

National Energy Board

Reasons for Decision

**Alberta Natural Gas
Company Ltd**

RHW-1-92

September 1992

Tolls

National Energy Board

Reasons for Decision

**Alberta Natural Gas
Company Ltd**

**Complaint Respecting ANG's 30 January 1992
Amendment to Statement of Effective Rates
and Charges**

RHW-1-92

September 1992

© Minister of Supply and Services Canada 1992

Cat. No. NE22-1/1992-17E
ISBN 0-662-19991-x

This report is published separately
in both official languages.

Copies are available on request from:

Regulatory Support Office
National Energy Board
311 Sixth Avenue S.W.
Calgary, Alberta
T2P 3H2
(403) 292-4800
FAX: (403) 292-5503

Printed in Canada

Ce rapport est publié séparément
dans les deux langues officielles.

Exemplaires disponibles auprès du:

Bureau du soutien de la réglementation
Office national de l'énergie
311, 6^e avenue s.-o.
Calgary, Alberta
T2P 3H2
(403) 292-4800
Télécopieur: (403) 292-5503

Imprimé au Canada

Recital and Submitters

IN THE MATTER OF the *National Energy Board Act* ("the Act") and the Regulations made thereunder; and

IN THE MATTER OF a complaint by the Independent Petroleum Association of Canada ("IPAC") and Czar Resources Ltd. ("Czar") regarding the tolls for Alberta Natural Gas Company Ltd ("ANG"), under Part IV of the Act; and

IN THE MATTER OF the National Energy Board Hearing Order RHW-1-92;

EXAMINED by means of written submission

BEFORE:

R. Andrew	Presiding Member
R. Priddle	Member
A. Côté-Verhaaf	Member

SUBMITTORS:

Alberta Petroleum Marketing Commission

Alberta and Southern Gas Co. Ltd.

Canadian Petroleum Association

Chevron Canada Resources

Czar Resources Ltd.

Independent Petroleum Association of Canada

Table of Contents

Recital and Submitters	(i)
Abbreviations	(iii)
1. Background and Application	1
2. Capital Structure and Cost of Capital	3
2.1 Deemed Common Equity Ratio	3
2.2 Cost of Capital	5
2.2.1 Cost of Debt	5
2.2.2 Rate of Return on Common Equity	6
2.3 Rate of Return on Rate Base	9
2.4 Impact on Tolls	9
3. Other Matters	10
3.1 Regulatory Costs	10
3.2 Method of Regulation	10
3.3 Related Party Transactions	11
3.4 Interruptible Tolls	11
3.5 Salary and Wages Expense	12
4. Interim Tolls	13
5. Disposition	14

Appendices

1. Order TG-8-92	15
2. Order RHW-1-92	17
3. Order TGI-2-92	24

Abbreviations

the Act	The National Energy Board Act
A&S	Alberta and Southern Gas Co. Ltd.
ANG, the Company, the Applicant	Alberta Natural Gas Company Ltd
APMC	Alberta Petroleum Marketing Commission
B.C. Pipeline	ANG's regulated pipeline operations
Board, NEB	National Energy Board
CAPM	Capital Asset Pricing Model
CBRS	Canadian Bond Rating Service
Chevron	Chevron Canada Resources
CPA	Canadian Petroleum Association
Czar	Czar Resources Ltd.
DCF	Discounted Cash Flow
FERC	Federal Energy Regulatory Commission
Foothills	Foothills (South B.C.) Ltd.
GS	Goepel Shields & Partners
IPAC	Independent Petroleum Association of Canada
km	kilometre
mm	millimetre
NOVA	NOVA Corporation of Alberta
OD	Outside Diameter
PG&E	Pacific Gas and Electric Company
PGT	Pacific Gas Transmission Company

ROE	Return on Equity
TCPL	TransCanada PipeLines Limited
Value Line	Value Line Investment Survey
WEI	Westcoast Energy Inc.

Chapter 1

Background and Application

Alberta Natural Gas Company Ltd ("ANG") owns and operates a gas transmission pipeline ("the B.C. Pipeline") in southern British Columbia. This pipeline is one link in the Alberta to California gas transmission system owned, from north to south, by ANG and Foothills Pipe Lines (South B.C.) Ltd. ("Foothills"), Pacific Gas Transmission Company ("PGT"), and Pacific Gas and Electric Company ("PG&E").

The existing facilities of ANG consist of a 914 mm (36 inch) outside diameter ("OD") mainline, 170.7 km (106.1 miles) in length, extending from a point 0.4 km (0.2 miles) east of the Alberta/B.C. border near Coleman to a point on the international boundary near Kingsgate B.C.. There are nine off-line taps along the pipeline route, serving B.C. communities via independent gas utility companies.

Foothills, which is also regulated by the Board, currently owns four segments of 914 mm (36 inch) pipe, totalling 87.6 km (54.4 miles), running parallel to ANG's mainline, as well as metering facilities near Kingsgate. These Foothills facilities are operated by ANG under the terms of an operating agreement between the two companies.

A planned expansion of the above-noted Alberta to California pipeline system is scheduled to go into service on 1 November 1993. This expansion would increase export capacity at Kingsgate by 24.7 million cubic metres (872 million cubic feet) per day.

The ANG component of the expansion would involve the installation of additional compression at the existing stations at an estimated capital cost of \$82 million (1990 dollars). The Board considered the related facilities application by means of a written proceeding (GHW-2-91), and approved the application by Order XG-16-92 dated 4 May 1992.

