

M A N I T O B A ) Order No. 49/95  
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)  
THE PUBLIC UTILITIES BOARD ACT ) May 5, 1995

Before: G. D. Forrest, Chairman  
Catherine Milner, Member  
W. C. Pearson, Q.C., Member  
Glenda Russell, Member

AN APPLICATION BY CENTRA GAS MANITOBA INC.  
FOR AN ORDER OF THE BOARD APPROVING:

1. RATES FOR THE SALE OF NATURAL GAS AND THE PROVISION OF TRANSPORTATION SERVICES TO BE EFFECTIVE WITH RESPECT TO ALL GAS CONSUMED ON AND AFTER JANUARY 1, 1995.
2. DETERMINATION OF RATE BASE, RATE OF RETURN AND REVENUE REQUIREMENT BASED ON A 1995 FUTURE TEST YEAR INCLUDING AMENDED GAS SUPPLY ARRANGEMENTS.
3. CONFIRMATION OF INTERIM EX PARTE ORDER 133/94 RELATED TO THE AUTHORIZATION AND USE OF CERTAIN GAS SUPPLY DEFERRAL ACCOUNTS.
4. OTHER RELATED MATTERS.

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## **Executive Summary**

### **Application**

In October 1994, Centra Gas Manitoba Inc. ("Centra") filed an application with The Public Utilities Board of Manitoba ("the Board") for an Order approving an increase in its revenue requirement, stating that the revenues generated by the current rates were insufficient to maintain Centra's financial integrity and would result in a revenue deficiency in 1995 of \$2.6 million. For the first time, Centra's application was filed on the basis of a Future Test Year, forecasting revenues and expenses for the 1995 test year rather than on historical data.

Centra's original application was based on an average cost of Western Canadian gas of \$1.996 per GJ. Centra amended its application on January 10, 1995, primarily as a result of a reduction in the average cost of gas to \$1.70 GJ, and again on February 9, 1995 primarily as a result of a further reduction in the average cost of gas to \$1.483 per GJ. The Board notes that the average cost of gas as at the date of this Order is approximately \$1.60 per GJ.

As part of its Future Test year application Centra filed its Strategic Plan and Financial Forecast which establishes Centra's direction for the next five years. The Financial Forecast is used to determine financing needs and to predict the impact of plans on future rates. In its Strategic Plan, Centra indicated that it intends to enter into non-traditional utility services so as to provide a wider range of services to its customers. The Board has provided direction for Centra to link further the Strategic Plan and Financial Forecast with the Application to improve the regulatory process.

### **Rate Base**

The rate base is Centra's total investment in plant (including property and equipment, and working capital) on which Centra is allowed to earn a fair rate of return. Centra applied for an increase in rate base of approximately \$9 million which included increases of \$13 million in net plant and a decrease of \$4 million in working capital.

The Board examined a number of factors affecting Rate Base including utility plant additions, prioritization of major capital projects and accumulated depreciation. The Board is satisfied that the capital expenditures categorized as Essential and Necessary are appropriate and reasonable but expressed concern that expenditures within the Justifiable category which are discretionary should be curtailed where possible.

Centra was to have filed feasibility studies to support expenditures where pipeline extensions exceed 1,000 metres. Centra filed the feasibility studies for 1994 following the hearing. Two-thirds of the extensions constructed in 1994 individually do not meet the criteria as set out by the Board. On a per customer basis, costs range dramatically from \$870 to \$8,800. This disparity is unacceptable and the Board will require feasibility studies to be completed and filed for all main extensions in excess of 500 metres. To the extent that the 1994 expenditures already made exceed the feasibility criteria, the Board has ordered those expenditures removed from Rate Base so that the customers of Centra do not subsidize uneconomic extensions.

The Board has approved numerous computer expenditures which are required for the efficient operation of the utility. These expenditures include computer hardware additions, the meter reading route design project, the meter shop bar coding project, the underground service system project, the executive office pilot studies, the meter management projects and the Distribution Facilities

Information System. The Board ordered certain computer expenditures for which cost benefit analyses were not prepared to be removed from Rate Base.

Centra sought approval of a Natural Gas Vehicle ("NGV") Program whereby Centra would enter a market of equipping, servicing and fuelling natural gas vehicles as a business conducted within the regulated utility. The Board denied the request to include in Rate Base and Revenue Requirement those expenditures necessary for Centra to launch and operate the NGV Program on the basis that the NGV Program, although somewhat related to the regulated business of Centra, does not exhibit the same characteristics of a regulated utility and should be undertaken by a competitive, unregulated entity. Additionally, the Board was not satisfied with the Business Plan prepared by Centra.

Centra also applied for approval of its Equipment Rental Program ("ERP") which it had launched in December 1994, prior to obtaining Board approval. Under the ERP Centra offers the rental of water heaters to its customers on a monthly rate to be approved by the Board. For reasons similar to the NGV Program, namely, the attempt to enter into the competitive water heater market which is only tangentially related to the natural gas business and the Board's dissatisfaction with the ERP feasibility study, the Board did not approve the inclusion of the expenditures incurred for ERP in Rate Base and Revenue Requirement, nor the rates to be charged by Centra for rental of its water heaters.

The Board has also ordered Centra to file new depreciation rates for certain items.

## **Return on Rate Base**

The allowed overall rate of return reflects a weighted average cost of the various types of capital that Centra employs to finance its operations.

Centra proposed a formula approach to adjust the Board's currently allowed return on equity and requested an overall rate of return of 10.87 per cent. The Board approved the formula approach with several caveats and approved an overall rate of return of 10.80 and a return on equity range of 11.90 to 12.35 per cent with a mid-point of 12.12 percent for rate setting purposes. The Board further stated that the debt:equity ratio of Centra should remain at 60:40.

## **Gas Costs**

Gas costs which are indexed to the New York Mercantile Exchange have decreased substantially from the date of the original filing of the application. However, the commodity price of gas is but one factor in determining the rates to be charged to the consumer, and prior to arriving at the final rates to be charged to the consumer, the Board has also assessed the requested increases in Centra's non-gas costs.

As a result of deregulation of the natural gas industry Centra is responsible for negotiating its supply and transportation arrangements for the supply of its gas. The price of gas is now indexed to that of the New York Mercantile Exchange. Such an indexed pricing mechanism carries with it risk due to the fluctuations in price which Centra hopes to manage by following its price risk management plan. The Board will conduct a further hearing to determine if

Centra's actions in carrying out its price risk management program have been and are prudent.

There are numerous issues that will be further reviewed by the Board, either in future public hearings before the next GRA or at the next GRA.

The Board has directed Centra to file for approval a revised calculation of rate base, revenue requirement and rates to reflect the adjustments made by the Board. The Board will review the revised filing and issue a separate Order approving rates for 1995. The impact of the new rates on the various customer classes will be discussed in that Order.

## 1.0 Appearances

R. F. Peters K. L. Kalinowsky	Counsel for the Public Utilities Board of Manitoba (the "Board")
J. E. Foran, Q.C.	Counsel for Centra Gas Manitoba Inc. ("Centra")
J. T. Brett	Counsel for Canadian Independent Gas Marketing Association ("CIGMA") and Direct Energy
J. Hayden L. Stewart	Representing the Communications, Energy, and Paperworkers Union ("CEPU")
B. J. Meronek R. J. Graham Seniors	Counsel for the Consumers' Association of Canada (Manitoba Chapter) and the Manitoba Society of Seniors ("CAC/MSOS")
D. Foreman	Representing the Heating, Ventilating, and Air Conditioning Coalition of Manitoba ("HVAC")
J. Carstairs	Counsel for Municipal Gas Company ("Municipal")

## 2.0 Witnesses for Centra

Hon. O. E. Lang	President and Chief Executive Officer
J. D. Brett	Vice-President, Gas Supply and Corporate Secretary
G. W. Neufeld	Manager, Gas Forecasts
G. M. Griffiths	Rate Analyst
B. J. Klippenstein	Manager, Gas Supply
G. B. Whitehill	Controller
R. M. Diduch	Business Manager, NGV
H. M. Kast	Vice-President, Finance
I. D. Anderson	Manager, Regulatory and Strategic Planning
T. J. E. Bell	Vice-President, Marketing
P. C. Consul	Vice-President, Engineering and Construction
M. T. McLeod	Senior Vice-President, Scotia McLeod Inc.

### 3.0 Intervenor

CIGMA and Direct Energy	Represented by J. T. Brett
City of Winnipeg	Represented by B. Bamburak
Communications, Energy and Paperworkers Union of Canada Local 681 ("CEPU")	Represented by J. Hayden and L. Stewart
Consumers Association of Canada (Manitoba) and Manitoba Society of Seniors ("CAC/MSOS")	Represented by B. J. Meronek and R. J. Graham
Domtar Inc.	Represented by G. Keightley
Heating, Ventilating, Air Conditioning Coalition ("HVAC")	Represented by D. Foreman
Manitoba Energy & Mines	Represented by R. Floom and M. Beck
Municipal Gas	Represented by J. Carstairs
Simplot Canada Limited	Represented by G. Collis and M. Hopkins
TransCanada Pipelines Ltd.	Represented by M. Newton
Western Gas Marketing Ltd.	Represented by B. Bullen and G. Toews

#### 4.0 Witnesses for Intervenors

##### 4.1 CAC/MSOS

Dr. L. D. Booth and                   Professors, University of Toronto, Re: Cost of  
Capital

Dr. M. K. Berkowitz

P. M. Nettleton                    President, Peter M. Nettleton Consulting Ltd., Re:  
Gas Supply, Gas Forecasting, and Natural Gas  
Vehicle ("NGV") Program

J. D. Todd                         Econalysis Consulting Services Inc., Re: Gas  
Supply and Gas Forecasting

##### 4.2 HVAC

F. Chorley                         Government Relations and Chapter Development  
Manager, Heating Refrigeration and Air  
Conditioning Institute of Canada, Re: Equipment  
Rental Program ("ERP")

## 5.0 Presenters

D. B. Baker	Custom Vac Ltd.
J. Pietracci	Total Comfort Supplies
G. Beckta	Elmwood Plumbing & Heating
R. Eyjolfson	Plant Engineer, Seagram Company Ltd.
N. Klause	Citizen
K. Ising	Plant Manager, Domtar Gypsum
E. S. Kovach	Citizen
M. E. Didyk	Secretary-Treasurer and Municipal Administrator, Rural Municipality of West St. Paul
A. Shek	Citizen
B. West	Citizen
R. Asmus	Citizen
S. Wolowiec	Citizen
R. Anderson	Controller, Burns Meats Limited
C. Osorio	Plant Manager, Seagram Company Ltd.
H. W. Schafer	Senior Vice-President of Operations, CanAmera Foods
R. Singleton, Q.C.	City Solicitor, City of Brandon
G. Duncan Association	President, Keystone Mechanical Contractors

## 6.0 Background

Centra last appeared before the Board in support of a General Rate Application ("GRA") in late 1993, based on a 1993 historic test year. Following public hearings, the Board issued Order 8/94 dated January 28, 1994. Subsequently, Order 11/94 dated February 4, 1995, Order 61/94 dated April 8, 1994 and Order 71/94 dated May 9, 1994 approved and revised rates.

