7. <u>COST OF CAPITAL</u>

- 7.0.1 The Board has determined that, for the purposes of this Decision, the following issues need to be addressed:
 - Financial Flexibility and Risk
 - Capital Structure
 - Cost of Long-Term Debt
 - Return on Common Equity
- 7.0.2 As stated in Chapter 3 of this Decision with Reasons, the Board, for the purposes of determining the Company's cost of capital in the test year, has accepted 5.95 percent as the indicated cost of short-term debt.
- 7.0.3 The Board's findings on cost of capital, as set out in this chapter, are summarized in Appendix C.

7.1 FINANCIAL FLEXIBILITY AND RISK

7.1.1 Dr. Sherwin/Ms McShane contended that the financial risk of the Company has continued to rise. The narrowing of the spread between the allowed utility return on equity and the embedded cost of debt, and the earnings shortfall have in their opinion contributed to a decline in utility interest coverage and limited the Company's financial flexibility. This view was

also supported by another Company consultant, Mr. Lackenbauer, who testified that the existing common equity ratios and high level of debt are "endangering" the credit ratings and financial flexibility of the Company. Consumers Gas noted that credit rating agencies have set 2.5 times interest coverage as a general benchmark in assessing a class "A" rating, and that Canadian Bond Rating Services Inc. had indicated that interest coverage ratios would need to improve for the Company to maintain current debt ratios.

- 7.1.2 Consumers Gas maintained that its financial flexibility has been affected by the shortfall in earnings experienced in fiscal 1991 and 1992 and the decline in interest coverage ratios. The Company stated that it was unable to access the long-term debt market between April 1991 and April 1992. It requested that the Board give it flexibility in its equity ratios and an adequate equity return.
- 7.1.3 Dr. Sherwin/Ms McShane maintained that there was no material change in business risk since E.B.R.O. 473.

Positions of the Parties

7.1.4 Board Staff submitted that the Company's financial risk has not changed substantially from fiscal 1992 to justify either an increase in the return on equity or the equity ratio for fiscal 1993. Dr. Winter testified that the issue test provisions would not significantly constrain the Company's access to debt markets. He indicated that, for fiscal 1994, at a 35 percent equity ratio, \$100 million in debt could be raised in the first month under the issue test, assuming an interest rate of nine to ten percent and an achieved return on equity of ten percent. Board Staff argued that even a 12 percent allowed return would result in a times interest earned ratio of 2.11, which would be higher than under the rates of return approved by the Board for fiscal 1991 (2.02), though not quite as high as fiscal 1992 (2.15). It submitted that the risk of a reduced credit rating in 1993, barring

other factors such as weather and a severely depressed economy, is highly unlikely.

- 7.1.5 IGUA contended that the submissions of the Company relating to a decline in credit rating are "scare tactics", and submissions based on such "fearmongering" evidence should be rejected as being unreasonable and without merit.
- 7.1.6 Both IGUA and CFBA/OCAP agreed that there was no material change in business risk since E.B.R.O. 473. However, Dr. Winter concluded that business risk has declined.

Board Findings

- 7.1.7 The Board has taken into account all the evidence, testimony and arguments of the parties with respect to the impacts of its decisions and the Company's need for financial flexibility. The Board, again, appreciates the assistance which the parties have provided through their efforts to instill objectivity into what is a highly subjective area of analysis and forecasting.
- 7.1.8 The Board finds that the overall financial and business risk exposure for fiscal 1993 is similar to that which existed in fiscal 1992.

7.2 CAPITAL STRUCTURE

7.2.1 Consumers Gas was reorganized to effect the transfer of the business activities and assets that were not part of its Ontario gas distribution and storage business to British Gas Holdings at fair market value. This reorganization was completed by February 1992, with an effective date of January 31, 1992.

7.2.2 In E.B.R.O. 473 the Board found the common equity component for the Company to be a deemed 35 percent for the 1992 test year. Due to the reorganization, Consumers Gas requested an actual projected common equity ratio for the 1993 test year and thereafter. It maintained that using an actual common equity and not a deemed common equity ratio gives the Company the flexibility to adjust for changes in risk. Consumers Gas set an internal target for the common equity ratio over the next five years in the range of 35 to 37 percent to reflect the non-linear impact on the common equity ratio of periodic common equity issues. It specifically proposed a capital structure that contains a projected actual ratio of 35.51 percent.