In conjunction with ANG's expansion, Foothills plans to complete its looping of the ANG mainline by installing four additional segments of 1067 mm (42 inch) OD pipe totalling 77.6 km (48.2 miles) at an estimated capital cost of about \$105 million (1990 dollars). These facilities have already been certificated under the *Northern Pipeline Act*.

The PGT and PG&E components of the expansion are forecast to cost in the order of U.S. \$1.6 billion (current dollars).

ANG has recently undergone a change of ownership. On 30 June 1992 PGT, ANG's former parent sold its 49.98 percent interest in the Company to TransCanada PipeLines Limited ("TCPL").

The Application

On 30 January 1992 ANG filed with the Board an Amendment to its Statement of Effective Rates and Charges, ("the Application"), effective 1 February 1992. The tolls proposed in the filing were based on a reduction in the rate of return on common equity to 13.25 percent, and a continuation of ANG's deemed common equity ratio of 35 percent and deemed debt cost of 11.5 percent. In its covering letter ANG indicated that it had provided a copy of the amendment to all of the

interested parties. ANG indicated that the only objection to the amendment was from the Independent Petroleum Association of Canada ("IPAC"), whose view was that the return on equity was too high.

By letter dated 4 February 1992, IPAC made a formal complaint to the Board with respect to ANG's rates amendment and requested an oral public hearing to review this matter. IPAC suggested that ANG's tolls be made interim, effective 1 February 1992, pending completion of the hearing process.

Czar Resources Ltd. ("Czar") also filed a formal complaint with the Board by way of letter dated 6 February 1992, stating that ANG's proposed 13.25 percent return on equity ("ROE") was excessive and requested that the Board hold an oral public hearing to review ANG's tolls.

On 6 February 1992 the Board issued Order TGI-2-92 making ANG's tolls interim effective 7 February 1992.

In a letter dated 2 March 1992, the Alberta Petroleum Marketing Commission ("APMC") stated that it considered the rate of return, capital structure and related topics to be important issues in ANG's toll application. APMC stated that it had participated in recent NEB proceedings on these issues and would do so in upcoming proceedings. APMC supported IPAC's request that a public hearing be convened to consider these issues.

The Board issued Hearing Order RHW-1-92 on 30 March 1992 in which it announced its intention to examine issues concerning ANG's proposed tolls including the allowed rate of return in a written proceeding.

Intervenors' written evidence was due on 26 June 1992. Letters of comment were due on 6 July 1992. Final comments from intervenors were due on 14 August 1992 while final comments from ANG were due 28 August 1992.

The written proceeding was not restricted to the matter of rate of return. Submissions from parties also addressed the appropriate capital structure, the deemed cost of debt and various other matters. Interventions were received from Alberta & Southern Gas Co. Ltd. ("A&S"), Canadian Petroleum Association ("CPA"), Czar, and IPAC. Letters of comment were received from APMC and Chevron Canada Resources ("Chevron").

Chapter 2

Capital Structure and Cost of Capital

ANG requested a 13.25 percent return on deemed common equity. This represented a reduction of 50 basis points from the 13.75 percent rate which the Company had been using since September 1991. Prior to September 1991 the rate had been 13.25 percent. B.C. Pipeline's capital structure, at the time ANG filed the rates amendment with the Board, was 35 percent deemed common equity and 65 percent deemed debt. The cost of debt as authorized by the Board on 1 March 1991 was 11.5 percent.

Table 2-1.

Table 2-1
Capital Structure and Rate of Return
as per Amended Statement of Rates and Charges
effective 1 February 1992

	<u>Capital Structure</u> (%)	<u>Cost Rate</u> (%)	<u>Cost Component</u> (%)
Deemed Debt	65.00	11.50	7.47
Deemed Common Equity	<u>35.00</u>	13.25	<u>4.64</u>
	<u>100.00</u>		
Rate of Return on Rate Base			<u>12.11</u>

2.1 Deemed Common Equity Ratio

In the rates amendment filed with the Board, ANG used the existing deemed capital structure for its pipeline of 65 percent unfunded debt and 35 percent common equity as, in its view, the existing capital structure was still appropriate. In its letter of final comment, the Company argued that the capital structure of its pipeline should be determined on a stand-alone basis apart from its unregulated business activities. ANG stated that it was inappropriate to consider the common equity level underpinning the unregulated portion of ANG's activities when determining an appropriate common equity level for the regulated pipeline. In addition, ANG argued its continued use of the 65/35 capital structure was justified by the increasing business risks faced by the Company, including:

- . increased number of shippers with an increased variety of gas supplies serving an increased variety of markets;
- . increased competition to serve ANG's traditional markets from US domestic supplies, including tax-subsidized coal-bed methane and recent actions taken by the Federal Energy Regulatory Commission (FERC) intended to increase pipeline competition in the US;

- . California gas market restructuring and uncertainty over differences in public policy objectives between Alberta and California;
- . initiation of legal claims by A&S suppliers against A&S, PGT, and PG&E;
- . restrictions on interruptible shipper access to NOVA and A&S.

On this issue IPAC's expert witness, Mr. G.Weir, stated that an equitable capital structure for ANG would be 25 percent common equity and 75 percent debt. This statement was supported with the argument that ANG faced less business risk than the average Canadian utility and should therefore have a correspondingly lower common equity ratio.