As part of the 1993 GRA, Centra requested approval to file its next GRA using a future test year methodology. Because of the significance of the proposed change in regulatory methodology and the fact that the request had no financial impact on the 1993 GRA, all parties agreed to a separate hearing to deal with future test year issues. In Order 89/94 dated May 26, 1994, the Board approved Centra's request to adopt a future test year.

On February 4, 1994, Centra applied to the Board to review and vary three of the Board's decisions in Order 8/94 relating to disallowed disconnect volume reductions, disallowed volume reductions for higher efficiency furnaces, and a reduction of expenses for the Meter Management Project. After a public hearing, Order 91/94 dated June 10, 1994 allowed the initially applied for disconnect volume reductions, but reaffirmed the decision to disallow expenses related to the Meter Management Project and to disallow the requested adjustments for higher efficiency furnaces.

Interim Ex Parte Order 133/94 dated October 3, 1994 approved the establishment and use of certain gas supply deferral accounts to accumulate expenses related to the development and implementation of Centra's gas cost optimization program and to record certain revenues from transactions relating to Centra's gas supply which would not otherwise be included in the Purchased Gas Variance Account ("PGVA").

Because the rates approved in the previous GRA were to expire on December 31, 1994, Centra applied on December 12, 1994, for an Interim Ex Parte Order approving a decrease in sales rates to be effective January 1, 1995 primarily because of decreased gas costs. The Board subsequently issued Order 159/94 dated December 23, 1994 which approved reduced rates and set the commodity cost of gas at \$1.90 per gigajoule ("GJ") for purposes of establishing interim rates effective January 1, 1995.

In Order 8/94 the Board approved the use of a price for gas that was determined by reference to the New York Mercantile Exchange ("NYMEX"). The overall average price of natural gas fell sharply on the NYMEX during 1994.

In the original GRA filing, a commodity cost of Western Canadian Supply gas for 1995 was \$1.996 per GJ. This price was subsequently updated on January 10, 1995 to \$1.70 per GJ and again on February 9, 1995 to \$1.483 per GJ. The Board notes that the gas costs of Western Canadian supply as of the date of this Order is now in the range of \$1.60 per GJ.

On December 14, 1994, Centra applied to the Board for approval of the provision of natural gas service to British Columbia Sugar Refining Company Limited ("BC Sugar"). Interim Ex Parte Order 4/95 dated January 13, 1995, gave interim approval to the Natural Gas Sales Agreement dated September 1, 1994.

## 7.0 The Application

Centra filed its 1995 Test Year GRA on October 18, 1994. A pre-hearing conference was held at the Board's office on November 2, 1995. Subsequently, the Board issued Procedural Order 141/94 dated November 7, 1994, which established timetables for the exchange of information and procedures to be followed at the public hearing and granted intervenor status to eleven interested parties. A technical conference was held on November 9, 1994, to discuss the matters contained in the GRA.

Centra's GRA is based on a 1995 forecast test year. The application material also contains 1994 bridge year data and 1993 historical data. In the original GRA, Centra stated that revenues generated by current rates is insufficient to maintain Centra's financial integrity and would result in a revenue deficiency in 1995 of \$2.6 million. Centra updated its filing on January 10, 1995 to reflect a revenue surplus of \$12.3 million. Centra further updated its filing on February 9, 1995 to reflect a revenue surplus of \$22.6 million, reflecting a cost of Western Canadian Supply gas of \$1.483 GJ. Centra's amended application requests approval of the following:

- X A total revenue requirement for the 1995 test year of \$261,854,400.
- X A rate base of \$271,494,600 which includes net plant of \$237,521,500, contributions in aid of construction of \$3,601,400 and a working capital allowance of \$37,574,400.
- X A debt/equity ratio of 40.66/ 59.34%, a return on equity of 12.25%, and an overall rate of return of 10.87%. Centra proposed a formula approach utilizing an estimate of Government of Canada long term bonds and an implied spread as well as an adjustment to reflect Centra's reduced risk in a future test year environment.
- X Gas costs for Western Canadian supply based on \$1.483 per GJ and a U.S. exchange rate of \$1.3733. Gas costs are forecast to be \$148,465,000, a decrease of \$30,708,300 from the gas costs approved in the 1993 GRA. The Board notes that the gas cost of Western Canadian supply as of the date of this Order is now estimated to be in the range of \$1.60 per GJ.
- X Confirmation of Interim Ex Parte Order 133/94 relating to gas supply deferral accounts.

Other important matters in the application include:

- X The use of thirteen month average balances for certain components of rate base.
- X Inclusion of NGV and ERP in revenue requirements and approval of a schedule of rates in respect of the ERP.
- X Increases in operating and maintenance costs and amortization expense.
- X Revised contractual arrangements with WGML.
- X Use of effective degree days with a balance point of 13.9 degrees Celsius for normalization of volumes.
- X Volumetric adjustments for customer additions, disconnected customers, higher efficiency furnaces and conservation.
- X New depreciation rates as a result of an updated depreciation study.
- X Gas supply management activities, including price risk management policies.
- X Information technology plans.
- X Corporate strategic plans.
- X Future test year monitoring and cost of transition.
- X Updates of the status of the deferral accounts.
- X Long-term storage arrangements.
- X Rate design, particularly for the interruptible T-service customers.

Public hearings were held from January 23 to 26, January 30 to 31, February 6 to 9, and February 13 to 16 in Winnipeg. A non-evidentiary hearing was held in Brandon on January 19, 1995. Closing argument was held on February 21, 1995.

The following table compares the revenue requirement last approved by the Board to the amounts requested by Centra in the current application.

	1993 Last	1995 Original	1995 Update	1995 Update

	Approved	Applicati on	Jan. 10/95	Feb. 9/95
<b>Revenue requirement</b>				
Operating and maintenance expenses	\$45,458.9	\$48,334.0	\$48,152.3	\$48,152.3
Amortization	1,640.3	3,742.2	3,742.2	3,742.2
Depreciation	10,951.8	12,288.9	12,070.5	12,070.5
Municipal taxes	12,148.2	12,428.0	12,312.8	12,312.8
Income taxes	11,229.4	11,339.7	12,387.2	13,292.4
Return on rate base	26,688.2	19,650.3	29,340.9	29,511.5
	<b>108,116.8</b>	<b>107,783.1</b>	<b>118,005.9</b>	<b>119,081.7</b>
Change in margin				
Change in sales	284,454.4	287,077.8	287,077.8	287,077.8
Change in cost of gas	179,173.4	174,018.1	159,799.0	148,465.1
<b>Margin subtotal</b>	<b>105,281.0</b>	<b>113,059.7</b>	<b>127,278.8</b>	<b>138,612.7</b>
Other income	2,835.8	3,069.0	3,069.0	3,069.0
Revenue requirement	284,454.4	289,732.2	274,735.9	264,477.8
Less increased sales	0.0	(2,623.4)	(2,623.4)	(2,623.4)
Adjusted revenue requirement	284,454.4	287,108.8	272,112.5	261,854.4
<b>Revenue deficiency (excess)</b>		<b>\$2,654.4</b>	<b>\$(12,341.9)</b>	<b>\$(22,600.0)</b>

## 8.0 Strategic Plan

### 8.1 General

Centra included its Strategic Plan and Financial Forecast as part of its 1995 Future Test Year Application. Centra stated that the Strategic Plan is the starting point of the Company's planning process and focuses on the basic nature and direction of the Company for the upcoming 5-year period. The Plan consists of seven areas: Executive Summary, Mission Statement, Organizational Goals, Strategic 'Drivers', Key Result Areas, Long-term Objectives and Strategies, and Financial Projections.

Centra stated that the Strategic Plan is supported by a five year Financial Forecast that is a directional projection of the Company's financial picture for the upcoming period. The forecast is used by Centra in determining financing needs and in predicting the impact of plans on future gas rates. The first year of the Forecast is used as a guide in the detailed budgeting process.

Operational plans identify objectives and specific results to be achieved within a one year time frame. The operational plan is the first point at which plans for the upcoming year are quantified. The Operational plans consist of five key elements: key results areas, indicators of performance, operational objectives, action plans and budgets. Operational plans are completed for each of Centra's seven functional areas that are in turn segregated into 34 responsibility centres, each headed by a manager who has control and responsibility over expenses.

The Regulatory and Strategic Planning Department coordinates the preparation of the budget which, on completion, is forwarded to Company executives who submit it for approval to the senior management of Westcoast Energy Inc. Once it is approved, it is finally passed to the Board of Directors of Centra Gas Manitoba Inc.

It is clear both from the written Strategic Plan and the introductory comments made by the President of Centra that Centra is reassessing its business in Manitoba. Centra's mission statement has been changed to read as follows:

"To provide Manitobans with natural gas and related energy service in a manner that gives customers outstanding value and superior service."

In the Strategic Plan, Centra indicates that the energy related services that it provides its customers will vary and change over time as opportunities arise. The Strategic Plan states:

"The services may range from traditional equipment servicing to home energy audits and energy conservation seminars. Energy related services is only as narrow as the imagination of our employees to envision new service opportunities. In fact, due to the nature of our business, being one rich with customer information and having access to homes through servicing and meter reading, our original view of service has expanded to include non-traditional utility services."

and:

"Our customers are Manitobans. We have the potential to provide service to all Manitobans, not just those who are currently receiving natural gas or are within our current franchises. Through feasible expansion our customer base can grow, and through the introduction of new services the vision of the traditional natural gas consuming customer has the potential to change."

When questioned regarding this change in direction, the President stated that Centra intends to use its strength, not abuse its strength, and that Centra intends to take advantage of business opportunities for all the stakeholders including its shareholders, its employees and its ratepayers.

## **8.2 Board Comments**

This application is the first based on Future Test Year data. It is also the first opportunity the Board has had to review the Company's Strategic Plan and Financial Forecast as part of the Company's application. Accordingly, the cross-examination of the Strategic Plan and Financial Forecast was at a high level.

The Board would have found its review of the Strategic Plan more helpful if there had been a clear link between the Strategic Plan, the Forecast and the Application itself, particularly in certain key areas such as capital planning, gas price forecasting, expense forecasting, employee levels and customer rate impacts. It would have been helpful if Centra had outlined some of the significant challenges facing the gas industry, technological changes to be addressed, and a clear delineation of the challenges that Centra has in

the Manitoba market including an aging delivery system and limited market growth. Without addressing these issues, a comprehensive review of the Strategic 'Drivers' and the words attributed to it have limited usefulness to the Customer and Regulator. It would also have been beneficial had some sensitivity analyses been done on the basic assumptions of interest rates, gas price changes and, in the final analysis, Centra's core business values. The emphasis on safety in the Strategic Plan is not totally consistent with the Capital Plan, with more emphasis apparently placed on the Justifiable category of expenditures in the current and directional financial forecast. During cross-examination, Centra's witnesses advised that a different risk strategy was being examined using different measurements, technologies and processes. Nevertheless, the long-term objectives of the Strategic Plan related to improving safety goals should be reflected in capital budgets.

