the capital cost allowance used by the Company in its calculations of income tax by \$5,035 in fiscal 1998 and \$3,787 in fiscal 1999.

2.5 IMPACT OF THE BOARD'S FINDINGS ON UTILITY RATE BASE

2.5.1 As a result of the ADR Agreement and the Board's findings in this Chapter, NRG's rate base for fiscal 1998 and 1999 will be \$8,234,572 and \$8,938,508 respectively. The impact statements showing the results of the Board's findings are set out in Appendix B.

3. UTILITY INCOME

3.1 OPERATING REVENUE

3.1.1 This segment of this Chapter deals with:

- the number of Rate 1 industrial customers forecast for fiscal 1999; and
- forecast volumes for these customers for fiscal 1999.

Number of Rate 1 Industrial Customers - 1999

3.1.2 The forecast provided by NRG indicated that there would be 24 Rate 1 industrial customers in 1999.

3.1.3 NRG indicated that there had been a steady increase in the number of Rate 1 industrial customers since 1996 and this trend was expected to continue into fiscal 1999. The recent history of Rate 1 industrial customer numbers is set out in the following table.

Fiscal Year	Forecast	Board-approved	Actual
1995	(Note 1)	17	17
1996	(Note 1)	16	17
1997	(Note 1)	17	22
1998 (Note 2)	23	23	
1999	24		
<p>Note 1: Prior to 1998, the Rate 1 industrial customer forecasts were not segmented from the Rate 3 industrial customer forecasts.</p> <p>Note 2: The proposed 1998 number was agreed to during the ADR process.</p>			

Positions of the Parties

3.1.4 Board Staff submitted that, for the past two years, actual number of Rate 1 industrial customers had been above the Board-approved level. Board Staff argued that an appropriate level of industrial customers could be determined by taking the average level of under forecasting from fiscal 1995 to 1997, or 2 customers, and adding this amount to NRG’s 1999 forecast to arrive at total of 26 Rate 1 industrial customers.

3.1.5 NRG argued that, if the Board believed that NRG had under forecast Rate 1 industrial customers, at most 2 additional customers should be added to the 23 accepted by Board Staff in fiscal 1998 as part of the ADR agreement, for a total of 25 Rate 1 industrial customers for fiscal 1999.

Board Findings

3.1.6 The Board notes that the actual number of customers in 1997 was significantly higher than forecast. Under forecasting of customer numbers may disadvantage NRG’s customers in that rates are higher than they would otherwise have been. Approving a number of customers that is greater than that which actually materializes does not have a negative effect on NRG’s actual customers. Weighing these factors, the Board finds that the appropriate number of Rate 1 industrial

customers for 1999 should be 26. The Board has not made any specific changes to rate base as a result of these additions, deeming the amount to be immaterial.

Volumes for Rate 1 Industrial Customers - 1999

3.1.7 NRG’s forecast of volumes from Rate 1 industrial customers in 1999 was 562,719 m³. Average use per customer in 1999 was forecast to be 23,824 m³, on a normalized basis.

3.1.8 The forecast was based on the use of the degree day methodology. The Company used degree day data provided by Environment Canada in its regression analysis. The results of the regression analysis were adjusted based on the judgment of the Company’s management.

3.1.9 The Company’s evidence on normalized volumes related to Rate 1 industrial customers was:

Fiscal Year	Forecast	Board-approved	Actual
1995	(Note 1)	691,700	653,271
1996	(Note 1)	299,062	369,758
1997	(Note 1)	288,670	721,629
1998 (Note 2)	867,647	867,647	
1999	562,719		
Note 1:	Prior to 1998, the Rate 1 industrial customer forecasts were not segmented from the Rate 3 industrial customer forecasts.		
Note 2:	The proposed 1998 volumes were agreed to during the ADR process.		

3.1.10 NRG stated that normalized use by Rate 1 industrial customers in fiscal 1997 was about 150 percent higher than forecast, partly due to the number of customers being 29.4 percent higher than forecast. According to the Company’s evidence, normalized Rate 1 industrial volumes were also above the Board-approved levels in 1996.

- 3.1.11 According to NRG, the updated forecast for 1998 was higher than originally calculated because of a larger than normal crop with a higher than normal moisture content. NRG also said that 1998 was an abnormal period due to higher than expected use by the grain dryers in the months of November and December, 1997. According to the Company, two factors were responsible for this occurrence, an extremely wet spring in 1997, which delayed planting and in turn made harvesting unusually late with a colder and wetter period for this activity, and a higher than normal moisture content in the crop that season.
- 3.1.12 The Rate 1 industrial throughput forecast for fiscal 1999 indicated a decline of 35.2 percent from fiscal 1998. NRG explained the reduction in the 1999 forecast as a return to normal use by the small grain dryers that dominate the Rate 1 industrial category.

Position of the Parties

- 3.1.13 Board Staff argued that the reduction in forecast volumes from 1998 to 1999 was very significant and there was no concrete data to support this drop. Basically, a judgment call had been made that the fiscal 1999 growing season would be “normal” while the past two years had been “abnormal”. Board Staff said that one indication of a good forecast was that the actual level of volumes should be expected to be above forecast level half of the time and under the forecast level half of the time. It was Board Staff’s contention that, in NRG’s case, there was a trend to under forecasting volumes.
- 3.1.14 Board Staff also submitted that the econometric model used had remained unchanged despite the evidence that there was a genuine need for a new forecasting model, which incorporated better weather information as it related to grain drying. Board Staff argued that, since NRG’s forecasting methodology was inadequate, it would be more accurate to determine the average normalized use per customer based on an average of the past four years of data.
- 3.1.15 Board Staff concluded that the appropriate level of Rate 1 industrial volumes for fiscal 1999 was 722,077 m³, based on multiplying the average use per customer

from 1995 to 1998 of 28,184 m³ by 26, the number of Rate 1 industrial customers considered appropriate by Board Staff.