IPAC's expert witness identified three contributing factors which minimized the business risks facing the B.C. Pipeline: business environment, cost recovery regulation and the regulatory environment. ANG transports the vast majority of Alberta gas destined for markets in California and the U.S. Pacific Northwest. IPAC argued that ANG has a secure supply of gas, varied markets and is protected by long term firm transport contracts with its shippers. In addition, IPAC's expert witness argued that the cost of service method of regulation guarantees the Company recovery of its costs and allowed return thereby insulating it from risks such as: regulatory lag, variable throughput and increased expenses. IPAC further argued that ANG is insulated from any risk associated with shippers cancelling their contracts as, in that event, the remaining shippers would be required to pay the pipeline's full cost of service. IPAC's expert witness argued that the ANG's planned pipeline expansion does not increase its business risk because ANG has contracted this expanded capacity to 29 firm shippers under long-term contracts ranging from 15 to 30 years.

IPAC's expert witness further stated that the applied-for deemed capital structure at 31 December 1991 left only 26.2 percent common equity to support ANG's non-regulated riskier investments. At a 25 percent deemed common equity ratio for the Company's regulated pipeline known as the B.C. pipeline, the common equity left for its unregulated business at 31 December 1991 would have been 27.3 percent. With a 25 percent common equity ratio and a 12.25 percent allowed ROE, the resulting interest coverage ratio for the B.C. Pipeline would allow it to maintain an investment grade credit standing. ANG argued that IPAC cited testimony on interest coverage given by an expert witness in another proceeding and that it should not be considered in the context of this proceeding.

Views of the Board

The Board is aware that in the past, the B.C. Pipeline's relatively small rate base meant that the existing capital structure did not have a material impact on its shippers in absolute terms. However, the B.C. Pipeline's 1992 average projected rate base is more than twice what it was when the current capital structure was approved by the Board in 1982, and three times larger than the average rate base in 1987. Consequently, ANG's capital structure now has a material impact on the shippers' costs. Based on the Board's assessment of the business risks of ANG, the size of the rate base and planned growth, the Board believes it is now appropriate to reconsider the capital structure of the B.C. Pipeline. The Board is of the view that the argument put forward by IPAC and its expert witness, that the business risks faced by ANG's pipeline operations are minimal, has merit. However, the Board is not persuaded that a common equity ratio of 25 percent, as recommended by IPAC, is appropriate at this time. In the Board's view the business risks faced by the B.C. Pipeline are not materially different than those faced by other gas pipelines regulated by the Board on a cost of service basis. The Board therefore considers that an adjustment to the deemed common equity ratio is appropriate.

Decision

The Board approves a deemed capital structure for the B.C. Pipeline consisting of 30 percent common equity and 70 percent debt.

2.2 Cost of Capital

2.2.1 Cost of Debt

ANG's statement of Effective Rates and Charges, filed with the Board on 30 January 1992, reflects a cost of debt of 11.5 percent. This rate was allowed by the Board in a Decision contained in its 1 March 1991 letter to ANG following the NEB's most recent review of ANG's cost of debt. In response to a question posed by the Board, ANG defended the use of 11.5 percent as a fair reflection of financing costs over time and not an indication of rates currently prevailing.

While ANG did not present evidence to substantiate its applied-for cost of debt rate, the evidence of ANG's expert witness, Mr. Timothy Crichfield, on return on common equity indicated that he considered the appropriate estimate for risk-free rate to be the most recently available forecast average yield for 1992 on long-term Government of Canada bonds at the time of his writing.

In its letter of final comment ANG submitted that IPAC's expert witness incorrectly based his recommended interest rates on rates prevailing in June 1992. ANG argued that this ignored both the interim toll period and the interest rates that prevailed throughout 1991. ANG agreed with the 125-150 basis point spread between A-rated utility corporate debt and long-term Canada bond yields as calculated by IPAC's expert witness, but disagreed with the A&S evidence on the spreads of 106 to 119 basis points. However ANG did not make any specific proposal as to what would constitute an appropriate spread.

IPAC considered the 11.5 percent applied-for cost of debt to be unreasonable and in its letter of final comment recommended a cost of debt rate of 9.5-10.0 percent, depending on the deemed capital structure approved by the Board. A deemed debt/equity ratio of 65/35 would warrant a cost of debt at the low end of the range, while a 75/25 ratio would warrant the upper end point of the range. IPAC arrived at these rates by using an estimated average yield for long-term Government of Canada bonds over 1992 of 8.5 percent and a 100-150 basis point spread between long-term Canada bonds and an appropriate risk premium for corporate debt issues. In his filed evidence, IPAC's expert witness stated that an A-rated utility can issue corporate debt at a 125-150 basis point spread over spot long-term Canada bond yields.

A&S examined current long-term Canada bond yields and spreads between these yields and A-rated corporate bonds. Spreads on A-rated debt were used despite the fact that ANG debt was downgraded by the Canadian Bond Rating Service ("CBRS") from A to B++ in 1991. A&S argued that this downgrading was due to losses in the non-regulated portion of ANG's business activities. The range in spread between long-term Canada bonds and A-rated debt in 1991 was 41 basis points in November and 128 basis points in January 1991. The average spread was 106 basis points in 1991 and 116 basis points for the five quarters ended 31 March 1992. A&S also reviewed the recent spreads between long-term Canada bonds and the long-term debt of a sample

of other regulated pipelines. The median spread was 117 basis points in 1991 and 119 for the five quarters ended 31 March 1992. A&S recommended a spread ranging between 106 and 119 basis points over long-term Canada bond forecast yields of 9.0-9.25 percent for 1992. The range of values for a debt cost rate, based on the combined estimates, was between 10.06 percent (9.00% + 106 basis points) and 10.44 percent (9.25% + 119 basis points). A&S recommended the midpoint of this range, 10.25 percent, as a long term debt cost rate for ANG.