One of Centra's long-term objectives is "To achieve regulatory reform in Manitoba that will result in a more cost-effective regulatory process". This is a commendable objective which has the support of the Board and Intervenors. During this hearing and the run-up process, there were attempts to improve the efficiency of the regulatory process including technical conferences, exchanges of information and specific hearing schedules. Unfortunately, complications and inefficiencies were added to this application because of significant last minute changes and corrections made to pre-filed information. Having to receive, file, review and examine the original and then the revised information certainly added to the length and complexity of these proceedings. The Board is not attaching blame but rather stating a fact. Efficiencies in the process leading up to and during the hearing will provide benefits to all parties. As outlined in the Company's Strategic Plan, efficiencies inside this process are in the Company's Operational Plan and will provide customers with a value-added product. This is an objective to which all parties should strive. The Board also notes that many of the regulatory initiatives set out in the Strategic Plan have already been implemented.

## 9.0 Rate Base

### 9.1 Total Rate Base

Centra calculated Rate Base using a thirteen month average which more accurately reflects the timing of additions to Rate Base than did the year-end historic methodology. Centra believes that this approach provides a more appropriate matching of Rate Base and Revenues. The 1995 applied for Rate Base compares to the 1993 allowed and the 1994 bridge year as follows (in 000's):

	1993 Allowed	1994 Bridge	1995 Test Year Requested
Gross Plant	\$317,252.0	\$322,659.8	\$345,802.5
Accumulated Depreciation	(92,369.4)	(97,615.3)	(108,116.1)
Disallowed Assets	(196.0)	(186.8)	(164.9)
Net Plant	224,687.5	224,857.7	237,521.5
Contributions in Aid of Construction	(3,595.5)	(3,649.4)	(3,601.4)
Working Capital Allowance	41,328.9	36,309.2	37,574.4
<b>Total Rate Base</b>	<b>\$262,420.9</b>	<b>\$257,517.4</b>	<b>\$271,494.6</b>

The overall increase in Rate Base from 1993 to requested 1995 is \$9,073,700.

### 9.2 Gross Plant - Change by Major Category

The 1994 and 1995 plant additions, net of retirements and adjustments are forecast to result in increases to gross plant of \$16,169,400 and \$21,818,800 respectively, as shown in the following tables (in 000s):

Plant	1993	1994	1994	1994	1994

Account	Year End	Additions	Retirements	Adjustment	Year End
Intangible	\$229.9	\$0.0	\$0.0	\$0.0	\$229.9
Storage	13,631.2	14.0	0.0	15.7	13,660.9
Transmission	22,352.3	233.2	0.0	22.1	22,607.6
Distribution	243,071.0	13,604.8	(298.4)	(37.8)	256,339.6
General	37,299.1	7,318.7	(1,703.8)	0.0	42,914.0
<b>Sub-Total</b>	<b>316,583.5</b>	<b>21,170.7</b>	<b>(2,002.2)</b>	<b>0.0</b>	<b>335,752.0</b>
Construction Work-in-progress	3,485.2	(2,947.8)		(51.3)	486.1
<b>Total</b>	<b>\$320,068.7</b>	<b>\$18,222.9</b>	<b>\$(2,002.2)</b>	<b>\$(51.3)</b>	<b>\$336,238.1</b>

Plant Account	1994 Year End	1995 Additions	1995 Retirements	1995 Adjustments	1995 Year End
Intangible	\$229.9	\$0.0	\$0.0	\$0.0	\$229.9
Storage	13,660.9	48.4	0.0	0.0	13,709.3
Transmission	22,607.6	89.8	0.0	0.0	22,697.4
Distribution	256,339.6	13,638.3	(630.0)	0.0	269,347.9
General	42,914.0	8,868.0	(975.0)	0.0	50,807
<b>Sub-Total</b>	<b>335,752.0</b>	<b>22,644.4</b>	<b>(1,605.0)</b>	<b>0.0</b>	<b>356,791.4</b>
Construction Work-in-Progress	486.1	779.4	0.0	0.0	1,265.5
<b>Total</b>	<b>\$336,238.1</b>	<b>\$23,423.8</b>	<b>\$(1,605.0)</b>	<b>\$0.0</b>	<b>\$358,056.9</b>

### 9.3 Utility Plant Additions

Centra categorized capital expenditures for utility plant additions as Customer Growth (which accommodates new customer growth through the installation of mains and services), System Replacement, System Relocations and Maintenance. Utility plant additions for 1993, 1994 and 1995 were categorized by Centra as follows:

Plant Category	1993 Additions	1994 Additions	1995 Additions
Customer Growth	\$6,601,500	\$6,794,600	\$9,275,700*
System Replacement	5,007,500	7,314,900	7,807,100
System Relocations	460,700	233,200	384,900
Maintenance	7,084,851	6,828,100	5,176,700
<b>Total</b>	<b>\$19,154,551</b>	<b>\$21,170,900</b>	<b>\$22,644,400</b>

\* The 1995 additions for customer growth include expenditures for NGV and ERP of \$4,175,600.

### 9.4 Priorization of Major Capital Projects

Centra prioritizes plant expenditures into the following categories:

Essential: Projects or acquisitions required to meet Government regulations, environmental minimum safety standards, or which are essential to maintain operations.

Necessary: Projects or acquisitions required to maintain facilities and operations in adequate operating condition to meet anticipated activity levels.

Justifiable: Projects or acquisitions that improve productivity with a new facility or the upgrade of an existing facility. These expenditures must be justified through a cost benefit analysis and/or a detailed qualitative analysis of customer value.

Centra prioritized utility plant additions for 1993, 1994 and 1995 as follows:

	1993	% of 1993 Total	1994	% of 1994 Total	1995	% of 1995 Total
Essential	3,873,950	20.2	4,107,900	19.4	3,802,300	16.8
Necessary	2,990,700	15.6	3,668,200	17.3	2,811,000	12.4
Justifiable	12,287,908	64.2	12,992,400	61.4	15,494,500	68.4
Not Priorized	-	-	402,400	1.9	536,600	2.4
<b>Total</b>	<b>\$19,154,551</b>	<b>100.0</b>	<b>\$21,170,900</b>	<b>100.0</b>	<b>\$22,644,400</b>	<b>100.0</b>

Centra's 1994 and 1995 expenditures in the Essential category were restricted to System Upgrades and the installation of Secondary Odorant Storage facilities. Centra justified the expenditures on mains and services as being required to improve system integrity and to enhance system capacity to accommodate load growth. An environmental audit conducted for Centra recommended that diking be constructed around bulk odorant tanks at all Primary Gate Station sites in order to contain potential odorant leaks.

Centra included expenditures in the Necessary classification for the continuation of its System Betterment Program, with the majority of the expenditures required for the Dresser Program and the upgrading and replacement of various Town Border Regulation Stations. The Dresser fitting replacements were justified on the basis that the current fittings are below standard and are therefore a more likely location for gas leaks. Town Border Stations are experiencing pipe stress, reduced capacity and encroachment of nearby residential development. Vehicle purchases and replacements in 1994 and 1995 (also classified as Necessary) are consistent with Centra's intended policy to reduce maintenance expenses and improve fleet safety and reliability.

Centra stated that all expenditures in the Justifiable category require a cost benefit analysis and/or a detailed qualitative analysis before the project is undertaken. The Justifiable classification consists of System Load Growth, Fleetnet Radio System, Leasehold Improvements and all expenditures in the area of Information System (I/S) Projects. Centra spent \$6,794,600 in 1994 and forecasts spending \$6,912,900 in 1995 on System Load Growth for the

installation of mains and services required to accommodate new customer attachments of 3,075 and 2,950 respectively. Centra stated that individual requests for main extensions are subjected to a cost benefit analysis and only those extensions which are in themselves feasible or made feasible by Customer Contributions in Aid of Construction are proceeded with. The Fleetnet Radio System is an upgrade of the current radio system and is required to improve communication between dispatchers and service personnel.

Centra requested tenders for all major projects and in all cases awarded projects to the lowest bidder.

### **9.5 Accumulated Depreciation**

The Accumulated Depreciation balance at December 1994, using a thirteen month average, was \$97,615,300. The depreciation expense for 1994 was calculated using rates approved by the Board. The thirteen month Accumulated Depreciation at December 1995, is \$108,116,100 and is calculated based on year-end 1994 plant for most plant accounts with the exception of Computer Equipment and Transportation Equipment which is based on 1995 month-end balances. Centra updated the depreciation study which was completed in 1989 based on plant records as at December 31, 1988. The result of this update is to increase the depreciation expense by \$322,800 for 1995. The net increase in depreciation expense is comprised of a decrease of \$229,900 due to new depreciation rates and an increase of \$522,700 due to inclusion of negative salvage for transmission mains, distribution mains and distribution services.

### **9.6 Five Year Capital Plan**

Centra's 1995 - 1999 Strategic Plan and Financial Forecast includes a five-year forecast of expenditures. Centra maintained that these expenditures are necessary to allow for the safe and efficient operation of the system. Load growth will occur through identification and development of new and existing business opportunities. Presently, Centra serves 98% of the residential market within the Manitoba franchise area. Limited growth is expected in the future in this area as evidenced by new customer attachments of only approximately 3,000 per year. Centra proposes to develop and implement market penetration strategies related to new technology developments, commercial building energy source conversions and new non-traditional gas systems and equipment installations including non-traditional utility services such as Natural Gas Vehicles and Equipment Rental Program.

The Five year forecast of Fixed Assets, including Property, Plant & Equipment and Accumulated Depreciation is as follows (in '000s):

	1995	1996	1997	1998	1999
<b>Fixed Assets</b> Property, Plant & Equipment	\$357,611	\$387,980	\$415,602	\$440,951	\$466,795
Accumulated Depreciation	(114,394)	(127,346)	(141,297)	(156,166)	(171,969)
<b>Net Fixed Assets</b>	<b>\$243,217</b>	<b>\$260,635</b>	<b>\$274,305</b>	<b>\$284,785</b>	<b>\$294,826</b>

A breakdown of forecast expenditures for Property, Plant and Equipment by New Business, System Betterment, General Plant and Overheads for the years 1996 to 1999 is as follows (in '000s):

	1996	1997	1998	1999
New Business	\$5,600	\$5,600	\$5,600	\$5,600
System Betterment	10,200	8,400	6,400	6,300
General Plant				
- I/S	4,400	2,900	1,700	1,800
- Other	8,500	9,000	9,900	10,400
Overheads	2,900	2,900	2,900	2,900
<b>Total</b>	<b>\$31,600</b>	<b>\$28,800</b>	<b>\$26,500</b>	<b>\$27,000</b>

Centra indicated that the Service Upgrade Program initiated in 1985 will be completed in 1996. Consequently, the System Betterment Program estimates in the Five Year Plan might, as a result, be overstated. The upgrading and replacement of Town Border Stations and Gate Stations in the former ICG Utilities franchise areas is also expected to be completed in 1996. Centra then proposes to embark on an evaluation of the extent of upgrades required to approximately 65 stations in the former GWG franchise area.

The five-year plan does not include any provision for capital expenditures related to rural gas expansion.