Positions of the Parties

- 7.2.3 Dr. Winter agreed with the Company's original proposal for a projected actual equity ratio of 35.5 percent. Board Staff submitted that the Board should approve a projected actual equity ratio for the test year but that it should be no higher than the current deemed equity ratio of 35 percent. Board Staff maintained that the deemed equity ratio of 35 percent remains appropriate as the risk of the utility has not changed substantially over the past year. Dr. Winter had suggested that a range of 34 to 36 percent would permit adequate access to debt markets, and that the Company's proposed upper limit of 37 percent was excessive. Board Staff submitted that the Board should not comment on the five year target ratio and expressed some concern that approval of a range would lend itself to an increase in the equity component of the capital structure. Further, Board Staff argued that, with a proposed rate base of \$2 billion, a two percent range is unnecessary for purposes of financial flexibility and that there were no financial needs to justify a change to the debt-equity ratio.
- 7.2.4 IGUA did not support the change from a single point deemed common equity ratio to a projected actual equity ratio. It also submitted that the Board should not approve the target range concept as this will permit the

Company to "thicken" its equity and that there was no evidence to suggest that the current ratio of 35 percent was not reasonable. IGUA argued that the Board should continue to use a deemed common equity ratio of 35 percent. CFBA/OCAP recommended that the current capital structure be maintained and that the Company look to other financial instruments for financial flexibility if it finds itself unable to access the corporate bond market.

Board Findings

- 7.2.5 The Board notes that the immediate impact of the Company's proposal to employ an actual equity ratio would be an increase in the equity component. The Board finds that such a thickening is not justified by the evidence. The Board, therefore, rejects the proposed use of the Company's 35.51 percent actual equity as the equity component for ratemaking purposes in the fiscal year.
- 7.2.6 The Board deems a common equity ratio of 35 percent to be appropriate for Consumers Gas in fiscal 1993.

7.3 COST OF LONG-TERM DEBT

7.3.1 Consumers Gas requested that the Board accept 10.53 percent as the embedded cost of long-term debt for fiscal 1993. Although no incremental long-term debt issues were planned, the Company projected the replacement of previously issued debt with a \$65 million debenture issue to be issued in March, 1993. The Company's forecast coupon rate on this issue is 9.10 percent, reflecting a spread of 85 basis points over its forecast of ten year Government of Canada bonds at 8.25 percent. After including issue costs, the effective cost rate of 9.24 percent has been included in the embedded cost of long-term debt calculation.

Positions of the Parties

- 7.3.2 Board Staff submitted that the coupon rate of the Company's debt issue would be 8.15 percent, not 9.10 per cent, based on Dr. de Bever's forecast of ten year Government of Canada bond yields (7.30 percent) and the 85 basis points spread. However, it estimated that the amount of the issue, compared to the total long-term debt of \$1.1 billion, would have a minimal impact on the cost of capital. Therefore, Board Staff proposed that the cost of long-term debt submitted by the Company should be accepted by the Board.
- 7.3.3 IGUA supported the use of Dr. de Bever's estimates for Government of Canada bonds, and submitted that the \$65 million debenture should use his ten year and over bond rate of 8.08 percent for fiscal 1993, plus a corporate premium of 85 basis points for a projected coupon rate rounded to nine percent.

Board Findings

7.3.4 The Board observes that the differences in the views expressed by the parties lead to results which would have only a minimal effect in the test year. The Board accepts the Company's assessment of the embedded cost of its proposed 1993 debenture issue at 9.24 percent and its forecast embedded cost of its total long-term debt at 10.53 percent for the test year.

7.4 RETURN ON COMMON EQUITY METHODOLOGIES

Long-term Canada Bond Rates

7.4.1 The Company's witnesses forecast a long-term Canada bond (30 year) rate of 8.75 percent for fiscal 1993 and Dr. de Bever forecast 8.2 percent.

7.4.2 Board Staff argued that 8.2 percent is reasonable given the continued poor prospect for economic recovery. IGUA preferred Dr. de Bever's rate over the higher rate of the Company's witnesses. It maintained that his long-term rate is consistent with the Bank of Canada policy to hold inflation near zero, and supported by the bridge year rates currently being experienced.