Czar submitted that the allowed debt should be based on ANG's actual cost of debt which Czar estimated to be 8.4 percent.

Views of the Board

The Board agrees with IPAC and A&S that the appropriate method of establishing a cost of debt rate for ANG is to use a forecast average yield on risk free investments such as long-term Government of Canada bonds and to add to it an appropriate corporate risk premium for the spread between long-term Canada bonds and A-rated utility debt issues. This method is consistent with the Board's decision in the last cost of debt review for ANG. ANG's position in that review was that this was the appropriate method for establishing the cost of debt and the Board accepted that position.

In arriving at its decision, the Board considered the most recent information on long-term Canada spot yields and yields to date for 1992, as well as the forecast average annual yields on the same for various periods through to the end of 1993. In addition the Board considered the evidence presented with respect to the necessary risk premium the Company would have to pay over the long-term Canada bond yields to attract debt capital in the financial markets at the present time and in the foreseeable future.

The Board is aware that a substantial portion of ANG's business activities are financed with short-term debt. At the present time no portion of ANG's outstanding long-term debt is allocated to the B.C. Pipeline. The Board expects the Company to allocate a substantial portion of all new debt issues to its pipeline operation so that the deemed debt position of the B.C. Pipeline can be replaced with the funded debt. If the unfunded debt position of the B.C. Pipeline is not substantially reduced, the Board may consider using the actual weighted debt cost of the Company for its pipeline operation effective 1 November 1993.

Decision

The Board approves 9.5 percent as ANG's deemed debt cost effective 7 February 1992. Furthermore, when ANG does allocate a portion of new debt to its pipeline operation, ANG shall notify the Board and commence to use the actual cost of that long-term debt issue in calculating its cost of service. ANG will continue to use the approved deemed debt cost rate of 9.5 percent for the remaining portion of unfunded debt.

2.2.2 Rate of Return on Common Equity

ANG's expert witness utilized three approaches for establishing the fair rate of return for ANG. The Equity Risk Premium approach was given more weight, while the Discounted Cash Flow (DCF) and Comparable Earnings approaches were used to test the results of the first approach.

The Risk Premium approach used by ANG's expert witness was the Capital Asset Pricing Model ("CAPM"). In this model, $R_i = R_f + B_i(R_m - R_f)$, the required rate of return on a given investment (R_i) is determined by the risk-free rate (R_f) plus a premium, ($B_i(R_m - R_f)$), that is commensurate with the relevant risk of the investment where B_i is the coefficient of variation of a particular investment, i , with respect to the market portfolio, R_m .

The witness calculated a beta coefficient for ANG of .66, by averaging estimated beta values for Westcoast Energy Inc. (WEI) of .62 and for TCPL of .70. The witness stated that his methodology for determining WEI and TCPL beta values was very similar to that used by Value Line Investment Survey ("Value Line"). Value Line estimated the beta value for ANG to be .65. An estimate of the average yields on long-term Government of Canada bonds was used as a surrogate for the return on a risk-free investment.

The expected risk premium for the market portfolio was derived from historical data, as measured in studies completed by Hatch and White and by the Canadian Institute of Actuaries. The Hatch and White study, updated to cover the period from 1950-1990, reported a premium for common equity over long-term Government of Canada bonds of 6.0 percent. The Canadian Institute of Actuaries study sets the premium for the same period at 7.0 percent. ANG's expert witness used the average, 6.5 percent, as an expected risk premium for the market portfolio. This risk premium was then adjusted downward using an ANG beta coefficient of .66 to yield a risk premium of 4.3 percent for ANG. This rate was then added to the witness's forecast of long-term Government of Canada bond rate of 9.3 percent, resulting in an estimated fair rate of return on common equity for ANG of 13.6 percent.

To verify the results of the equity risk premium test the witness also performed a DCF test. In this test the cost of capital is equal to the investors' required return on equity investment and is determined based on the current price of the investment and projections of future cash flows from that investment.

ANG's expert witness estimated the average cost of equity capital for a sample of 14 companies using a traditional DCF approach. An adjustment for the relative risk of ANG in relation to the sample companies was made based on an average beta factor of .40 for the sample companies and the calculated beta of .66 for ANG. The estimate of the average DCF return was 12.4 percent to which 80 to 150 basis points were added for the higher relative risk of ANG. The final DCF range estimate for the cost of equity capital was 13.2 to 13.9 percent.

To further test the equity risk premium approach a comparable earnings test was performed. ANG's expert witness expressed the concern that due to the lack of a directly comparable group of investments to an investment in ANG's gas pipeline, the results of a comparable earnings approach are less meaningful than either of the other methods utilized. The returns on average book equity for a sample of 14 companies listed in the current Pipelines and Utilities Groups of the TSE 300 were determined from 1983 through 1991. The average of the annual rates of return on average book equity from 1983 through 1991 was 13.3 percent. The witness noted that as he calculated a higher beta factor for ANG than for the average beta of the sample, 13.3 percent would represent a minimum cost of common equity capital based on this approach. The final rate of return recommendation for ANG by its expert witness was 13.25 percent.

IPAC's expert witness submitted that ANG's requested rate of return on common equity was too high. In support of this position he stated that current market conditions, including the drop in interest rates and the high level of stock prices experienced despite the recent reduction in

corporate profits, indicate that investors expectations on rates of return on competing investment opportunities have declined significantly.