### 9.7 Intervenor's Position

CAC/MSOS noted that capital expenditures related to Plant Additions have been increasing for the last several years in spite of unfavourable economic times, stating:

"...our warnings and admonitions last year are repeated with equal force with respect to the frugality with which the Company should be embarking on capital projects."

(Transcript - Page 3581)

CAC/MSOS expressed concern regarding the level of expenditures in the Justifiable category arguing that most of the expenditure increases are not in the necessary or essential category. CAC/MSOS noted that the Board's observations in Order 8/94 about being circumspect about making these expenditures at this time are no less valid than they were last year.

CAC/MSOS commented on Centra's budget process in light of the change from a historical test year to a future test year, noting that the change in the process was intended to eliminate the punitive nature of the post facto review. CAC/MSOS argued that the Board should deny any project that does not have a positive cost benefit result, stating:

"Any project which is submitted to the board for approval and which has not satisfied the necessary criteria but which is not outright denied should be put into CWIP and should not have interest carrying charges attached to it. Why should the consumer pay for something that Centra hasn't proven to the regulatory authority's satisfaction."

(Transcript - Page 3587)

CAC/MSOS questioned Centra's failure to submit feasibility studies on main extensions exceeding 1,000 meters as required by the Board in Order 8/94. It also expressed concerns respecting vehicle expenditures, noting that \$961,000 was included in rate base in 1994, and a further \$376,000 is projected for

1995. CAC/MSOS believed that there is an inordinately high ratio of vehicles to employees and stated:

"The position of CAC/MSOS therefore, is that the Board should disallow some of these capital expenditures as representing an excessive investment in vehicles, and that they should require Centra in future to provide a full reconciliation of the vehicle inventory requirements and purchasing policies."

(Transcript - Page 3589)

CAC/MSOS also recommended excluding the proposed Fleetnet Radio expenditure of \$407,000 from Rate Base because of the project's negative net present value, and questioned the appropriateness of the depreciation rates used in the analysis.

Municipal Gas discussed the process that the Board followed under a Historical Test Year scenario regarding a retroactive review of project expenditures for determination of prudence, and questioned whether this was a benefit to consumers. Municipal recommended to the Board that:

"In this application, projects which Centra had requested to be proceeded with, which have not been subject to a cost/benefit analysis should not be approved until such cost/benefit analysis has been presented to the Board for their review and evaluation."

(Transcript - Page 3678)

## **9.8 Board Findings**

The Board accepts Centra's priority classification of capital projects into the Essential, Necessary and Justifiable categories. The Board further supports Centra's policy of justifying capital expenditures in the Justifiable classification through a cost benefit analysis and/or a detailed qualitative analysis of customer value. The Board has reviewed the level of expenditures categorized as Essential and Necessary and is generally satisfied that those capital additions for the bridge year 1994 and the forecast year 1995 are appropriate and reasonable.

Much of Centra's System Betterment Program falls into the Essential and Necessary categories. The Board notes however, that approximately 68% or \$15,494,500 of the total 1995 capital additions of \$22,644,400 are in the

Justifiable classification, of which \$6,794,600 is related to system load growth. The Board continues to be concerned with the level of expenditures in this category which may be considered discretionary. The Board continues to believe that discretionary spending should be curtailed to the fullest extent possible particularly in this current economic climate. The Board is aware that the Company's infrastructure is aging and there is a continuing need for rehabilitation and ongoing maintenance. The Board is therefore concerned with the high proportion of capital expenditures in the Justifiable category when there appears to be a pressing need for more expenditures in the Essential and Necessary categories, particularly for system betterment.

With respect to system load growth, the Board requested in its last Order, that Centra file feasibility studies to support expenditures where pipeline extensions exceed 1,000 metres. Subsequent to the hearing Centra filed the results of such feasibility studies for the 1994 capital expenditures. While on an overall basis the main extensions exceeded Centra's feasibility test criteria, individually 20 of the 30 filed did not meet the criteria. The Board also reviewed all other main extension expenditures and notes that the per customer cost of attachments varies from a low of approximately \$870 to a high of \$8,800. The Board finds such a disparity to be unacceptable and is concerned at the level of expenditures made by Centra to attach certain single customers, many of which are less than 1,000 metres.

**The Board will therefore require that feasibility studies be completed for main extensions in excess of 500 metres and be filed in summary form at all future GRAs. The Board will require Centra to undertake and complete all such analyses prior to commencement of the projects, and on an individual basis.** Should Centra decide to proceed with main extensions where the fifth year revenue/cost ratio requirement is not met, the incremental expenditures must be borne either by Centra's shareholders or be recovered by a contribution from the customers affected. It is not appropriate for the existing customers to subsidize new customers beyond the extent allowed by the specified criteria.

For 1994 expenditures for main extensions in excess of 1000 meters listed in undertaking No. 115 that do not achieve a revenue to cost ratio of 1.00 by Year 5, **the Board directs that Centra remove from rate base, the amount that would be required as a customer contribution for each project sufficient to achieve a revenue to cost ratio of 1.00 by Year 5.**

The Board cautions Centra that each individual main extension greater than 500 meters in 1995 must meet the same criteria. As a principle, Centra should

examine all system extensions to ensure they are financially viable within five years.

The Board will allow the capital expenditures for vehicle replacements for 1994 and 1995. However, as recommended by CAC/MSOS, **the Board will require the Company to file evidence at the next GRA that Centra's total vehicle requirements are reasonable, are consistent with the new vehicle policy and do not require inordinate annual expenditures.**

The Board has reviewed Centra's submission and justification for the Fleetnet Radio expenditures and is of the opinion that the negative NPV value is offset by enhanced communication ability which the Board considers to be critical to ensure proper response time for safe operation of the system, especially in emergency situations and accordingly should be included in Rate Base.

## 10.0 Natural Gas Vehicle Program ("NGV")

### 10.1 Background

Centra stated that they have monitored the NGV markets in North America over the last decade. In 1992 Centra considered the conditions for the NGV market appropriate for further evaluation and began to develop an NGV plan for its franchise area.

In Order 10/93 the Board stated that it would not allow the inclusion of any NGV costs in rate base or revenue requirement (except for the costs related to Centra's fleet) until Centra provided the Board with an NGV business plan that demonstrated the degree of risk and the economic viability of such a program.

The NGV Business Plan was briefly discussed during the 1994 GRA. At that time, the Board was of the view that the NGV program was a relatively modest program intended for Centra's vehicle fleet and a limited number of commercial applications. The Board, in Order 8/94, reaffirmed its expectation that the NGV Business Plan be filed with the Board upon its completion. The Board again stated that it would not allow NGV expenditures unless Centra could demonstrate that such inclusion would have a positive effect on the consumers of Manitoba. An NGV Business Plan edited for competitive purposes was filed with the Board in early 1994 on a confidential basis. Receipt of the Plan was acknowledged by the Board and returned to Centra with no comments. No informal approval was given by the Board.

### 10.2 NGV Business Plan

In this application, Centra requested approval of an NGV program. Centra stated that as technology changes and opportunities arise, regulated operations must be able to move and adapt with the changes in order to ensure long-term viability. Centra submitted that the NGV program has a strong fit with the activities and expertise of Centra. Centra outlined the primary benefits of the NGV program are:

- X increase natural gas volumes that have high annual load factors and low seasonal variance;
- X improve overall system load factor;
- X diversify volumes away from traditional space and water heating;
- X stabilize or reduce service costs to ratepayers;
- X provide a lower cost transportation energy service to consumers;

- X provide an environmentally sensitive transportation fuel as an alternative for consumers;
- X capitalize on the opportunity to initiate NGV infrastructure investment; and
- X leverage the synergy of Centra's current expertise and knowledge base.

Centra stated that it has studied the business opportunities, has reviewed the process in other jurisdictions, and has obtained independent evaluations to mitigate the risks, all of which are incorporated into the business plan. The business plan established a methodology by which returns to Centra's customers could be maximized, risks minimized and deviations from the objectives reduced. Centra also believes the business plan incorporates a conservative approach.

Centra believes that the utility-based development and investment in NGV is consistent with other jurisdictions. Centra argued that non-utilities have been deterred from developing the NGV market because the high initial investment, the perceived lack of margins flowing from gas sales, and the lack of primary consumption markets all represent significant business risks. The NGV business requires a "kickstart", and Centra believes that it is the appropriate business entity to initiate the venture. In Centra's view, the risks are too great for this venture to be undertaken by an unregulated entrepreneur.

Centra argued that the NGV program should be within the regulated framework since it would eventually be profitable and hence beneficial to Centra's customers. Centra expressed concern that the operation of such a program in an unregulated subsidiary would create problems with allocation of costs within Centra and would increase regulatory costs as a result of ensuring the appropriate separation between the regulated and unregulated businesses.

The NGV business plan contains a ten year plan for the development of the NGV program. The NGV business plan estimates volumes of gas for NGVs to be 0.07 Bcf in the first year of the plan, 0.675 Bcf after five years, and 1.5 Bcf after ten years. The investment in the NGV program contemplated at this time will be primarily for refuelling infrastructure and rental of vehicle cylinders. The total annual capital requirement is forecast to increase from about \$2.4 million in Year One to \$11.7 million in Year Five, and \$21.9 million in Year Ten. By Year Ten, the net after tax return on rate base is forecast to be 22.6%.

Operating and maintenance expenses include equipment maintenance, personnel costs and related expenses, technical services, marketing activities, research, warranty, and re-certification expenses. Over the ten year period the cumulative expenses are forecast to be approximately \$20 million. The revenues are derived from equipment sales, rentals, gas compression service fees, maintenance fees, and gas sales margins. The forecasted revenues in Year One are \$452,000, increasing to \$3,887,000 in Year Five and \$9,629,000 by Year Ten. The net cash flow in Year One is forecast to be negative \$2,497,000, in Year Seven positive \$468,000, and Year Ten to be \$2,568,000. The cumulative net cash flow is forecast at negative \$3,077,000 over the ten years.

### **10.3 NGV Programs in Other Jurisdictions**

#### **10.3.1 Ontario**

Consumers Gas in Ontario has operated a regulated NGV program since 1990 with NGV capital expenditures included in rate base. This Ontario utility has approximately 30 public NGV stations and 15 private stations included in its operations. Consumers Gas also provides cylinder rentals, conversion equipment sales and market development services. In 1993 Consumers Gas= NGV volumes were 17,464 10<sup>3</sup>m<sup>3</sup>, with 21,520 10<sup>3</sup>m<sup>3</sup> forecast for 1994 NGV and 26,410 10<sup>3</sup>m<sup>3</sup> forecast for 1995 NGV volumes.

The rate of return on capital employed in the NGV plan, after taking allowable tax credits, was 8.40% in 1993, compared to the allowed 10.86%. The estimated and forecast rate of return on NGV capital is 10.04% for 1994 (with an approved rate of return of 10.18%) and 10.25% in 1995.

Union Gas has operated a regulated NGV program since 1989 with similar service offerings to those of Consumers Gas. There are 27 public stations and 12 private refuelling facilities in Union=s operating area. Union Gas= NGV program first showed a positive return in fiscal 1992. Union Gas= NGV program is forecast to continue to generate a smaller return than the approved utility rate of return until 1996, and that the cumulative revenue deficiency will not be recovered until the year 2000.