3.1.16 NRG argued that, during 1995, volumes consumed in this category were below the Board-approved level, and only two years actually were under forecast, 1996 and 1997. NRG submitted that experience over two years does not constitute a trend.

3.1.17 As for the appropriate figure for average use per customer to be used for forecasting volumes for 1999, NRG was opposed to including the forecast fiscal 1998 figure of 37,723 m³ in the averaging process because of the uniqueness of the period.

3.1.18 NRG submitted that its rates should be set on the basis of normalized throughput, which in turn was based on normal conditions, whether those were heating degree days, growing degree days or moisture content. In sum, NRG's position was that its forecast for Rate 1 industrial volumes in fiscal 1999 was appropriate and reflected a return to normal conditions.

Board Findings

3.1.19 The Board is concerned that, recently, the results of NRG's forecasting methodology, after adjustment for management's judgment, have been highly inaccurate. The Board therefore directs NRG to undertake a review of its forecasting methodology, with the objective of identifying any improvements that can be introduced. The Board expects the Company to file the results of the review at the Company's next rates hearing.

3.1.20 The Board also directs NRG to document what is considered to be a "normal" year for Rate 1 industrial customers, in particular with respect to temperature, precipitation, crop size and crop moisture content. Further, NRG is directed to indicate how such a "normal" year assumption would be applied in its forecasting. The explanation should be filed at NRG's next rates hearing so that the description may be tested during the proceeding.

3.1.21 Given the Board's finding earlier in this Chapter, that the Company's forecast of Rate 1 industrial customers should be 26, the Board finds that an additional 47,648 m³ [23,824 m³ x 2] should be included in the Company's forecast of volumes related to Rate 1 industrial customers for 1999.

3.1.22 The Board will not substitute a forecast based on averages for that produced by the Company. The Board finds that the appropriate volume to be included in the 1999 fiscal year for Rate 1 industrial customers is 610,367 m³.

3.1.23 The Board directs NRG to file annually with the Board Secretary the actual volumes consumed by Rate 1 industrial customers on a regular and normalized basis.

3.2 COST OF SERVICE

3.2.1 This segment of this Chapter deals with:

- 1998 gas commodity cost forecasts;
- 1999 gas commodity cost forecasts;
- the wages and benefits related to the executive payroll;
- transfers between wages category and management fees;
- costs, both operational and depreciation, related to Mr. Graat's vehicle;
- the depreciation expense related to the Yarmouth franchise;
- the methodology used by NRG in calculating capital taxes; and
- the methodology used by NRG in calculating income taxes.

Gas Supply Portfolio 1998

3.2.2 NRG’s gas commodity purchases for 1998 were forecast as:

Suppliers	Volumes * m ³	Commodity Costs \$
Norfolk	1,852,441	218,008
Hemlock	1,199,329	104,292
NRG Corp.	17,623,236	1,981,936
* Agreed to during the ADR process		

3.2.3 Two of NRG’s gas supply arrangements were with affiliates: NRG Corp., and Norfolk. Norfolk is owned by NRG Corp. For the 1998 test year, NRG has forecast that the Company would purchase approximately 85% of its gas supply from NRG Corp., and that the Company would buy approximately 9% of its gas supply needs from Norfolk.

3.2.4 With regard to the gas supplied by Norfolk, NRG stated that the pricing mechanism in this contract, which would expire in June, 1999, tied the price paid by NRG for the volumes purchased from Norfolk to Union’s gas supply commodity charge for utility sales. For the period June 1998 to September 1998, NRG forecast that the Company would purchase 619,828 m³ of gas from Norfolk.

3.2.5 With respect to its arrangements with NRG Corp., NRG stated that the Company had signed an agency agreement and a separate gas supply contract with NRG Corp. Both agreements will expire on September 30, 1998.

3.2.6 For the gas supply underpinned by NRG’s TransCanada PipeLines capacity, the Company indicated that NRG Corp. was paid a fixed price of \$0.108577 per m³. This price was determined at the end of September 1997, through negotiations between NRG and NRG Corp. The balance of the volumes forecast to be delivered by NRG Corp. were Ontario-delivered supplies and the price forecast for this supply was \$0.124470 per m³. NRG’s price forecast for Ontario-delivered volumes was based on recent market information obtained by NRG. NRG said, however, that the

Company was not bound to buy gas from NRG Corp. for any needed Ontario-delivered volumes, but could instead buy these volumes from another supplier.

- 3.2.7 NRG forecast an average gas commodity cost of \$0.111450 per m³ in fiscal 1998, prior to any adjustment arising from the Board's findings on Union's EBRO 494-09 application. To the extent that there are any differences in gas prices for fiscal 1998, these would be captured in NRG's PGVA account and disposed of by the Board at a future date.

Position of the Parties

- 3.2.8 Board Staff submitted that the prices forecast to be paid to NRG's gas suppliers for fiscal 1998 were reasonable. However, Board Staff indicated a residual level of discomfort with the transactions with NRG Corp. for fiscal 1998 because NRG did not solicit bids from other potential suppliers prior to entering into arrangements with its affiliate.

- 3.2.9 NRG submitted that the Board had approved the EBRO 494-09 Union application on May 26, 1998, resulting in an increase of Union's gas commodity price to \$0.131160 per m³ effective June 1, 1998, with a resulting increase of \$0.013794 per m³. NRG determined that this increase in the price resulted in an additional cost of gas for Norfolk purchases of \$8,550 over the June to September period. NRG argued that the Board should take this approved price change into consideration when setting the gas commodity price, and approve a commodity cost of gas of \$0.111864 per m³ for fiscal 1998.

Board Findings

- 3.2.10 The Board notes that the situation with regard to NRG's purchase of gas will change in 1999, and comments on it in the next section.
- 3.2.11 The Board finds that NRG's revised forecast of gas supply commodity costs based upon the Board-approved EBRO 494-09 rates for Union is reasonable. NRG's forecast of gas costs of \$0.111864 per m³, the weighted average cost of gas ("WACOG"), for fiscal 1998 is found to be appropriate by the Board.