IPAC's expert witness also gave evidence to show that ANG has, in the past, earned returns greater than those required to maintain access to capital markets and to maintain ANG's financial integrity. He cited ANG's market to book value ratio as being sufficiently large as to indicate that the allowed return on equity may be higher than the cost of equity.

In its letter of final comment, IPAC argued that the 13.6 percent rate of return as derived by the expert witness for ANG using the CAPM model was too high and that 11.05 percent was more appropriate. This difference was due to IPAC's use of 8.5 percent as a risk-free rate, an equity market risk premium of 4.48 percent, a beta of .50, and an allowance for flotation costs of 30 basis points. IPAC's expert witness derived the value used for the beta factor from estimated beta values for WEI and TCPL. However, in arriving at .50, IPAC's witness estimated what the regulated pipeline beta values for WEI and TCPL would be on a stand-alone basis. These values were then adjusted to arrive at an estimate beta value for ANG's B.C. Pipeline also on a stand-alone basis.

Other intervenors did not present evidence on this issue but did state their positions. CPA was of the opinion that a 12 percent return on common equity was reasonable, and Chevron agreed with CPA. APMC's position was that in light of current economic conditions a range of 12 -12.25 percent, with emphasis on the lower end of this range, was reasonable. Czar submitted that the return on common equity should be reduced and stated 12.5 percent was a reasonable rate.

Views of the Board

Ideally, the cost of common equity capital is the price investors are willing to pay under free market conditions. For a financially regulated company, this cost must be approximated using various cost of capital measuring techniques. In this case, the task is further complicated by the diversified activities of ANG where the regulated business activities of the B.C pipeline account for a relatively small portion of the company's overall business activities. No directly applicable historical data is available to simulate investors' expected returns for the regulated portion of ANG's activities. Consequently, the Board must rely on a variety of methodologies, each purporting to simulate the fair return required by a typical investor in the common equity of a pure utility. The Board has traditionally relied on the results of tests based on the equity risk premium, comparable earnings and DCF models.

The Board finds all the evidence presented to be helpful in determining a fair rate of return on ANG's common equity. Given the current economic environment, financial market conditions and recent past periods of high inflation, the Board agrees with the Company's witness that more weight should be placed on the equity risk premium approach.

In considering the evidence presented on the equity risk premium model, the Board finds that the risk-free rate of 9.3 percent used by the ANG witness is too high. The expert witness for the Company relied on the view that the interest rates had reached its low point at the end of 1991. In his view, interest rates would increase over the course of 1992 as the Canadian and the U.S. economies started to recover from the recent economic downturn. This has not happened. The Board also notes that a 6.5 percent equity market risk premium as advocated by the Company's witness appears to be excessive. In addition, the estimated beta factor of .66 for ANG does not appear to adequately consider the reduced risk the B.C. Pipeline would be subject to on a stand-

alone basis. The Board recognizes IPAC's attempt to estimate the element of risk attributable to the B.C. Pipeline but finds the description of methodology and supporting evidence for this argument inadequate to support using a beta value as low as .50.

With regards to the Company's evidence on the DCF and comparable earnings tests, the Board has concerns with the sample of companies chosen for comparison purposes. The Board is mindful of the circularity problem associated with using data from other regulated companies in determining a fair rate of return for the B.C. Pipeline.

Decision

Having weighed all the evidence, and having given particular consideration to the current and prospective economic environment, to the current and forecast inflation and interest rates, and to the equity risk premium required to maintain accessibility to capital markets, the Board finds 12 percent to be a fair rate of return on common equity for ANG.

2.3 Rate of Return on Rate Base

Decision

The Board approves the capital structure, cost of debt, cost of common equity capital and return on rate base as shown in Table 2-2.

**Table 2-2
Approved deemed capital structure and
Rate of Return**

	<u>Capital Structure</u> (%)	<u>Cost Rate</u> (%)	<u>Cost Component</u> (%)
Deemed Debt	70.00	9.50	6.65
Deemed Common Equity	<u>30.00</u>	12.00	<u>3.60</u>
	<u>100.00</u>		
Rate of Return on Rate Base			<u>10.25</u>

2.4 Impact on Tolls

The decisions in this chapter on deemed capital structure, cost of debt and return on common equity will reduce the Company's 1992 revenue requirement by approximately \$ 950,000.00 to

approximately \$23.7 million before NEB charges and should reduce tolls by approximately 3.9 percent.

Chapter 3

Other Matters

3.1 Regulatory Costs

IPAC expressed concern that the applicant is able to recover in tolls the cost of retaining expert technical and legal advice to prepare and support its rate of return evidence, while tollpayers must pay their own costs associated with challenging that evidence. IPAC argued that tollpayers should not be expected to shield the utility from having to incur those costs associated with the defence of its proposed rate of return. In its view, costs incurred by ANG, directly related to shareholder profit, should be borne by ANG's shareholders and not by the tollpayers.

Similarly the APMC argued, in its letter of comment, that not only do intervenors pay directly the costs associated with retaining their own expert witnesses, they also pay indirectly for the utility's expert witnesses through tolls.

ANG disagreed, arguing that hearing costs are an inherent element in the cost of service of any regulated Company. Moreover ANG felt that this was not an appropriate forum in which to discuss this issue.

Views of The Board

The Board believes that this is a generic issue which was not sufficiently explored in this proceeding to enable the Board to make a decision in this case.