### **10.3.2 Quebec - Gaz Metropolitan**

Gaz Metropolitan has operated a regulated NGV program since 1986, and currently has six public and six private NGV facilities. Gaz Metropolitan offers similar services to those of the Ontario utilities, but also provides an additional grant up to \$500 to match the federal government conversion grant available for customer NGV conversions. Gaz Metropolitan does not operate a segregated NGV business unit as such services are included in its general marketing program.

### **10.3.3 Alberta**

In 1993, Canadian Western Natural Gas ("CWNG") sought regulatory approval for both an internal (private) and external (public) NGV program. The internal component was allowed into rate base, but the external component was not. Northwestern Utilities Limited ("NUL") has a regulated NGV program initiated in 1990 and which now includes three public and three private facilities. NUL offers technical support, cylinder rental; refuelling equipment and vehicle conversions, with the primary focus on the commercial market where relatively high fuel consumption per vehicle enhances the economic benefits. By the end of 1994, NUL forecast 850 NGV customer vehicles will consume 140,000 GJ/year. After considering conversion grants, the expenses of NUL's public NGV program are forecast to exceed the revenues until 1994.

### **10.3.4 British Columbia**

B.C. Gas has a regulated NGV program that has been in existence since 1983, with 43 public and 9 private stations currently in operation. In its decision of August 12, 1994, the British Columbia Utilities Commission sought to maintain the status quo of the B.C. Gas NGV program which targets 4000 NGVs in the year 2000. Alternative more aggressive targets were not approved. The Commission was faced with determining what expenditure levels were required to sustain NGV infrastructure in B.C. until it could be ascertained whether the Original Equipment Manufactured ("OEM") market will develop. Because the OEM market may not develop due to infrastructure limitations or success of competitive fuels, an aggressive marketing target was not endorsed. The BC Gas NGV program will therefore maintain and refine the NGV station infrastructure, provide customer service through technical and marketing support, assist dealers with conversion technologies and private grants for the purchase of NGV urban transit buses.

#### 10.4 Intervenor's Position

Municipal urged the Board to deny Centra's application and to discontinue expansion by the regulated utility into other non-traditional markets. Municipal argued that because of its regulated status, Centra will have an advantage over other competitors who must enter the market at their own risk and expense. All customers of Centra will bear the cost and the risk of Centra's entry into this market, yet few will use the NGV facilities. Municipal argued that the NGV program is advantageous only because of the tax differential between gasoline and natural gas imposed by governments. If this differential were to be removed, natural gas would no longer be an economic alternative fuel.

CIGMA opposed Centra's entry into the NGV market as part of its regulated entity and expressed concerns over the proposed subsidy of the NGV program in its early years by the customers of the regulated utility.

CAC/MSOS argued that the NGV program should be operated outside of the regulated utility and urged the Board to reject the NGV program because of the significant amount of uncertainty, both in terms of its financial feasibility and the NGV industry itself. CAC/MSOS urged the Board to consider the unsatisfactory experience in other jurisdictions where the uncertainty of future viability, the competitive nature of the industry, and the subsidization by the consumer has cast a shadow of doubt on the NGV programs.

CAC/MSOS argued that the ratepayers should not bear the risk of this uncertainty. If the NGV program were operated in a separate non-regulated subsidiary, Centra could allocate its costs separately and still take advantage of its strengths. CAC/MSOS urged rejection of the NGV program because it is a competitive venture in the alternative fuel market. CAC/MSOS indicated that the projected volumes for the NGV consumption are overly optimistic and environmental legislation could introduce additional uncertainty about the future of NGV development. CAC/MSOS expressed concern of the risk related to Centra's ability to capture market share in a highly competitive market.

CEPU supported Centra's application that the NGV program be operated within the regulated utility arguing that this was a natural extension of the utility's operation. Representatives for CEPU further argued that Centra had employees qualified to perform conversions of vehicles to natural gas and

there was a certain assurance that this new-to-Manitoba technology is being introduced by an experienced organization in the natural gas industry.

## 10.5 Board Findings

The Board expects that many of the primary benefits of the NGV program described by Centra will be realized by the regulated utility whether the NGV business is conducted within the regulated utility or in a separate unregulated business entity. Increased natural gas volumes, improved overall system load factor and diversified volumes are examples of benefits that will accrue to the regulated utility independently of what entity operates the NGV program.

The Board views with scepticism a number of the basic assumptions and projections contained in the NGV business plan. The economic assumptions are based on limited research of the market in Manitoba. Centra has used and adapted the process used in other jurisdictions, many of which have failed to meet their original expectations. For example, Centra has made detailed projections as to NGV users by way of vehicle category, vehicle use, and mileage/ consumption but is unable to explain how these assumptions were determined. In its analysis of margins to be earned, Centra assumes that the retail profit margin remains static while there is a large increase in the profit margin of Centra. The NGV business plan seeks to maximize the return to consumers and minimize risks and deviations from the objectives. The Board remains unconvinced that many of the key assumptions and projections contained in the NGV business plan are achievable. The business plan provided by Centra and the related supporting evidence is not sufficient to convince the Board that entering into the NGV program, which is so heavily subsidized by general rate customers initially, is a prudent investment.

The Board notes that many of the risks related to the NGV program are risks over which Centra has no control. Much of the economic benefit of natural gas as a motor vehicle fuel is derived from its exemption from the fuel taxes which may be eliminated by any one of the levels of government. Manufacturer support of NGVs is still in its infancy and is, to a certain extent, driven by legislated demand requirements from other jurisdictions. A change in any of these two critical factors could place the high capital investment of Centra at risk.

The Board notes the difficulty in applying general regulatory principles to a new type of service and technology where provision of service does not exhibit significant economies of scale and where the users of this service are mobile

and have alternate supplies available. The Board does not consider it within its mandate to regulate a business entity which does not exhibit characteristics commonly associated with a public utility. The Board is also concerned with ratepayers funding limited-access refuelling stations for vehicle fleet owners since only specific NGV users can benefit from these refuelling stations. The Board is not convinced that the initial funding for the NGV program should come from the regulated operations of Centra.

Centra argued that:

"In principle, any business activities which are competitive could be operated in a non-regulated manner and conversely any operation that is a monopoly should be regulated. The problem of cost allocation between operations arises unless it is reasonable to have the activity completely separate from our main regulated business. We have not reached final opinions about where the line between regulated and unregulated operations should be drawn, but we see activities more properly within the regulated framework the more closely they involve the natural gas business or the more they draw upon internal strengths developed and maintained by Centra. Considering that the primary purposes of the NGV and Rental Programs are to sell natural gas, Centra considers them appropriately within the regulated business. "

(Exhibit PUB 10-1)

As stated in the strategic plan filed in this GRA, Centra is seeking to enter into "non-traditional utility services". The Board must consider which of these non-traditional ventures should be regulated. In examining the NGV program, the Board notes that although competition does not currently exist for NGVs, conditions are such that it could emerge as a competitive motor fuel. Similarly, conditions within the NGV refuelling industry can in no way be equated to a natural monopoly. The fuelling of NGVs, although closely related to the regulated business of Centra, does not exhibit the same characteristics as a regulated utility. Although Centra views the use of natural gas for transportation as an extension of its gas distribution service, others believe the NGV program has many similarities with other motor vehicle fuel competitive markets.

While the Board agrees with the above principles enunciated by Centra, the Board does not agree with the application of that principle as it applies to the NGV program. The Board looks more to the nature of the proposed business activity, and views the NGV as a business activity that should not be

conducted in a regulated utility. In the Board's view, the NGV program in and of itself is not about selling natural gas, but rather entering the competitive alternative fuel market.

For all of the above reasons, the Board will not approve the NGV program by Centra and will order Centra to remove from rate base and revenue requirement the total cumulative expenditures related to the NGV program for 1995, including all related costs and revenues.

## **11.0 Equipment Rental ("ERP") Program**

### **11.1 Background**

Centra is requesting approval of an Equipment Rental Program ("ERP") which initially is offering the rental of 30, 40 and 50 gallon water heaters at monthly rental rates of \$8.50 and \$11.00 per month. Centra testified that future increases in rental rates could be accomplished by filing the rates with the Board for approval, but would not, in the opinion of Centra, require a hearing. Although initially limited to the rental of water heaters, Centra indicated that it is considering expanding the rental program to other natural gas appliances including furnaces.

Manitoba gas utilities had previously offered the rental of water heaters but terminated the program when the manufacturers reduced the warranty period from ten years to five years, and there was concern about higher servicing costs due to the quality of water, particularly in rural areas.

Centra launched the ERP on December 1, 1994, without prior Board approval. As of the date of the public hearing, approximately 250 water heaters had been rented. When questioned why the ERP was proceeded with prior to Board approval, Centra testified that it wanted to get going on it and that it was, in Centra's judgment, prudent to get this program started when it got started". Centra testified that its capital expenditures for the ERP were approximately \$50,000 to \$60,000, that two staff have been hired, and that a one-time computer system upgrade was completed at a cost of \$96,800.

### **11.2 ERP Business Plan**

The ERP business plan forecasts a total of 3,100 rental units in 1995, increasing to 79,700 units in 2004, or approximately 1/3 of Centra's customer base. The capital expenditures in 1995 are forecast to be \$1,812,000, with revenue of \$183,000, and operating costs of \$296,500. Projected incremental rate base is expected to reach \$24,700,000 by year 2004. The ERP Business Plan projects that Centra will earn its currently allowed return on equity of 11.25% over the 30 year life of the ERP. In the first nine year period, the ERP benefits from tax credits arising from the timing differences between depreciation and capital cost allowance and from the write-off of the installation costs in the year in which they are incurred. In the following ten year period the rate of return drops to levels between 7.3% and 11.6% when the tax advantage is no longer available. In the final decade of the program,

there is a negative return. Any profits from the program would accrue to the benefit of all customers; similarly, any losses would be subsidized by all customers. Centra stated that since mid-1993, it has met with dealers to make arrangements for the successful operation of the ERP.

The ERP Business Plan is based upon the rental of low-efficiency heaters. Apparently unknown to Centra, these heaters are to be phased out commencing in March 1995 by government regulation. Regulations will now require more expensive higher-efficiency heaters. Directionally, this will require increased investment and higher rates than proposed in the application. In addition, the Business Plan assumed a service life of 10 years, while many intervenors maintain that 7 years is more appropriate.

The Rental Agreement includes the statement that "The Consumer agrees to the conditions herein, as well as the Terms and Conditions for Natural Gas Service and amendments as approved by the Public Utilities Board of Manitoba which are incorporated herein and form part of this Agreement." Centra testified that this statement was not intended to imply that the Board had approved the Rental Agreement, but rather that it referred to the Terms and Conditions of Natural Gas Service that had been previously approved by the Board.

Under the terms of the Rental Agreement the customer and Centra each have the option to terminate the rental after providing one month's notice in writing. Centra can also terminate the Rental Agreement if the customer's credit is unsatisfactory. Although there is no provision for the customer to exercise the buy-out option, Centra testified that such an option was available as a policy, subject to the payment of an administrative fee of \$50 and the remaining book value of the water heater.