Gas Supply Portfolio 1999

3.2.12 NRG’s gas commodity purchases for 1999 were forecast as:

Suppliers	Volumes * m³	Commodity Cost \$
Norfolk	1,673,536	196,416
Hemlock	1,042,438	90,650
NRG Corp.	18,218,379	2,289,404
* Agreed to during the ADR process		

3.2.13 NRG stated that, in fiscal 1999, the Company was planning to issue a tender for the volumes previously delivered by NRG Corp. NRG suggested that the tendering might be done directly by NRG or by NRG Corp. in exchange for a fee. NRG was also prepared to accommodate whatever suggestions or orders the Board might make on how the gas supply arrangements might be priced.

3.2.14 The Company’s witnesses indicated that there was a relatively high degree of uncertainty associated with the forecast of volumes required because of the Company’s proposal to introduce the option of direct purchase to all its customers.

Position of the Parties

3.2.15 Board Staff submitted that NRG’s forecast cost of gas for fiscal 1999 was reasonable given the state of developments and the high degree of uncertainty in NRG’s 1999 gas supply portfolio.

- 3.2.16 Board Staff submitted that any variance in the 1999 cost of gas could be dealt with in one of two ways:
- by the Board's directing that NRG file a revised 1999 forecast along with a forecast year-end PGVA balance sometime before the start of the 1999 test year, with a decision to be made at that time on whether the 1999 gas costs should be changed given the new information; or
 - the Board could rely on the existing PGVA trigger threshold mechanism approved in the EBRO 491 Decision, recognizing the change in the gas commodity charge under EBRO 494-09.
- 3.2.17 Board Staff also noted that NRG planned, for fiscal 1999, on tendering for the volumes previously supplied by NRG Corp. and was encouraged by this determination. In Board Staff's opinion, this would ensure that NRG would realize the lowest available market price for its gas supply. Board Staff noted that NRG Corp. did not need to be excluded from making a bid provided the tendering process was arranged in such a way that no advantage accrued to the affiliate company.
- 3.2.18 NRG submitted that the Board-approved increase in Union's gas commodity cost would result in an increased cost of gas for Norfolk purchases of \$23,085, which would raise the total commodity cost of gas by \$0.001103 per m³ from \$0.123074 per m³ to \$0.124177 per m³. NRG argued that the Board-approved commodity cost of gas for fiscal 1999 be set at \$0.124177 per m³.
- 3.2.19 NRG also argued that the existing PGVA trigger threshold was the appropriate mechanism to deal with the uncertainty surrounding gas costs in fiscal 1999. In the Company's opinion, this mechanism provided a proven process through which gas cost variances could be dealt with.

Board Findings

- 3.2.20 As indicated previously in this Chapter, the Board approved an increase in Union's gas commodity rate to \$0.131160 per m³ effective June 1, 1998.
- 3.2.21 The Board finds that NRG's revised forecast of gas supply costs based upon the Board-approved EBRO 494-09 rates for Union is reasonable. NRG's submission of a WACOG of \$0.124177 per m³ for fiscal 1999 is accepted by the Board.
- 3.2.22 Earlier in this Chapter, the Board has found that the Company's forecast of gas volumes to be sold should increase by 47,648 m³. Consequently, the Board finds that the gas purchased volume should also increase by this amount. Applying the Board-approved WACOG, this results in an increase in the 1999 forecast cost of gas of \$5,917. The Board has used WACOG in this calculation because of the immaterial difference between WACOG and the incremental cost of gas for NRG.
- 3.2.23 The Board finds that the existing PGVA trigger threshold mechanism should continue as the appropriate method for dealing with uncertainty surrounding gas costs in fiscal 1999.
- 3.2.24 The Board directs NRG to proceed with its plan to tender for non-local gas volumes that would otherwise be supplied by an affiliate. This will meet the Board's concerns that NRG and, hence, its customers should realize the lowest available market price for the Company's gas supply.
- 3.2.25 The Board expects that NRG will manage the tendering process itself, and that NRG Corp. will not be excluded from tendering, provided that the affiliate does not benefit from its affiliate status.

Executive Payroll

- 3.2.26 NRG proposed a salary range for Mr. Graat for fiscal 1998 and 1999 of \$65,000 to \$75,000. The evidence indicated that on average Mr. Graat spent about 15-20 hours per week on various responsibilities and duties relating to NRG.

- 3.2.27 In the EBRO 491 Decision, paragraph 2.7.19 indicated that “the Board expects NRG to develop a comparative standard to measure the appropriateness of Mr. Graat’s executive compensation package”. A study completed by Mr. Weston Suchard responded to the Board’s directive.
- 3.2.28 Mr. Suchard said that he relied mainly on a national compensation survey for 1997 prepared by Morneau Sobeco Coopers & Lybrand and on conversations with the Company’s management on Mr. Graat’s role and responsibilities. He also stated that he had little knowledge of part-time compensation, utility companies or how executives of utility companies are generally compensated. In addition, Mr. Suchard indicated that utility companies were not included in the survey he relied on to conduct his analysis.
- 3.2.29 Mr. Suchard concluded that “it would be reasonable for the Company to pay Mr. Graat a salary in the range of \$65,000 to \$75,000”. In addition, NRG indicated that Mr. Graat does not receive any other form of compensation from the utility, outside of a company vehicle.