Comparable Earnings Test

- 7.4.3 This test estimates a return on equity for Consumers Gas by comparing the returns earned by a sample of low-risk industrials, adjusted to incorporate the specific risks of the utility over an appropriate time period.
- 7.4.4 The Company's witnesses applied the comparable earnings test to a sample of 28 companies for the period 1983 to 1991 to yield a 13.5 percent return. The result was then reduced by 30 basis points for the lower risk of the utility for a return on equity of 13.2 percent. They did not regard an adjustment for market-to-book ratios to be appropriate.
- Dr. Winter selected 20 companies and used two business cycles, the historical business cycle, 1983 to 1991 and the current/prospective business cycle, 1985 to 1993, to produce returns of 12.45 percent and 11.62 percent respectively. He then reduced the results by 50 basis points for risk and 25 basis points for the market-to-book ratio to arrive at returns of 11.70 and 10.87. The adjustment for the market-to-book ratio is to compensate for non-balance sheet assets and inflationary distortions on book valued assets and to bring the Company's book rate of return closer to its opportunity cost of capital. The average of the results, 11.25 percent, was Dr. Winter's estimate for a fair rate of return under the comparable earnings test.
- 7.4.6 Board Staff, contending that information about current and proposed rates of return better reflects the rates of return available in the current business

cycle, supported the inclusion of the 1993 returns. The Company argued that if weight is to be given to Dr. Winter's evidence, then 1992 and 1993 should be disregarded and only the "raw return" for the business cycle 1983 to 1991 (12.45 percent) should be considered. In other words, the Board should ignore the downward adjustment as the resulting return is below the cost of attracting capital.

7.4.7 IGUA submitted that the only thing the evidence showed was that the results of the test can differ. Therefore, it argued that the results of both the Company's and Board Staff's consultants should be considered. IGUA noted the midpoint of the two results is 12.2 percent. CFBA/OCAP maintained that the comparable earnings test should be adjusted by 100 basis points to better reflect the lower risk of the Company. Further, it argued that the market-to-book ratio adjustment should be even greater than Dr. Winter's 25 basis points. CFBA/OCAP suggested that a return of 11.4 percent would be a fair, generous and conservative rate of return for the Company under the test.

Equity Risk Techniques

- 7.4.8 This methodology compares the returns on equity investments to those of low risk long-term Canada bonds to derive the shareholder risk premium associated with equity investments. The forecast rate for long Canada bonds is added to the premium and the result is adjusted. Some of the parties noted that the cost of attracting capital has traditionally been adjusted by the Board at a market-to-book ratio of 115 percent for flotation cost, market pressure, and financial flexibility.
- 7.4.9 The Company's witnesses used a long Canada yield of 8.75 percent and relied on a risk premium of 3.5 to 3.75 percent for a cost of 12.375 percent. This was then adjusted for financial flexibility for a cost of 13.5 percent. Using Dr. de Bever's forecast of 8.2 percent, Board Staff noted

that the Company's cost under this test would be reduced by 55 basis points to 12.95 percent.

- 7.4.10 Dr. Winter used Dr. de Bever's long Canada rate of 8.2 percent and a lower risk premium (1.91 to 2.5 percent) for a cost of equity, adjusted, in the range of 11.0 to 11.7 percent. He derived the lower specific risk premium by using a beta risk test. Board Staff submitted that Dr. Winter's range would provide a 2.9 to 3.5 percent return over the long Canada bond forecast. Board Staff argued that this is in line with Mr. Lackenbauer's testimony in support of a risk premium of three percent over government bonds. The Company submitted that Dr. Winter's reliance on beta in his calculation should not be accepted as it is an unreliable method for establishing a reasonable risk premium for the Company. Moreover, the Company argued that a risk premium of 1.9 to 2.5 percent will not meet investor requirements in that an investor would need a return of at least three percent over a long bond yield of 8.75 percent. When adjusted at 115 percent, this results in a minimum cost of equity of 12.8 percent.
- 7.4.11 IGUA, using Dr. de Bever's forecast for long Canadas and a market risk premium of 3.375 percent, submitted that the cost of equity would be 11.6 percent, when rounded. It calculated a market risk premium using the Board's previous findings on common equity (13.125 percent) and the cost of long-term debt (9.75 percent) in E.B.R.O. 473.
- 7.4.12 CFBA/OCAP maintained that the estimates of the equity market risk premium over long Canadas by all the witnesses were excessive. It recommended a lower market risk premium for an overall return of 11.95 to 12.15 percent. CFBA/OCAP also objected to the market-to-book value adjustment, and submitted that there was no evidence that supported the underestimation of the fair rate of return. It asked that the Board reconsider the use of the adjustment factor.