### 11.3 Intervenors' Position

HVAC testified that under the equipment rental plans operated in Ontario, market penetration rates of up to 95% have been achieved and the purchase options to the consumer has been effectively removed. HVAC testified that this overwhelmingly dominant market share was achieved over time through a number of marketing techniques and incentives from the utility to home builders to install rental water heaters in new homes. HVAC admitted that significant differences exist between Manitoba ERP and those offered by the Ontario utilities. In particular, there is a the lack of dealer involvement in the programs offered by the Ontario utilities. HVAC expressed concern that Centra could have the ability to subsidize the ERP from its regulated operations. HVAC requested that the Board direct Centra Gas to cease any further involvement in the ERP or, if further information is required by the Board, to defer the ERP for one year to allow interested parties to bring further evidence. Alternatively, HVAC requested the Board to order Centra to proceed with ERP only if operated as a stand alone business with no connection with the current operations of Centra.

CAC/MSOS supported the ERP proposal by Centra, viewing it differently from NGV. CAC/MSOS argued that the water tank rental program is a business more closely associated with the main business of Centra, that it is likely to be self-sustaining, that the predecessor utilities had engaged in this business and that it is carried on profitably by other utilities in Canada. CAC/MSOS did not view Centra's expansion into ERP as a possible abuse of its monopolistic position and noted the involvement of the dealers. The support of CAC/MSOS was, however, qualified. CAC/MSOS recommended that if the asset life was reduced, the rental rates should be adjusted accordingly. Customers should be made aware of both the rental and finance options, Centra should include both mid- and high-efficiency heater rental options, the rental agreement should be reworded to clarify the PUB approval, and the existence of a buy-out option should be communicated. Centra should also report annually to the Board on the status of the ERP.

CEPU's representatives argued that the ERP should be included as part of the regulated utility of Centra because it added a choice to the consumer and the offering of Centra's services could be of assistance to both the dealer and the customer.

Municipal argued that it should be unbundled from the traditional utility and operated as a separate entity. Municipal also expressed concern over the initial subsidization of the ERP by the ratepayers.

#### 11.4 Board Findings

Centra stated that a study on the useful service life of a water tank had been undertaken by Centra's Engineering Department. When questioned at the hearing and asked to provide a copy of the study, Centra stated that in fact no formal study had been conducted. Evidence was given that the poor water quality incorporated into the analysis of the tank life was merely a judgmental assessment as opposed to a written detailed study and was performed by several telephone calls to manufacturers. The service life proposed by Centra is at the high end of the spectrum. The Board also notes that the predecessor utilities involved in the rental of water heaters departed from this service when manufacturers reduced the warranty period from ten years to five years, and there was increasing concern due to the high service cost related to poor water quality. Nothing has changed in the intervening years to alleviate that concern. The Board is also not convinced that Centra has accurately assessed the useful service life of the water heater. Since the capital expenditure is the greatest component of the cost of the ERP, any alteration to the service life could dramatically affect the ERP feasibility study.

The feasibility study was prepared using low efficiency heaters, even though new government regulations will require the use of higher-efficiency heaters commencing in March 1995. Centra was not aware of this change in government regulation and did not incorporate the higher cost of the to higher-efficiency heaters into its feasibility test.

The Board notes that Centra testified that "the rental rate is highly dependent on asset life, the cost of water heaters, installation charges, and forecasted rental units". The Board is not convinced that the evidence provided by Centra relative to the asset life and the cost of water heaters is based on current reliable information. Centra noted that one private company in the Winnipeg market presently has a limited rental program. Centra has numerous competitive advantages in entering into an equipment rental program. These include its pre-existing billing system, the ease with which it can perform credit checks of those customers seeking to enter into such a Rental Agreement, and its access to its customer base for advertising purposes. However, the significant number of dealers that attended the hearing in opposition to the ERP is evidence of Centra's failure to deal in an appropriate manner, with the concerns of the many dealers whom Centra will rely on or compete with.

The Board is disappointed that the ERP was launched on December 1, 1994 without prior Board approval. This date is after the filing of the GRA and prior to the start of the hearing. Although the purpose of a future test year regulatory process is to permit the Board to consider such expenditures prior to the expenditures taking place, in this instance Centra chose to proceed and launch the ERP without informing the Board. The Board is also concerned that Centra set a rate for service without obtaining Board approval. The wisdom of that strategy escapes the Board.

Similar to the principles enunciated under the NGV program, the Board finds that the ERP need not involve the regulated natural gas business and is an unnecessary attempt to enter the competitive water heater market.

In Manitoba, the natural gas consumer currently has various payment options when replacing a water heater. These options include:

1. Cash purchase by the consumer;
2. Purchase by consumer on financing terms arranged by the consumer;
3. Purchase by the consumer from a dealer with the financing provided by Centra and billed on the consumer's monthly natural gas bill; or
4. Rental by the consumer with monthly payments to a private dealer currently offering a water heater rental program.

For all of the above reasons, the Board finds that Centra has not satisfied the onus of proof with respect to the prudence of entering into the rental of water heaters. **The Board will therefore order Centra to remove from rate base and revenue requirements the total cumulative expenditures related to the ERP for 1995. The Board also denies the application of Centra to include the rental rates in the schedule of Other Charges under the Terms and Conditions of Service. The Board also will not approve the Rental Agreement and directs that Centra remove from the Rental Agreement all references to the Public Utilities Board of Manitoba.**

**The Board expects to receive a report from Centra within 60 days of this Order that describes in detail Centra's plans for the ERP in light of the decision set out above, including Centra's plans to deal with the existing water heater rental customers that have entered into rental contracts with**

Centra since December 1, 1994. Should Centra determine that it will continue the ERP in an unregulated separate entity, the report to the Board should also discuss how Centra intends to ensure that it does not abuse any competitive advantages it might enjoy.

## **12.0 Computer Expenditures**

### **12.1 General**

A substantial amount of time was spent during the 1993 GRA in connection with the examination of computer expenditures, related cost benefit studies, and the technology platform study. At that time, the evidence was that there are several stages of cost/benefit analyses. The first stage is a high level analysis done as part of the Information Technology ("IT") plan which is used to determine the initial feasibility of the project. This is used to determine which projects are most beneficial to proceed with to the next phase. The second phase is the "analysis charter phase" which is a more detailed analysis of the costs and benefits. This is typically completed once the actual scope of the project has been determined. This is used to determine if the project will proceed. A post implementation cost/benefit analysis is subsequently prepared to ensure that the anticipated benefits were delivered and that the estimates were accurate.

Order No. 8/94 included a number of specific directives relative to computer expenditures including directives relative to cost/benefit analyses, the technology platform study and long range planning.

The 1995 GRA includes evidence relative to IT. The evidence discusses some of the increased opportunities for IT, quantifies some of the "hard" and "soft" benefits realized from IT, and addresses some of the specific directives set out in Order No. 8/94. Centra's evidence also includes an "Information Services Profile", an "Information Services 1995-99 Strategic Plan", a 1995 Operational plan and budget, and a series of project costs and benefits evaluations.

### **12.2 Technology Platform Study and Theseus**

Order 10/93 ordered Centra to file with the Board a comprehensive five year IT plan. In a letter to the Board dated June 15, 1994, Centra advised the Board that, because of problems with Theseus, the plans requested would not be prepared in 1994. In the current application, Centra advised the Board that the Theseus project had been cancelled and the consortium developing the system has broken up. As a result of this, Centra did not develop the planning studies, migration plan or five-year IT plan.

Centra still has a vision of generating synergies by using a common customer information system (CIS) , but this possibility has moved further into the future. Centra will undertake the planning studies and migration plan once the feasibility of a common CIS has been reconfirmed. A five-year plan will be created after this major direction has been determined.

Centra also advised the Board that it will not be allocating any of the Technology Platform Strategy Study ("TPS") costs to other WEI companies. This position is contrary to information given to the Board during the 1993 GRA. The total cost of the Technology Platform Study of approximately \$484,000 has been accumulated in a separate account which Centra is amortizing over 36 months. The requested revenue requirement includes \$155,900 amortization related to the Technology Platform Study.

### 12.3 Summary of Computer Expenditures

Centra has added approximately \$8.5 million to utility plant for 1994 and 1995 in computer related expenditures. The following table sets out the major items :

Description	(in 000' s)		
	1993 Disallowed Expenditures Added in 1994	1994 Expenditures	1995 Expenditures
Computer Hardware	\$186.8	\$372.9	\$1,096.0
Computer Hardware - E.M.R. Upgrade			438.0
Underground Service System	1,421.3		
CSS Meter Management	938.6		
DFIS #1		1,445.7	
DFIS #2			180.6
DFIS #3			725.4
Meter Reading Route Design		303.3	

Meter Shop Bar Coding		262.6	
Computer Software			323.0
Gas Accounting			41.2
SCADA Project			153.0
Financial Systems Rollout			119.1
Other Projects less than \$100,000	-	469.5	50.0
<b>Total Additions to Utility Plant</b>	<b>\$2,546.7</b>	<b>\$2,854.0</b>	<b>\$3,126.3</b>

#### 12.4 1993 Disallowed Expenditures

In Order 8/94, the Board stated that Centra had not satisfied the onus of proof with respect to the prudence of certain computer expenditures and ordered Centra to remove the total cumulative expenditures related to the Executive Office Pilot Study, Meter Management, and Underground Service Records from rate base and place them in work-in-progress until such time as Centra can demonstrate that the expenditures met the test of used, useful and prudently acquired through updated cost/benefit analyses. Centra maintains that all three of these projects meet the test of used, useful and prudently acquired, and provided prefiled evidence in support of this position.

The Underground Service System deals with the creation, maintenance, and updating of gas service information which is used to improve the efficiency and reliability of business processes related to installation, maintenance and reporting of information about gas services. The system was put into productive use in 1993 and Centra believes that the total actual hard and soft benefits realized are approximately \$302,000 annually. The post-completion cost benefit analysis reflects a positive net present value.

The Meter Management project was intended to improve the business side of meter management throughout the province. The project addressed four main issues, being the large urban customer base in Winnipeg, amalgamation of Manitoba companies, government regulations and accreditation program. The project was fully implemented in January, 1994. Although the direction and scope of the project changed considerably from when it was first developed, the completed project is expected to deliver benefits over the next ten years in excess of \$3 million, and the cost/benefit analysis reflects a positive net present value.

The Executive Office Pilot Study was launched to examine the potential productivity gains from LAN-based work-group computing compared to utilizing microcomputers on a stand alone basis. Centra stated that tangible benefits have been realized, and further benefits and opportunities are forthcoming. However, no specific cost/benefit analysis was included in the application, although one was filed in response to CAC/MSOS Information Request ("I/R") #69. This cost/benefit analysis prepared in November 1992 assumed a productivity improvement of 10%, and reflected a positive net present value. The hardware and software that was purchased has been implemented primarily in the executive area. Centra has capitalized the hardware and software costs of \$186,800 and wrote off the development costs of approximately \$100,000 in 1994.