Position of the Parties

- 3.2.30 Board Staff argued that, while Mr. Suchard’s evidence did provide some insight into executive compensation, there was a lack of evidence related to part-time executive and utility executive compensation. Board Staff therefore submitted that the study was inconclusive about the appropriateness of Mr. Graat’s compensation level as a part-time executive in a utility operation.
- 3.2.31 Board Staff submitted that a disallowance of 25% of Mr. Graat’s salary was necessary. Given that a salary range of \$65,000 to \$75,000 had been identified for Mr. Graat, Board Staff argued that a reduction of \$17,500 to the utility cost of service was appropriate.
- 3.2.32 NRG argued that it had more than adequately fulfilled the Board’s EBRO 491 directive with respect to Mr. Graat’s executive compensation package, and that no reduction should be made to the cost of service with respect to Mr. Graat’s salary.

Board Findings

3.2.33 The Board is disappointed that Mr. Suchard’s study did not include evidence on the salaries paid to part-time executives or executives within the regulated utility industry.

3.2.34 Nevertheless, the Board finds that the salary of \$65,000 for Mr. Graat’s services to NRG is acceptable for each of 1998 and 1999, taking into account the evidence that this represents approximately one third of the range for full-time executive compensation. However, the Board stresses that it needs to be satisfied on an ongoing basis that the ratepayers are getting value for Mr. Graat’s services.

Transfers Between Wages and Management Fees

3.2.35 In 1998, according to NRG, accounting services that were provided by NRG in 1997 would be provided by a new Financial Manager position within Cornerstone Properties Inc. (“Cornerstone”), an affiliate of NRG, and charged back to NRG through a management fee.

3.2.36 The Company also said that the Financial Manager provided services to two or three other affiliate companies. However, the position was physically located in NRG’s building in Aylmer.

Position of the Parties

3.2.37 Board Staff submitted that NRG should be directed to locate the Financial Manager position, charged out to other companies on an as needed basis, within the regulated utility because:

- the majority of the Financial Manager’s responsibilities (i.e. 75% of his time commitment) relate to NRG and include supervisory duties at NRG; and
- it is physically located at NRG’s Aylmer office.

- 3.2.38 Board Staff also submitted that NRG's current time studies did not provide an accurate indication of future time commitments of the Financial Manager position, which made it difficult to determine the related costs on a prospective basis.
- 3.2.39 NRG submitted that the location of the Financial Manager position within Cornerstone provided the Company with greater flexibility through the cost sharing of the function. NRG also expected the time commitment of the Financial Manager to change, with the possibility that the Company might require less time from the Financial Manager in the future. NRG also revealed that, to date, it had not experienced conflicting priorities resulting from the structure of the position.
- 3.2.40 NRG argued that its use of an employee of Cornerstone as Financial Manager was not a new practice, but rather a reversion to previous arrangements.

Board Findings

- 3.2.41 The Board notes that whether the Financial Manager position is within NRG or within Cornerstone should have no overall cost impact in fiscal 1998 and fiscal 1999.
- 3.2.42 For fiscal 1998 and fiscal 1999, the Board finds that the current position of the Financial Manager as an employee of Cornerstone, which charges back an appropriate management fee to NRG, is acceptable.

Costs Related to Mr. Graat's Vehicle

- 3.2.43 The Company stated that Mr. Graat utilized a company vehicle for transportation while providing services for NRG. Automotive expenditure for this vehicle was also included in the forecast cost of operation and maintenance for both fiscal years.

3.2.44 NRG provided the following forecasts for each test year regarding Mr. Graat’s vehicular expenses:

Category	1998	1999
Automotive Expense	\$500	\$500
Depreciation Expense	\$7,741	\$10,713

Positions of the Parties

3.2.45 Board Staff submitted no argument on the subject of automotive expense allowances for Mr. Graat’s vehicle.

3.2.46 NRG argued that Mr. Graat required transportation to travel to Aylmer and to attend meetings in Toronto, and in general to carry on the work of the Company. NRG noted that Mr. Graat cannot manage the company solely from his office at NRG’s headquarters.

Board Findings

3.2.47 In the light of the Board’s finding regarding the unacceptability of including Mr. Graat’s vehicle in the rate base, the Board finds that NRG should include \$500 for each test year in its cost of service for Mr. Graat’s automotive expenses.

3.2.48 The Board also finds that depreciation expenses of \$7,741 in fiscal 1998 and \$10,713 in fiscal 1999 should be excluded from NRG’s cost of service calculation.

Depreciation Expense Related to the Yarmouth Franchise

3.2.49 According to NRG, the Company’s proposed depreciation rate for franchises was calculated by dividing the net book value of all franchises by the remaining life of the franchise agreements.

3.2.50 For 1998 and 1999, assuming as the Company did, that the net book value should include the proposed cost of the Yarmouth franchise, the proposed depreciation rate was 4.33 percent. Applied on a straight line basis to the cost of the Yarmouth franchise, this results in \$2,423 being included in cost of service as depreciation of the Yarmouth franchise in fiscal 1998 and \$3,230 in fiscal 1999.

Positions of the Parties

3.2.51 Neither party made specific submissions on the subject of either the depreciation rate that would be applicable to the Yarmouth franchise or the amount of the depreciation relating to the Yarmouth franchise.

Board Findings

3.2.52 In Chapter 2 of this Decision, the Board found that the costs of obtaining the franchise for the Township of Yarmouth, as estimated by the Company, should be included in rate base. Consequently, the Board finds that:

- these costs are properly included in the calculation of the depreciation rate to be applied to capitalized franchise costs;
- the rate of 4.33 percent is appropriate; and
- the depreciation expense to be included in NRG's cost of service for fiscal 1998 and fiscal 1999 is \$2,423 and \$3,230 respectively.

Capital Tax

3.2.53 Companies with assets of over \$10 million are required to pay the large corporations tax (also known as the federal capital tax). NRG, as a stand alone entity, had taxable capital employed in Canada of about \$6 to \$7 million, which was substantially less than the \$10 million threshold that identifies a large corporation.

3.2.54 NRG explained that, for federal capital tax calculation purposes, the Company was considered together with other affiliated companies that were also owned by Mr.