3.2 Method of Regulation

In March 1987, the Board approved ANG's application to be regulated on a complaint basis. While ANG is regulated on a complaint basis it continues to be a Group 1 Company, subject to full reporting requirements.

Both IPAC and Czar submitted that ANG's recently approved expansion will result in a significant increase in the pipeline's rate base and number of shippers. In view of these changes, they argued that it would be appropriate to regulate ANG in the same manner as the Board regulates other major pipelines.

In its final letter of comment ANG indicated that the Company is supportive of finding new ways of regulation, but that this proceeding was not an appropriate forum in which to discuss this issue.

Views Of the Board

At the time the Board approved ANG's current method of regulation, the Company's rate base had shrunk to approximately \$15 million and it had a limited number of shippers. The rate base is currently in the range of \$65 million and with the recently approved compressor additions should increase by approximately \$85 million to a total of \$150 million by late 1993.

The Board is not satisfied that sufficient evidence was presented on this topic upon which to base a decision to change ANG's method of regulation at this time. The Company is entering into a period of growth which may justify a change in the method of regulation for the Company. The Board is of the view that it would be appropriate to consider this issue at a future date.

3.3 Related Party Transactions

IPAC noted that ANG has a 50 percent ownership interest in the Amoco Centre where its offices are located. In response to questions submitted by IPAC the Company stated that it rents space in the Amoco Centre through a sub-lease arrangement with A&S. The rent paid is \$19.00 per square foot, net of operating costs, business taxes and utilities. It was ANG's evidence that it occupies about 11 percent of the total rentable space in the Centre and that about 14 percent of that is allocated to the pipeline.

IPAC expressed concern that the building was of a higher quality than the pipeline's management might have chosen in the absence of ANG's ownership of a Class A building. IPAC was also concerned that the space allocated to the pipeline may not be reasonable and that the rental costs might not represent the fair value of the space.

Views of the Board

The Board notes that the class of office space occupied by ANG is consistent with that of other pipeline companies regulated by the Board. With respect to the concerns raised about the cost of the office space allocated to the pipeline, there is no evidence on the record to indicate that the rental rate being paid is in excess of the market rates prevailing at the time the lease was entered into. The Board will review these matters during its next regulatory audit of ANG.

3.4 Interruptible Tolls

Currently ANG offers two tier Interruptible Service. Tier 1 service takes priority over Tier 2 service and is available only to Founding Shippers. In response to an information request posed by Chevron, ANG indicated that the current two tier structure and rates would terminate on 31 October 1993.

In its letter of comment Chevron encouraged ANG to solicit comments on interruptible service from all classes of shippers prior to the 31 October 1993 implementation date for ANG's expansion facilities.

Decision

ANG is directed to consult with its firm and Interruptible shippers on the revised terms and conditions for Interruptible Service to become effective 31 October 1993, and to file the appropriate tariff revisions with the Board and all shippers at least sixty days prior to their coming into force.

3.5 Salary and Wages Expense

ANG stated that the Company had agreed to a 3.0 percent wage increase for its hourly personnel and 3.5 percent for salaried employees effective 1 January 1992. Czar suggested that the Board reduce the awarded increases to 2.5 percent to bring them in line with the increases allowed by the Board in its most recent IPL decision.

Views of the Board

It is the Board's view that the increases awarded by the Company are within a range considered reasonable in the circumstances of this case.

Chapter 4

Interim Tolls

On 6 February 1992, the Board issued Order Number TGI-2-92 making ANG's tolls interim effective 7 February 1992, pending completion of the Board's review of the complaint filed by IPAC.

Order Number TG-8-92 (Appendix I) requires ANG to recalculate its Statement of Effective Rates and Charges effective 7 February 1992 and to refund to its shippers, with interest at an annual rate of 9.5 percent, the difference between the rates so recalculated and the rates charged pursuant to Order TGI-2-92.

Chapter 5

Disposition

The foregoing chapters, together with Order Number TG-8-92, constitute our Decisions and Reasons for Decision in this matter.

R. L. Andrew
Presiding Member

R. Priddle
Member

A. Côté-Verhaaf
Member

ORDER TG-8-92

IN THE MATTER OF the *National Energy Board Act* ("the Act") and the Regulations made thereunder; and

IN THE MATTER OF a complaint by the Independent Petroleum Association of Canada and Czar Resources Ltd., regarding ANG's tolls under Part IV of the Act, filed with the Board under file no. 4200-A2-1.

BEFORE the Board on 29 September, 1992.

WHEREAS on 30 January 1992, Alberta Natural Gas Ltd ("ANG"), filed an amended tariff to be effective 1 February 1992;

WHEREAS on 4 February 1992, the Independent Petroleum Association of Canada ("IPAC") and on 6 February 1992, Czar Resources Ltd. ("Czar") filed letters of complaint concerning ANG's tariff requesting that an oral public hearing be held;

WHEREAS on 6 February 1992, the Board issued Order TGI-2-92 making ANG's tolls interim effective 7 February 1992;

WHEREAS the Board pursuant to Order RHW-1-92, solicited written submissions from interested parties on the complaint;

WHEREAS the Board has examined ANG's amended tariff together with all written submissions by interested parties; and

WHEREAS the Board's decisions on the complaint are set out in its Reasons for Decision dated September 1992 and in this Order;

IT IS ORDERED THAT:

1. ANG shall forthwith recalculate the tolls set out in its Statement of Effective Rates and Charges dated 30 January 1992 to reflect the decisions contained in the RHW-1-92 Reasons for Decision and with this order, ANG shall file with the Board and serve on its shippers and interested parties to RHW-1-92, a copy of the recalculated tolls;
2. ANG shall refund to its shippers by no later than 31 December 1992, with interest at an annual rate of 9.5 percent, the difference between the tolls calculated in paragraph 1 above and the tolls charged pursuant to TGI-2-92;