## **12.5 1994 Computer Expenditures**

The largest project expenditure in 1994 relates to the Distribution Facilities Information System (DFIS) - Phase 1, with total expenditures in 1994 of \$1,445,700. The purpose of this project was to improve the quality and timeliness of the gas main facility maps available to field and office personnel involved in locating gas mains to determine the appropriate course of action in the event of an emergency, and to assist in day to day management of the gas network. The system was expected to be implemented by November 1994. Hardware purchased in 1993 of approximately \$257,000 was added to rate base in 1993, and the remaining costs of \$1,445,700, consisting of approximately \$583,000 in hardware and software costs and the remainder of capitalized labour and disbursements are added to rate base in 1994. Centra has identified hard and soft benefits of approximately \$157,000 annually, consisting mostly of "soft" productivity gains. A financial model prepared for this project in June 1993 reflects a negative net present value of \$1,157,700. A revised cost/benefit analysis for DFIS - Phase 1 (Exhibit CAC/MSOS #5) dated February 5, 1995 prepared in response to a CAC/MSOS undertaking reflects a negative net present value of \$644,800. In cross examination on why a project with negative salvage value was proceeded with, Centra stated that the project is primarily a maintenance of business project, and while it is categorized as justifiable, it is primarily a safety and reliability project, and cannot be justified using traditional financial models. Centra stated that this project is really an essential or necessary project. Safety and reliability are the justifications for the project, and the financial model does not apply.

The Meter Reading Route Design project was initiated to improve the productivity of the existing meter reading work force. The project was scheduled for completion in November, 1994. The costs consist of approximately \$90,000 in hardware/software costs and the balance in capitalized labour and disbursements. The projected tangible benefits from the project are estimated at \$384,000 annually, and the project financial model which was prepared in July 1994, and subsequently updated in response to CAC/MSOS Information Request #134 indicated a positive net present value.

The Meter Shop Bar Coding Project is intended to improve the efficiency of meter repair personnel in the meter shop. The project costs consist of approximately \$155,000 of hardware/software costs, and approximately \$107,000 in capitalized labour and disbursements. The project is expected to deliver hard benefits of approximately \$85,000 annually, and the project financial model reflects a positive net present value.

The expenditures for computer hardware consist primarily of personal computers required to support new positions and personal computer upgrades and replacements.

## **12.6 1995 Computer Expenditures**

Computer hardware costs include \$363,000 for 81 personal computers to be acquired in 1995, and \$733,000 for project hardware, the largest items being \$304,000 for computer aided dispatch and \$250,000 for CSS/CIS user interface to increase efficiency for staff responses to customer inquiries.

The current electronic meter reading system is at the end of its useful life, and the expenditure of \$438,000 is related to the replacement of hand held units, meter reading PC's and software.

The DFIS - Phase 2 project is designed to reduce labour required to prepare input and accomplish electronic integration. The expenditures relate primarily to systems development.

The purpose of the DFIS - Phase 3 project is to improve the efficiency and effectiveness of engineering, gas distribution and maintenance, and construction staff that install, maintain and report on gas main facilities. The estimated costs of \$725,400 include hardware/software costs of approximately \$168,000. The project is expected to be completed in late 1995, and is added to rate base in December, 1995. Centra stated that the analysis

charter for this project has been prepared for approval, but no cost/benefit information was included in the application.

The expenditures for software relate to application software purchased for specific projects including systems delivery, data base software and risk management among others.

The SCADA project is required to evaluate and recommend options for the gas distribution department since the current gas distribution monitoring software is running out of capacity. The expenditures are added to rate base in October, 1995. An analysis charter has been completed, but no cost benefit report is available.

No cost/benefit reports were provided by Centra for any of the computer projects forecast for 1995, which is in direct conflict with the very clear direction given in Order 8/94.

## **12.7 Intervenor's Position**

CAC/MSOS argued that "there are massive dollars being spent " in the computer area and that "a portion of these expenditures are in the form of experimentation that doesn't provide the long term benefits sought if at all." and

" While Centra is winging its way along the information highway, there is no road map being laid out before us, in the meantime the consumer is paying all the travel expenses,..."

(Transcript page 3593)

CAC/MSOS argued that Centra should be required to clearly demonstrate where it is going, and that future forecasts with a focused plan should be submitted to the Board as soon as possible.

CAC/MSOS stated that spending on personal computers is exorbitant, and that Centra should be required to justify that level of expenditure by showing positive returns to the consumer before the expenditures are approved.

CAC/MSOS expressed concern about certain other projects that either have no cost/benefit analyses, or ones that show a negative net present value. These include the EMR project, the CSS/CIS Interface project, the computer aided

dispatch project and the DFIS project. CAC/MSOS argued that these projects should be removed from rate base until the benefits can be clearly demonstrated by Centra, preferably by way of cost benefit analyses.

With respect to the 1993 disallowed expenditures, CAC/MSOS argued that there is some uncertainty whether the benefits realized by the customers as a result of the Office Pilot Project justify the inclusion of the expenditure in rate base. With respect to the underground service system, CAC/MSOS believes that the productivity and other benefits from this project are inflated. With respect to the meter management program, CAC/MSOS argued that 50% of the benefits are "soft", and the study has been skewed by including 11 years of expense reductions and 12 years of staffing and other avoidance benefits. CAC/MSOS argued that the study should be redone based solely on a ten year life to determine what portion of the project should be allowed.

## **12.8 Board Findings**

The Board is of the view that Centra has now satisfied the onus of proof requirement with respect to the 1993 disallowed expenditures and will allow those items as an addition to rate base in 1994. The Board shares the concerns expressed by CAC/MSOS that the benefits expected to be realized by Centra's customers as a result of these projects are uncertain and may be inflated, particularly with respect to the Executive Office Pilot Project. The Board is prepared to accept Centra's judgment on these projects, for purposes of this application, but cautions Centra that more focus will be placed in future applications on detailed reviews of cost benefit analyses. Centra must be prepared to support its position on anticipated benefits with quantitative information and post implementation reviews.

With respect to the 1994 additions to utility plant, the Board accepts the evidence put forward by Centra with respect to computer hardware additions, the meter reading route design project and the meter shop bar coding project. Each of these projects is supported by a cost benefit analysis that indicated a positive net present value based on reasonable assumptions.

With respect to the DFIS - Phase 1 project, it is the Board's view that Centra incorrectly categorized this project as justifiable rather than essential or necessary. The Board agrees with Centra's view that it is absolutely essential that operating personnel have a complete set of fully-discernable current as-built drawings. Anything less could contribute to an escalation of emergency incidents. Accordingly, the Board views the important safety

aspects of this project as the important driver, not the financial cost benefit analysis. The Board will therefore allow this addition to rate base.

The Board has concern about the 1995 forecast expenditures and has no basis on which to determine whether many of the proposed 1995 computer expenditures are prudent other than the general evidence put forward by Centra. Order 8/94 directed that Centra provide, as part of future GRA filings, cost benefit study summaries for Computer Development Projects. Since this information was not provided for planned 1995 expenditures, **the Board will order Centra to remove from rate base the following 1995 planned computer expenditures: computer aided dispatch (\$304,000), CSS/CIS user interface (\$250,000), DFIS - Phase 2 (\$180,600), DFIS - Phase 3 (\$725,400) and SCADA projects (\$153,000).**

These 1995 planned expenditures should be treated as construction work in progress until such time as Centra can demonstrate to the Board the prudence of these planned expenditures.

On an overall basis, while the Board has approved significant computer-related expenditures in the last few Board orders, the overall MIS Strategy was just developed for this hearing. In the last two Board orders, the Company was directed to file a five year IT Strategy Plan. Because the Theseus project was cancelled, the Company has not developed the planning studies, migration plan or its five year IT Plan.

The Board is concerned that without a five year plan or road map, it is difficult to see what the future needs are of Centra, how Centra should meet these needs and what priorities should be set. The Board also notes that while significant expenditures have been made in the past on information technology, little evidence has been provided to demonstrate reductions in labour costs.

While the Board recognizes that precise quantification of immediate and long-term savings is difficult to determine, every effort should be made to demonstrate that these significant investments will provide customers with long-term cost reductions. Productivity gains should be one of the significant "drivers" in the long-term MIS Strategy.

## 13.0 Working Capital Allowance

### 13.1 General

The working capital component applied for in rate base is \$37.6 million, approximately \$3.7 million less than that allowed in Order 8/94. As with other components of rate base, the components of the working capital allowance, with the exception of "cash requirements", are calculated using a thirteen month average. These components include materials inventory, propane inventory, gas storage inventory, customer security deposits and finance contracts. With the exception of inventories, the balances in the respective accounts are comparable with the balances allowed in Order 8/94. Total inventories reflect a reduction of approximately \$2.7 million, primarily as a result of the forecasted reduced cost of gas in storage .

The 1995 working capital allowance for cash requirements is \$7.0 million, a reduction of \$1.9 million from the amount allowed in Order 8/94. This amount is calculated using the lead-lag methodology originally approved in Order 156/91. The amount is less than the 1993 test year approved amount mainly because of a reduction in the revenue lag from 41.5 days to 38.7 days. Somewhat offsetting this reduction is an increase in 1995 test year daily revenues and minor changes in various expense leads and daily expense amounts.

A lead-lag study is an acceptable method that is used to estimate the net investment in cash requirements that the utility must make in order to provide services to its customers. The method involves analyses of the time between when the customer receives service from Centra and the time the customer pays for that service (revenue lag), reduced by the time between when employees and others render service to Centra and when Centra pays for that service (expense lead). The overall objective of the study is to provide a reasonable estimate of the lead and lag days for a particular period, and not to provide an exact measure.

Centra's application sets out calculations in support of this working capital component on which they are requesting a return. The application includes information on total revenues and cash expenses, the respective lead/lag days, and the working capital required to provide for the net revenue lag. The application also includes a reconciliation of the cost of service items to total revenue requirements.

The following table summarizes Centra's requested 1995 working capital allowance compared to the working capital allowance allowed in Order 8/94.

Component	1993 Allowed in 000' s	1995 Requested in 000' s	Increase (Decrease) in 000' s
Total Inventories	\$29,626.5	\$26,869.4	\$(2,757.2)
Security Deposits	(1,278.7)	(806.9)	471.8
Finance Contracts	4,048.4	4,465.7	417.3
Cash Requirements	8,932.7	7,046.3	(1,886.4)
<b>Total Working Capital Allowance</b>	<b>\$41,328.9</b>	<b>\$37,574.4</b>	<b>\$(3,754.5)</b>

### 13.2 Intervenors' Position

CAC/MSOS questioned Centra relative to the calculation of the cash requirement component of working capital. As part of their closing argument, CAC/MSOS introduced a document described as an "argument appendix" which included selected samples of the treatment of cash requirements in other jurisdictions. CAC/MSOS argued that,

"They ought not to include in principle and by definition those items that are non-cash items which are not required to be paid out to cover day-to-day expenses, nor financial obligations such as revenues associated with the return on equity."