Graat. Consequently, the Company was not exempt from the large corporations tax, as the assets of the affiliated companies, when grouped together, amounted to more than \$10 million.

- 3.2.55 The level of federal capital tax that NRG forecast for fiscal 1999 was \$10,317. The federal capital tax figure for fiscal 1998 was \$6,626.

Position of the Parties

- 3.2.56 Board Staff submitted that it was standard regulatory practice to treat a utility as a stand alone entity for regulatory tax purposes. In Board Staff's opinion, NRG should be held to the same regulatory standard as other utilities.

- 3.2.57 Board Staff argued that ratepayers should not have to pay higher taxes because of NRG's affiliate relationships. Ratepayers should not have to subsidize or pay any taxes related to unregulated activities. As a result, Board Staff submitted that NRG should be directed to remove from the utility's cost of service the \$10,317 identified as the federal capital tax for fiscal 1999 and \$6,626 identified as the federal capital tax for fiscal 1998.

- 3.2.58 NRG maintained that the Company obtained benefits from its association with the Graat group of affiliated companies. NRG indicated that the chief benefits were access to financing and management support. According to the Company, therefore, it was appropriate to treat NRG as part of the group for tax purposes.

Board Findings

- 3.2.59 The Board notes that the avoidance of cross-subsidization between regulated and non-regulated activities of a company or group of companies is a key principle in regulation. While there may be benefits to NRG from being part of the Graat group of affiliated companies, there are benefits to other entities within the group from the presence of NRG within the family. NRG's management fee compensates the Graat group of affiliated companies for any access to financing or management support provided.

3.2.60 Consequently, the Board finds that NRG should be treated as a stand alone entity for purposes of calculating the federal capital tax to be included in NRG's cost of service. Therefore, NRG is directed to remove \$10,317, identified as the federal capital tax for 1999, and \$6,626, identified as the federal capital tax for 1998, from the utility's cost of service for those fiscal years.

Income Tax

3.2.61 NRG's witnesses testified that, for income tax purposes, all the Graat companies were pooled and taxes payable calculated on the consolidated finances of these companies. The Company stated that it paid two levels of taxes: provincial and federal.

3.2.62 NRG received a Small Business Deduction at both the provincial and federal levels. Surtaxes were also applied to the Company at both the provincial and federal levels.

3.2.63 NRG indicated that the surtax and the Small Business Deduction offset one another at the provincial level, so that the net impact was zero. In its presentation of income taxes, NRG included an amount for the federal corporate surtax but did not reduce the amount shown for the federal Small Business Deduction.

Positions of the Parties

3.2.64 Board Staff submitted that, for regulatory purposes, NRG should have included in the Company's cost of service only the level of taxes appropriate for a stand alone entity, regardless of its association with other companies. Furthermore, Board Staff argued that a proper filing of tax calculations, including all the appropriate deductions, should be expected from NRG as part of its regulatory filing.

3.2.65 Board Staff submitted that NRG was entitled to the federal Small Business Deduction. This deduction should have been included in the calculation of income tax for regulatory purposes. Therefore it was Board Staff's position that the income tax calculation has been over stated by an amount corresponding to the Small Business Deduction, i.e., 16% of the first \$200,000 of income or \$32,000.

Consequently, income taxes included in the Company's cost of service should be reduced by this amount for each of the test years 1998 and 1999.

- 3.2.66 NRG argued that the Company should be allowed to recover in its cost of service the total income tax that the Company expected to pay.

Board Findings

- 3.2.67 As previously stated, the Board is a strong proponent of the principle of avoidance of cross-subsidization. Consequently, the Board finds that NRG should be treated as a stand alone entity for purposes of calculating the income tax to be included in NRG's cost of service.

- 3.2.68 The Board finds that, since NRG should be entitled to the federal Small Business Deduction, this deduction must be included in the calculation of income tax for regulatory purposes. Therefore, the Board directs the Company to reduce the amount allowed in the cost of service for income taxes by \$32,000 for each of the 1998 and 1999 test years.

- 3.2.69 The Board also directs NRG to include in its filings for future rate hearings, a detailed calculation of the income taxes included in the Company's cost of service, showing any surtaxes that the Company must pay and any deductions to which the Company, considered on a stand alone basis, is entitled.

- 3.2.70 The Board holds that interest expense deductions allowed in determining NRG's taxable income must include the interest calculated on all components of the capital structure approved by the Board for rate making purposes. The Board therefore has incorporated the interest associated with the unfunded debt component of the capital structure in the net interest expense deducted in determining NRG's taxable income.

3.3 IMPACT OF THE BOARD'S FINDINGS ON UTILITY INCOME

3.3.1 As a result of the ADR Agreement and the Board's findings in this Chapter, NRG's utility income for fiscal 1998 and 1999 will be \$1,210,766 and \$1,122,689 respectively. The impact statements showing the results of the Board's findings are set out in Appendix B.

4. COST OF CAPITAL

4.0.1 This Chapter of the Decision deals with:

- capital structure;
- cost of equity; and
- cost of debt.

4.0.2 In the EBRO 491 Decision, the Board requested that NRG prepare a long-term financing strategy report. The goal, in the Board's view, was to provide "independent, objective information, supported by the appropriate theoretical underpinnings, for a company as unique as NRG". That report (the "Crosbie Report") was completed and filed in this proceeding. The Crosbie Report provided expert advice on: NRG's business risk, appropriate debt to equity ratios, likely long-term debt costs, the availability of third party financing and prepayment penalty clauses.

4.1 CAPITAL STRUCTURE

4.1.1 NRG requested a deemed equity ratio of 50 percent, although the Company's actual equity ratio was forecast to be 51.02 percent in fiscal 1998 and 52.14 percent in fiscal 1999, before any adjustments arising from the ADR Agreement. According to NRG, the Company's request for a deemed equity ratio of 50 percent was based on two independent studies: the Crosbie Report, and the Opinion on Required Equity Risk Premium of Foster Associates, Inc.