3. Order TGI-2-92 which authorized the tolls ANG could charge on an interim basis pending a final decision on the above-referenced complaint is revoked on the day that ANG makes the refund prescribed in paragraph 2 above;
4. The tolls calculated pursuant to paragraph 1 above shall be effective from 7 February 1992 , subject to the toll adjustment procedure set out at page 21 of ANG's Gas Transmission Service Documents;
5. The Board's decisions set out in its RHW-1-92 Reasons for Decision, and the changes to ANG's tariff authorized in this Order are to take effect on a final basis as of 7 February 1992; and
6. ANG is directed to file with the Board a revised interruptible service tariff a least sixty days prior to its effective date of 31 October 1993.

NATIONAL ENERGY BOARD

J.S. Richardson
Secretary

**HEARING ORDER RHW-1-92
DIRECTIONS ON PROCEDURE**

**Alberta Natural Gas Ltd
Rates Amendment Effective 1 February 1992**

WHEREAS on 30 January 1992, Alberta Natural Gas Ltd ("ANG", "the applicant") filed an amended tariff ("the application") to be effective 1 February 1992;

WHEREAS on 4 February 1992, the Independent Petroleum Association of Canada ("IPAC") and on 6 February 1992, Czar Resources Ltd. ("Czar") filed letters of complaint concerning ANG's tariff requesting that an oral public hearing be held;

WHEREAS on 6 February 1992, the Board issued Order TGI-2-92 making ANG's tolls interim effective 7 February 1992;

WHEREAS the Board has now received additional representations from ANG, Czar, the Alberta Petroleum Marketing Commission and IPAC on how it should proceed with this matter; and

WHEREAS the Board has decided to undertake a written review under part IV of *the National Energy Board Act* ("the Act") of ANG's cost of service and tariff and wishes to provide for participation by interested parties;

Therefore the Board directs as follows:

PUBLIC VIEWING

1. ANG shall deposit and keep on file for public inspection during normal business hours, a copy of its application, amendments, evidence and all documents related thereto in its offices at:

2900, 240 Fourth Avenue S.W.
Calgary, Alberta T2P 4L7

A copy of this application is also available for viewing at the Board's office at:

Library
First Floor
311 - Sixth Avenue S.W.
Calgary, Alberta T2P 3H2

SCOPE OF THE PROCEEDING

2. The Board intends to examine issues concerning ANG's tolls and cost of service including the allowed rate of return in a written proceeding.

INTERVENTIONS

3. Interventions are to be filed with the Secretary and served on ANG by 1 May 1992. Interventions shall include all information set out in subsection 32(1) of Part III to the revised draft *NEB Rules of Practice and Procedure* ("the Rules") dated 21 April 1987.
4. The Secretary will issue a List of Intervenors shortly after 1 May 1992.

APPLICANT'S ADDITIONAL EVIDENCE

5. Any additional evidence that ANG wishes to present shall unless otherwise directed by the Board, be filed with the Secretary of the Board and served on all parties listed in paragraph 4 by 15 May 1992.

DIRECT EVIDENCE BY INTERVENORS

6. Intervenor Direct Evidence is to be filed with the Secretary and served on ANG and all intervenors to the proceeding by 26 June 1992.

SERVICE TO PARTIES

7. ANG shall serve a copy of these Directions on Procedures, including the Appendices, in either official language as appropriate or requested, forthwith on all parties listed on its Interested Parties List and on those parties listed in Appendix IV.
8. Once the List of Intervenors is issued by the Board, ANG shall serve its application, any amendment and all other documents related thereto on those intervenors who have not already been served.
9. Intervenors are reminded that pursuant to section 32 of the Rules, each intervenor must serve a copy of its intervention on the applicant and on all other intervenors once the List of Intervenors has been issued by the Board.

INFORMATION REQUESTS

10. Information requests addressed to ANG on the application and evidence shall be filed with the Secretary and served on all intervenors to the proceeding by 29 May 1992.
11. The applicant's written responses to information requests made pursuant to paragraph 10 shall be filed with the Secretary and served on all intervenors to the proceeding by 12 June 1992.

12. Information requests addressed to intervenors who have filed direct evidence pursuant to paragraph 6 shall be filed with the Secretary and served on ANG and all other intervenors by 17 July 1992.
13. Responses to information requests sent pursuant to paragraph 12 shall be filed with the Secretary and served on ANG and all other intervenors by 31 July 1992.

LETTERS OF COMMENT

14. Letters of comment by persons who do not wish to intervene are to be filed with the Secretary and served on ANG by 6 July 1992.

PUBLIC NOTICE

15. Appendix I is the Public Notice which ANG is required to publish in the publications listed in Appendix II.

FILING AND SERVICE REQUIREMENTS

16. Where parties are directed by these Directions on Procedures or by the Rules to file or serve documents on other parties, the following number of copies shall be served or filed:
 - (a) for documents to be filed with the Board, provide 30 copies;
 - (b) for documents to be served on ANG, provide 3 copies;
 - (c) for documents to be served on intervenors, provide 1 copy.
17. Persons filing letters of comment shall serve one copy on ANG and file one copy with the Board, which in turn will provide copies for all other parties.
18. Parties are reminded that pursuant to subsections 8(4) and 9(1) of the Rules, a document is not filed or served until it is received by the intended recipient.