7.5 RETURN ON COMMON EQUITY

Positions of the Parties

7.5.1 The Company's witnesses gave equal weight to the comparable earnings and risk premium tests. It was their conclusion that the fair return on equity for the Company is 13.375 percent on an actual capital structure of 35.51 percent common equity. If the return were to be lower, they maintained that the common equity component would have to be higher.

- 7.5.2 Dr. Winter attached a 25 percent weighting to the comparable earnings test result of 11.24 percent and 75 percent to the equity risk premium point of 11.0 percent for a point estimate of 11.1 percent as the lower limit. He made no adjustment to the upper limit of the equity risk premium point of 11.7 percent. Board Staff submitted that, given Dr. Winter's recommendations, the decline in interest rates, the trend in the capital market and the rates of return available to potential investors since 1992, and the approved return in fiscal 1992, a return on common equity of 13.125 percent would be excessive for fiscal 1993. It maintained that the appropriate return is in the range of 11.7 percent to 12.5 percent. Board Staff recommended a rate of return of 12.5 percent on a 35 percent actual common equity ratio for fiscal 1993.
- 7.5.3 IGUA submitted that the Board should look at the 13.125 percent awarded in E.B.R.O. 473, and take into account the changes that have occurred in risks and economic conditions and the trends in equity awards granted by other regulators. Recent decisions in other jurisdictions have seen a reduction of about 125 basis points. IGUA pointed out that Consumers Gas' recommendation is only 67.5 basis points below the Company's recommendation in E.B.R.O. 473. IGUA, prescribing a 50/50 weighting to the results of the two tests (12.2 percent and 11.6 percent), submitted that the Board should find a rate of return of no more than 11.9 percent on a 35 percent deemed common equity ratio for fiscal 1993.

- 7.5.4 CFBA/OCAP submitted that changes in the money market, evidenced by the decrease in the yields of long-term Canada bonds, necessitate a lower rate of return. It recommended that the Board accept the lower range of Dr. Winter's recommendation and allow a return on equity of 11.0 percent.
- 7.5.5 The following table displays the submissions on the equity return requirement:

	Sherwin/McShane (Company) ¹	Winter	Board Staff	IGUA	CFBA
Comparable Earnings Test	13.2%	11.25%	-	12.2%	11.4%
Equity Risk Techniques	13.5%	11.0 - 11.17%	-	11.6%	11.95 - 12.15%
Return Recommendation	13.375%	11.1 - 11.7%	12.5%	11.9%	11%

Board Finding

7.5.6 After considering all the evidence and arguments in this proceeding, the Board finds that the Company's authorized fair rate of return for the test year on a deemed common equity component of 35 percent shall be 12.3 percent.

THE CONSUMERS' GAS COMPANY LTD. CAPITALIZATION AND COST OF CAPITAL For The Year Ending September 30, 1993 (\$ million)

PER COMPANY (1)	Capital Structure	Ratios	Cost Rate	Return Component	Return
Long-Term Debt	1,145.6	55.11%	10.53%	5.80%	120.6
Short-Term Debt	89.1	4.29%	7.92%	0.34%	7.1
Preference Capital	105.9	5.09%	8.80%	0.45%	9.3
Common Equity	738.1	35.51%	13.375%	4.75%	98.7
Total	2,078.7	100.00%		11.34%	235.7

(1) Includes Evidence Updates and Impact Statement Adjustments, but Excludes ADR.

PER BOARD	Capital Structure	Ratios	Cost Rate	Return Component	Return
Long-Term Debt	1,145.6	55.36%	10.53%	5.83%	120.6
Short-Term Debt	93.7	4.53%	5.95%	0.27%	5.6
Preference Capital	105.9	5.12%	8.80%	0.45%	9.3
Common Equity	724.3	35.00%	12.30%	4.31%	89.1
Total	2,069.5	100.01%		10.86% ======	224.6 =====