- 4.1.2 The Crosbie Report concluded that NRG's capital structure should have a long-term equity target of between 50 percent and 60 percent. According to Mr. Bowman and Mr. McLelland, NRG's witnesses from Crosbie Houlihan Lokey Inc., (the "Crosbie witnesses") the rationale for this was the perspective given in the Crosbie Report on the impact of NRG's size on business risk and the expectations of the marketplace.
- 4.1.3 Ms. McShane, of Foster Associates, another witness on behalf of NRG, recommended that NRG should have a deemed common equity ratio of 50 percent. Ms. McShane stated that, in her approach, it is the deeming of a capital structure (i.e., establishing the weighting of the capital components) that is the mechanism to adjust for relative business risk rather than adjusting the percentage cost of, or return on, equity.
- 4.1.4 There was also a discussion in the evidence of the appropriateness of NRG's actual equity ratio as opposed to a deemed component. Ms. McShane held that the Board should not focus on the actual ratio unless "the actual ratio is the optimal equity ratio".

Positions of the Parties

- 4.1.5 Board Staff acknowledged that the optimal balance of equity within the capital structure cannot be divorced from the return on, or cost of, that equity. Board Staff noted that Ms. McShane's oral and written evidence was compelling. Secondly, in Board Staff's opinion, any Board-approved capital structure would form the cornerstone of NRG's capital structure and should not vary with changes in the actual equity ratio or without significant cause.
- 4.1.6 Board Staff submitted that deeming a 50 percent equity ratio would have very little impact on NRG's proposed revenue requirement, since the Company's proposed equity ratios for fiscal 1998 and fiscal 1999 were approximately 50 percent.

- 4.1.7 NRG submitted that the Board should approve the Company's proposal, i.e., an equity ratio of 50 percent. The Company argued that this deemed equity component was consistent with its business risk.

Board Findings

- 4.1.8 The Board notes that the recommendations of Board Staff, Ms. McShane and the Crosbie witnesses are congruent. The Board finds that a deemed 50 percent debt to equity ratio for NRG is appropriate for fiscal 1998 and fiscal 1999.

- 4.1.9 The Board wishes to emphasize that this is a "deemed" debt/equity ratio, and is not a finding that the actual debt to equity ratio is appropriate. The deeming of the 50 percent ratio would be the Board's decision even if the actual debt to equity ratio was different.

4.2 COST OF EQUITY

Required Risk Premium

- 4.2.1 Ms. McShane presented analysis on the issue of business risk and concluded that NRG's business risk relative to that of Consumers Gas had not changed materially since EBRO 491. The analysis focused on customer base and size-related factors. Ms. McShane found that, as a small company, NRG had fewer opportunities to spread the risk, could be more susceptible to negative events, had fewer financing options and attracted less financial institutional interest.

- 4.2.2 Ms. McShane recommended that the Board allow an equity risk premium equal to that of Consumers Gas, provided that the Company was allowed a deemed common equity ratio of 50 percent. Ms. McShane stated that "the common equity ratio of NRG offsets the differential level of business risk relative to Consumers, ... there's no need for any adjustment to Consumers Gas' equity risk premium" and "that an approximate fifteen ... percentage point spread between the two common equity ratios; that is, 35% for Consumers Gas and 50% for NRG, would equate the companies' total risk."

4.2.3 Ms. McShane also noted that “the appropriate risk premium based on a 50% common equity ratio is not directly related to the fact that ... they [NRG] happen to have around 50 [percent] this year.”

4.2.4 Ms. McShane noted that the Board had applied a significantly higher common equity risk premium to the 40 percent equity element allowed by the Board in EBRO 491. Additionally, Ms. McShane asserted that a 40 percent ratio would only partially compensate equity investors for the differences in business risk between Consumers Gas and NRG and would, therefore, command a higher risk premium than a 50 percent equity ratio.

4.2.5 With respect to business risk, the Crosbie Report concluded that NRG faced significantly higher business risks than Consumers Gas and Union because of NRG’s restricted franchise area, economic and weather-related risks, dependency on a single industry or small group of consumers, forecast risks and the market impact of deregulation.

Positions of the Parties

4.2.6 Board Staff agreed with both Ms. McShane and the Crosbie Report that NRG had an inherently higher business risk profile than Consumers Gas. NRG’s recent good performance and the growth opportunities available to the Company did not negate the underlying risk characteristics. Board Staff submitted that the tone of the Crosbie Report was unduly negative in light of NRG’s progress in customer additions and system improvements. Board Staff suggested that the Crosbie Report’s conclusions were weakened by lack of experience with regulated utilities, the use of generic material and selection of publicly-traded comparables.

Board Findings

4.2.7 Given the consensus of opinions among the witnesses, the Board finds that NRG does indeed have a higher business risk than Consumers Gas. The Board finds that the difference in business risk is fully accounted for by the larger deemed equity component approved for NRG.

- 4.2.8 The Board notes that, while the Crosbie Report was helpful, it reflects a lack of experience with, and reference to, regulated utilities in its conclusions.

Rate of Return on Equity

- 4.2.9 Subsequent to the EBRO 491 decision, the Board moved to adopt a formula-based return on common equity for regulated utilities.
- 4.2.10 Ms. McShane presented evidence indicating that, if the Board imposed a deemed 50 percent equity ratio, the deemed equity component would allow for the greater business risk of NRG versus Consumers Gas. For 1998, Ms. McShane's opinion was that this deemed equity should be allowed a rate of return of 10.30 percent, the same cost of equity awarded to Consumers Gas.