TIMETABLE OF EVENTS

19. Appendix III is a summary of deadlines for filing and service.

GENERAL

20. All parties are asked to quote Hearing Order RHW-1-92 and file 4200-A2 when corresponding with the Board in this matter.

21. Subject to the foregoing, the procedure to be followed shall be governed by the Rules.
22. For further information on the application described herein, or the procedures governing the Board's review, contact Leigh-Ann Galbraith, Regulatory Support Officer at (403) 299-3929.

NATIONAL ENERGY BOARD

G.A. Laing
Secretary

NATIONAL ENERGY BOARD

PUBLIC NOTICE

Alberta Natural Gas Ltd
Rates Amendment Effective 1 February 1992

The National Energy Board ("the Board") will conduct a written proceeding to obtain evidence and the relevant views of interested parties on an application dated 30 January 1992 by Alberta Natural Gas Ltd ("ANG") pursuant to Part IV of the National Energy Board Act respecting the tolls that ANG may charge for services rendered after 7 February 1992.

The Board has received letters from the Independent Petroleum Association of Canada and Czar Resources Ltd. indicating concern with ANG's proposed rate of return. Anyone wishing to intervene in the hearing must file a written intervention with the Secretary of the Board and serve three copies on ANG at the following address:

2900, 240 Fourth Avenue S.W.
Calgary, Alberta T2P 4L7

ANG will provide a copy of its application to each intervenor.

The deadline for receipt of written interventions is 1 May 1992. The Secretary will then issue a List of Intervenors. Anyone who does not wish to intervene in the hearing, but would like only to comment on the application, should write to the Secretary of the Board and send a copy to ANG. The deadline for the receipt of comments is 6 July 1992.

Information on the procedures of this hearing (Order RHW-1-92) or the draft NEB Rules of Practice and Procedures governing all hearings (available in both English and French) may be obtained by writing the Secretary or telephoning the Board's Regulatory Support Office at (403) 292-4800.

G.A. Laing
Secretary
National Energy Board
311 - Sixth Avenue S.W.
Calgary, Alberta
T2P 3H2

LIST OF PUBLICATIONS

The publications in which the applicant is required to publish the public notice are as follows:

<u>Publication</u>	<u>City</u>
NOTICE IN ENGLISH:	
"Times Colonist"	Victoria, British Columbia
"The Sun" and "Vancouver Province"	Vancouver, British Columbia
"The Edmonton Journal"	Edmonton, Alberta
"Calgary Herald"	Calgary, Alberta
"Globe and Mail (National Edition)"	Toronto, Ontario
NOTICE IN FRENCH:	
"Le soleil de Colombie"	Vancouver, British Columbia
"Le Franco-albertain"	Edmonton, Alberta
NOTICE IN BOTH ENGLISH AND FRENCH:	
"Canada Gazette"	Ottawa, Ontario

TIMETABLE

ANG Application filed	30 January 1992
Interventions to be filed	1 May 1992
Additional evidence from ANG	15 May 1992
Information requests to ANG due	29 May 1992
Responses from ANG due	12 June 1992
Intervenors' written evidence due	26 June 1992
Letters of comment due	6 July 1992
Information requests to intervenors due	17 July 1992
Responses from intervenors due	31 July 1992
Final comments from intervenors due	14 August 1992
Final comments from ANG due	28 August 1992

ORDER TGI-2-92

IN THE MATTER OF the *National Energy Board Act*("the Act") and the regulations made thereunder; and

IN THE MATTER OF an application dated 30 January 1992 by Alberta Natural Gas Ltd("ANG") for an adjustment of its tolls; filed with the Board under File 4750-A2.

BEFORE the Board on Thursday, the 6th day of February, 1992.

WHEREAS on 30 January 1992, ANG filed an amended tariff with the Board respecting its Statement of Effective Rates and Charges which tariff is to be effective 1 February 1992;

AND WHEREAS the Independent Petroleum Association of Canada has filed a letter of complaint dated 4 February 1992, respecting this tariff;

AND WHEREAS the Board is considering this letter of complaint;

AND WHEREAS the Board has decided to make the tariff interim until such time as the Board has completed its consideration of this complaint;

IT IS ORDERED THAT:

Pursuant to subsection 19(2) and section 59 of the Act, the rates set out in Schedule "A" attached hereto are to be charged on an interim basis effective 7 February 1992, and will remain in effect until the day before the Board's final order in this matter comes into effect.

NATIONAL ENERGY BOARD

G.A. Laing
Secretary

SCHEDULE "A"

STATEMENT OF EFFECTIVE RATES AND CHARGES

Firm Services

	<u>Demand Rate</u> (\$/10 ³ m ³ /Km/Mo.)	<u>Commodity Rate</u> (\$/10 ³ m ³ /Km)
PIPELINE	0.193817	-
COMPRESSOR	0.062140	0.001160

Interruptible Service

	<u>Commodity Rate</u> (\$/10 ³ m ³ /Km)
TIER 1	0.011679
TIER 2	0.010510

Company Use Gas and Line Pack Requirements

Shipper's share of Company use Gas shall be determined pursuant to Article V of the General Terms and Conditions. Shipper's Share of Line Pack Requirements shall be determined pursuant to paragraph 9.6 of Article IX of the General Terms and Conditions. In the event that Company provides Shipper's share of Company Use Gas and/or Line Pack Requirements, Company shall bill Shipper for such gas at the rate of:

\$ 1.40/GJ