Positions of the Parties

- 4.2.11 Board Staff submitted that, for 1998, if the Board approved a deemed 50 percent equity ratio, it would be appropriate for NRG to be allowed the same cost of equity as approved by the Board for Consumers Gas in EBRO 495. Similarly, Board Staff argued that there should be no equity premium applied over that of Consumers Gas for the 1999 test year. Board Staff suggested applying the Board's formula using the most current Consensus Forecasts available at the time of the Decision to determine the 1999 rate.
- 4.2.12 NRG also submitted that a cost of equity equivalent to that allowed to Consumers Gas in its most recent proceeding should be applied to a deemed 50 percent equity. NRG agreed with Board Staff's suggestion on the calculation of the 1999 cost of equity.

Board Findings

- 4.2.13 Given the Board's finding on the appropriate debt to equity ratio for NRG, the Board finds that a 10.30 percent rate of return on equity should be allowed for 1998.

4.2.14 The formula used to adjust the 1998 return on equity reflects interest rate changes between the August 1997 and July 1998 Consensus Forecasts. This results in a 9.50 percent rate of return on equity for 1999. The Board finds that this percentage should be used in the determination of the NRG's revenue requirement for 1999.

4.3 COST OF DEBT

Standby Fee

4.3.1 NRG stated that, pursuant to an amendment of its loan agreement with Junsen, an affiliated company, in February 1998, Junsen provided NRG with a line of credit of not more than \$1.3 million with a standby fee, to be paid to Junsen, of 1 percent per annum on the unused balance. The estimated outstanding loan balance was forecast as \$278,339 in 1998 and \$484,104 in 1999.

4.3.2 The Crosbie witnesses expressed the view that the standby fee and the prepayment penalty negotiated with Junsen were reasonable and normal in the industry. These witnesses indicated that the rate for a standby fee "may be as high as 1.0%" and "it is our view that 1% of the unused facility for this type of loan would not be unreasonable under the circumstances".

Positions of the Parties

4.3.3 Board Staff noted that while such a fee is not unusual, at 1 percent it is at the high end of the range, as acknowledged by the Crosbie Report. Board Staff argued that the allowed amount of carrying cost of the debt should be reduced in two ways:

- the standby fee should be reduced from 1.0% to 0.75%; and
- the level of the line of credit should be reduced, since the unused portion was forecast to be approximately \$1 million in 1998 and approximately \$800,000 in 1999.

4.3.4 NRG submitted that the total cost of the line of credit was reasonable. NRG argued that the full credit facility of \$1.3 million was required to cover all contingencies in the test years, including the impact of Board findings; warmer weather in 1998 and, potentially, in 1999; smaller tobacco crops; and other factors. NRG contended that these factors could put the Company at financial risk and if the credit facility was exhausted, NRG would be forced to seek additional financing at higher rates than those negotiated under the amendment of the Junsen loan agreement.

Board Findings

4.3.5 The Board finds that the 1 percent standby fee recoverable in cost of service should be reduced to 0.75 percent. The Board also finds that the level of the line of credit on which the standby fee is calculated for cost of service purposes should be reduced to \$500,000.

4.3.6 The Board notes that the standby fee is described as being at the high end of the range and believes that a transaction with an affiliate should be, if not at the low end, at least towards the middle of the range. The Board also notes that, during the 1998 test year, NRG does not intend to avail itself of the line of credit and, for test year 1999, the amount needed will be only \$220,000. This means that if NRG earns higher net income or reduces its capital expenditures for the fiscal year 1999, the full amount will not be needed.

- 4.3.7 These changes would reduce the standby fee costs for 1998 (8 months) to \$2,500 from the \$6,717 indicated in the evidence. For 1999, the fee would be reduced to \$2,100 from \$7,875.
- 4.3.8 The Board's finding will also reduce the cost of long-term debt recoverable in cost of service from 11.85 percent in fiscal 1998 to 11.74 percent and from 11.72 percent in fiscal 1999 to 11.59 percent.

Long-term Debt — Terms and Conditions

- 4.3.9 NRG stated that the Company had an outstanding loan with Imperial Life Assurance Company ("Imperial Life") with various covenants attached to it. The Company noted that NRG had been in breach of the covenant related to capital expenditures for the year ended September 30, 1997.
- 4.3.10 Mr. Blake admitted that the covenant would continue to be breached as capital expenditures were forecast to exceed the limits specified in the covenant. The limits on capital expenditures as specified in the loan agreement were \$525,000 for fiscal 1998 and \$550,000 for fiscal 1999. NRG's capital expenditures for 1998 and 1999 were forecast to be \$1,818,444 and \$1,140,087 respectively.
- 4.3.11 While NRG did not expect the loan agreement to be terminated because of the breach of the covenant, Imperial Life had refused to waive this covenant. The evidence indicated that this was a potential problem since the penalties could be as high as \$1,126,000, although the terms regarding the penalties were ambiguous.
- 4.3.12 The Company said that, although negotiations continued between NRG and Imperial Life on the loan covenants, nothing had been resolved.

Positions of the Parties

- 4.3.13 Board Staff submitted that the Board needed to be kept informed of any developments with Imperial Life, NRG's senior lender. Board Staff was concerned that if there was a hardening of Imperial Life's position with respect to covenant contraventions, the likelihood of penalties could increase.

Board Findings

4.3.14 The Board believes that the covenant contraventions could have a serious impact on the financial viability of NRG, particularly in light of the evidence submitted concerning the difficulty of a company such as NRG being able to obtain financing.

4.3.15 Consequently, the Board directs NRG to file with the Board Secretary correspondence relating to loan covenants, requests for waivers and any item relating to the violation of covenants, as such documentation originates. If the Company feels that this information is confidential, it may be filed with the Energy Returns Officer.

4.4 IMPACT OF THE BOARD’S FINDINGS ON COST OF CAPITAL

4.4.1 The cost of capital resulting from the ADR Agreement and the Board’s findings in this Chapter is:

Capital Component	Fiscal 1998		Fiscal 1999	
	Per ADR Impact Statement	Per Board	Per ADR Impact Statement	Per Board
Long-term Debt	11.85%	11.74%	11.72%	11.59%
Short-term Debt	7.53%	7.53%	7.75%	7.75%
Common Equity	10.30%	10.30%	10.10%	9.50%

4.4.2 The resulting cost of capital, as adjusted for the Board’s findings, will be 11.06 percent for fiscal 1998 and 10.49 percent for fiscal 1999. The impact statements showing the results of the Board’s findings are included in Appendix B.

5. RATE DESIGN

5.0.1 This Chapter deals with:

- revenue to cost ratios;
- rate unbundling;
- the disposition of the fiscal 1998 revenue sufficiency;
- rate restructuring; and
- long-term changes to rates.

Revenue to Cost Ratios

5.0.2 The prefiled evidence of NRG shows that its historical and proposed revenue to cost ratios are:

Customer Classes	1998 at 1997 rates	1998 Proposed	1999 Proposed
Rate 1 - residential customers	.8745	.8921	.9174
Rate 1 - commercial customers	1.2583	1.1817	1.1711
Rate 1 - industrial customers	1.3083	1.2998	1.1064
Rate 2 - seasonal customers	1.1729	1.0322	1.0323
Rate 3 - firm customers	1.591	1.1662	1.1071
Rate 3 - interruptible customers	1.0079	1.0076	.9723

- 5.0.3 Mr. Aiken, NRG's witness, explained that the intent of the proposed rate design was to reduce the rates paid by NRG's non-residential customers, in rate classes 1, 2 and 3, while proposing a small increase in rates to residential customers in rate class 1. He indicated that the proposed rate design was part of a long-term process of improving residential revenue to cost ratios.

Positions of the Parties

- 5.0.4 Board Staff made no specific submission on revenue to cost ratios.
- 5.0.5 NRG indicated that customers in rate classes with ratios of more than 1.0 were over contributing in relation to the costs that were allocated to that customer class. Conversely, customers in rate classes with ratios of less than 1.0 were under contributing.

Board Findings

- 5.0.6 The Board has espoused, in previous NRG proceedings the concept of cost-based rates. However, to minimize the possibility of rate shock on the captive Rate 1 residential customers, the Board directs NRG to maintain, for fiscal 1999, the revenue to cost ratio of Rate 1 residential customers at .8745, subject to adjustment for the ADR Agreement and the Board's findings on rate design and customer impacts appearing later in this Chapter. The Board also directs the Company to allocate the impact of the Board's findings in this rate case in such a way that the movement toward cost-based rates continues for all other classes of NRG's customers.

Rate Unbundling

- 5.0.7 NRG proposed to unbundle all three rate structures to allow customers to supply their own natural gas. The Company designed a "Bundled Direct Purchase Contract Rate" ("BT1") to enable NRG to pass the costs of transporting gas to Ontario to direct purchase customers or their agent(s).

5.0.8 The Company stated that the delivery charge would be based on the cost of service within NRG's franchise plus the cost of storage, load balancing and transportation across the Union franchise that NRG pays under Union's M9 rate. The Company proposed to bill the delivery charge to the direct purchase customers, or their agent(s), on a monthly basis.

5.0.9 However, NRG's witnesses did not provide detailed information concerning the proposed service. The Company indicated that none of the customer documentation had yet been prepared.

Positions of the Parties

5.0.10 NRG stated that the Company's proposal to unbundle the gas supply charge from the delivery charge across Rates 1, 2 and 3 would facilitate the use of the direct purchase option by all of NRG's customers. NRG's witnesses said that the change would also bring NRG more in line with the other utilities in Ontario and eliminate the need for gas supply credits for Rate 3 customers who elected to supply their own natural gas.

5.0.11 Board Staff stated its support for the proposed separation of gas commodity costs from the utility transportation and distribution costs in the rates proposed for all customer classes, and for the proposed concept that unbundled T-service (transportation service) should be available to all customers.

5.0.12 Board Staff submitted that NRG should, however, submit the documentation related to its proposed ABC (Agent Billing and Collection) T-service to the Board for its review and approval before the ABC T-service was introduced. Consequently, Board Staff argued that the new ABC T-service, if approved by the Board, should not be available for customers until October 1, 1998. In Board Staff's opinion, NRG should be directed to file with the Board a complete package of all necessary customer documentation by August 1, 1998.

5.0.13 Board Staff also argued that approval of the proposed ABC T-service for NRG should be contingent upon NRG adopting the code of conduct previously developed by the Direct Purchase Industry Committee (now the Ontario Energy

Marketers Association), and ensuring that the code is observed by any marketers active in its franchised territory.

5.0.14 In its reply, NRG indicated that the Company agreed with Board Staff's submission that Rate 1 and 2 customers should have the option to become direct purchase customers, along with Rate 3 customers, after proper notice had been issued to all NRG's customers.

5.0.15 NRG also stated that the Company agreed with the conditions suggested by Board Staff, but was concerned that it might not be able to meet an August 1, 1998 filing deadline if the Company waited for the Board's Decision. As a result, NRG indicated its intention to move forward on this documentation and provide the material to the Board as soon as it was available.

Board Findings

5.0.16 The Board agrees with the concept of unbundled rates and notes that NRG has indicated its willingness to adopt the code of conduct developed by the Direct Purchase Industry Committee, and ensure that the code is observed by any marketers active in its franchise territory. However, the Board is concerned that the lack of supporting information regarding an unbundled service and the extent of review that will be required before the service is approved, could unduly delay the implementation of NRG's rate order. In the interest of timely implementation of NRG's fiscal 1999 rates, the BT1 rate is not approved at this time.

5.0.17 The Board will consider an application for a special rate to enable NRG to provide an unbundled service. The application should contain the necessary details on the operation of this service, a forecast of customer migration to this service and the impact on WACOG. It should also provide information about how NRG has addressed the fairness issue regarding the attribution of the cost of the load balancing component of gas supply commodity costs.