(Transcript page 3574)

CAC/MSOS reviewed in detail some of the tabs included in their argument appendix, including a revised calculation of working capital. CAC/MSOS concluded by stating,

"We say that in principle, then, historically the working capital requirements, revenue requirements have been overstated notwithstanding that they have received endorsement by this Board. My memory doesn't allow me the luxury of recalling whether this was discussed, but it certainly doesn't appear to have been discussed. In any event, if it was discussed,

it certainly requires, in my respectful submission, an adjustment, and that adjustment is found on tab 12 which is a reconciliation of Centra Gas' working capital cash requirement schedule removing those 30 million odd dollars in non-cash items and just incorporating in its revenues, revenues required to operate and fund day-to-day expenses of Centra".

(Transcript page  
3578)

By letter to the Board dated April 3, 1995, CAC/MSOS responded to Centra's Undertaking No. 96 (Centra exhibit 74). This undertaking detailed how non-cash items are treated for purposes of calculating working capital in Ontario and Alberta.

By letter dated April 10, 1995, Centra advised the Board of "its objections to the timing and content of the replies filed by CAC/MSOS". Centra took the position that the April 3, 1995 response from CAC/MSOS could be characterized as argument based on questionable premises, and therefore Centra responded to these replies by way of attachments to its letter. By letter dated April 13, 1995, CAC/MSOS responded to Centra's letter of April 10, 1995 and submitted that the Board should disregard in its entirety the reply submitted by Centra.

No other intervenors took a position on the working capital allowance or in the subsequent filings by CAC/MSOS and Centra.

### 13.3 Board Findings

New evidence cannot be introduced in closing argument and subsequent filings and therefore the Board has given little weight to this new evidence in its deliberations. The Board remains of the view that the methodology for calculating the cash requirement of working capital allowance, as originally designed by an independent expert on the matter, and as updated by Centra for current business conditions, remains theoretically sound. The Board acknowledges that there are a number of different methods used in various jurisdictions for calculating the cash requirement component of working capital, some of which include only cash expenses. However, if Centra were to modify its calculation to remove non-cash expenses from the revenue side, as suggested by CAC/MSOS, certain other adjustments should also be made to the calculation. The consequence of this revised calculation would likely be a net working capital component for cash expenses that may not be significantly different from that included in the application. **Therefore, the Board will**

approve a working capital allowance for cash requirements calculated in a method consistent with the application as proposed by Centra, subject only to the required adjustments as a result of Board directives elsewhere in this decision.

The Board will further direct that Centra lead evidence on this matter in the next GRA so that arguments can be fully canvassed and Centra's methodology can be compared to other jurisdictions.

## 14.0 Overall Rate of Return and Capital Structure

### 14.1 1993 Allowed Overall Rate of Return and Capital Structure

Order 8/94 dated January 29, 1994 ("1994 Decision") contains the last full decision of the Board with respect to the overall rate of return and capital structure of Centra. At that time, the Board approved a return on equity ("ROE") range of 10.75 to 11.75 percent (with a midpoint for rate setting purposes of 11.25 percent), and a capital structure which included 39.83 percent equity. This decision resulted in an overall allowed rate of return of 10.17 percent for rates in effect from January 1, 1994 to December 31, 1994 as outlined below:

	Capital Structure	Weight Percent	Cost Rate Percent	Weighted Average Cost of Capital
Long-term debt	\$129,847,432	47.945	10.460	5.02
Short-term debt	33,103,000	12.223	5.500	0.67
Equity	107,875,000	39.832	11.250	4.48
<b>Total</b>	<b>\$270,825,432</b>	<b>100.000</b>		<b>10.17</b>

In the 1994 Decision, the Board outlined the considerations underlying its decision with respect to various areas of disagreement between Centra's and the CAC/MSOS expert witnesses, including the weight which the Board attached to the various methodologies proposed by the witnesses for determining an appropriate return on equity. These decisions expanded on the rationale which the Board had previously followed as described in Order 156/91.

### 14.2 Formula-based Return on Equity Proposal

By letter to the Board dated August 26, 1994, Centra proposed a mechanical formula to adjust the Board's currently allowed return on equity for the current application. A meeting was held at the Board offices on September 21, 1994 with representatives of Centra, CAC/MSOS and others to review the proposal. CAC/MSOS rejected the proposed formula and advocated the continued use of expert testimony, albeit on a narrowed basis. In response, Centra

offered certain amendments to the proposed formula which CAC/MSOS also rejected. Centra's application for ROE has been filed on a basis consistent with its amended proposal for a formula based approach.

Formula = Benchmark long Canada bond rate  
+ change in long Canada bond rate from Benchmark rate  
+ implied spread between long Canada bond rate and ROE

This approach for determining ROE departs from the past practice of annually introducing expert evidence by witnesses retained by Centra and Intervenors. A formula based approach was recently approved by the British Columbia Utilities Commission ("BCUC") following a generic hearing into the matter. A similar generic hearing was recently conducted by the National Energy Board ("NEB") and a formula based approach was approved.

As a basis for proposing a formula approach for establishing the ROE in the current application, Centra suggested that the formula would:

- ∃ reflect changes in capital markets;
- ∃ avoid use of time consuming and costly expert witness testimony;
- ∃ improve efficiency of hearing process by reducing hearing time devoted to ROE;
- ∃ determine an ROE fair to both shareholders and consumers;
- ∃ avoid debate on issues upon which the Board has already rendered decisions by following the Board's last decision;
- ∃ produce an allowed ROE that approximates the result had detailed ROE expert testimony been filed; and
- ∃ be practical and readily understood by all interested parties.

Centra suggested that the option to re-examine the formula be considered at least every three years, at which times interested parties could request a full ROE hearing with witnesses. Centra further suggested that the formula be allowed to operate for the 1995 and 1996 future test years, within a range of movement in the benchmark long Canada bond yield. Centra proposed that the validity of the formula be accepted for changes in the benchmark long Canada bond yield of plus or minus 2 percentage points (200 basis points or "bps").

### 14.3 1995 Application

Centra's original application included an overall rate of return of 10.75 percent based on a 40.553 percent equity component of total capital.

Centra amended its requested overall rate of return and capital structure on several occasions and, with its final revision on February 9, 1995, requested approval of an overall rate of return of 10.87 percent as outlined below:

	Capital Structure	Weight Percent	Cost Rate Percent	Weighted Average Cost of Capital
Long-term debt	\$135,609,800	47.385%	10.287%	4.87%
Short-term debt	34,213,100	11.955%	8.500%	1.02%
Equity	116,361,600	40.660%	12.250%	4.98%
<b>Total</b>	<b>\$286,184,500</b>	<b>100.000%</b>		<b>10.87%</b>

#### 14.3.1 Capitalization

Centra's requested capital structure includes an increase in the equity component of almost 1 percent to 40.66 percent, notwithstanding that Board Order 8/94 had indicated that the equity component should not exceed 40 percent.

Centra's application also included the impact of a proposed long-term debt issue of about \$50 million in the fall of 1995. The debt issue is not expected to greatly impact Centra's level of long-term debt or cost of long-term debt for the 1995 test year. However, the issue will serve to reduce Centra's level of short-term debt relative to the Company's limit on short-term borrowing of some \$70 million.

Centra indicated that its total financing requirements were based on an average of the 1994 and 1995 year-end capital outstanding. The equity component was determined based on the average of beginning and year-end balances. The long-term debt component was calculated based on a thirteen month weighted average balance. The short-term debt requirement was determined as the difference between total financing requirements and equity and long-term debt financing as calculated.

#### 14.3.2 Long-term Debt

As indicated above, Centra proposes to issue \$50 million in long-term debt at an estimated coupon rate of 10 percent (10.08 percent imbedded cost) in the fall of 1995. The long-term debt issue is intended to take advantage of the improved bond ratings which Centra received in late 1994 from both the Canadian Bond Rating Service ("CBRS") and the Dominion Bond Rating Service ("DBRS"). In improving Centra's bond ratings, both CBRS and DBRS noted a number of underlying positive factors including the regulatory environment and improving financial performance. Centra expects that these favourable bond ratings will reduce the cost to the ratepayers of future debt issues.

Due to the timing of the new debt issue, Centra projects only a marginal decline of 17.3 bps in the weighted cost of long-term debt from 10.46 percent to 10.287 percent.

#### **14.3.3 Short-term Debt**

The level of short-term debt projected for 1995 is expected to decline somewhat due to both the new long-term debt issue and a higher requested equity financing component. The cost of short-term debt is expected to increase 300 bps to 8.5 percent over the currently allowed cost of 5.5 percent. This increase in the cost of short-term debt is consistent with increases in short-term financing costs since the last hearing.

#### **14.3.4 Return on Equity**

Centra did not request a full ROE hearing either to support a particular ROE or to evaluate the proposed formula included in this GRA. Centra contended that a full ROE hearing in 1994 and Board Order 8/94 provided adequate support and direction to enable all parties to evaluate the requested ROE calculated by a formula approach. Further, Centra indicated that no other significant changes had occurred in the capital markets or business risks of Centra since the last full ROE hearing which would invalidate the use of a formula approach.

Centra derived an "implied spread" from the Board's decision in Board Order 8/94, by subtracting an estimate of the benchmark long Canada bond yield from the ROE approved by the Board. Centra estimated the benchmark long Canada bond yield based on the long Canada spot yield (7.5 percent) recommended by Centra's expert witness and the forecasted long Canada yield (8 percent) recommended by CAC/MSOS's expert witness at the 1994 hearing. In so doing, Centra calculated an implied spread range of 3.25 to 3.75 percent or a midpoint of 3.5 percent.

The ROE approved by the Board in 1994 was based on a historical test year whereas the current application was filed under a future test year. Therefore, Centra recommended that the implied spread be reduced by a further 25 bps to 3.25 percent to reflect the lower corporate risk associated with a future test year. Centra's expert's testimony in 1994 and CAC/MSOS's expert concurred that 25 bps was a reasonable estimate

Centra's application indicated that the "risk free" component of Centra's underlying ROE, represented by 30 year long Canada bonds, would be 9 percent for 1995. Centra's expert witness from Scotia McLeod forecast that rate of return on long Canada bonds would be about 9.25 percent to 9.5 percent for 1995. An average of the November 1994 Consensus Forecast's<sup>1</sup> 3 month and 12 month forecast of 10 year Canada bonds, adjusted for the spread between 10 year and 30 year bonds at the end of November 1994, resulted in an estimated long Canada bond yield of 9.12 percent for 1995.

Accordingly, Centra calculated an ROE of 12.37 percent, being the implied spread of 3.25 percent plus the average long Canada bond yield forecast of 9.12 percent based on Consensus Forecast. Centra's application also proposed to round the ROE to the nearest 25 bps, with the result that Centra's requested ROE was reduced to 12.25 percent. The 1 percent increase in Centra's requested ROE from the 11.25 percent currently allowed is attributed to the increase of 137 bps in the long Canada rate over the average of the two rates advocated by the expert witnesses in 1994, and offset by 25 bps for the impact of a future test year.

In support of the 1 percent increase in the ROE, Centra's expert witness from Scotia McLeod indicated that, in her experience, equity returns move in "lock-step" with changes in the benchmark long Canada bond yield for yields of less than 10 percent. For every 1 bps increase or decrease in the long Canada bond

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<sup>1</sup>The Consensus Forecast is published monthly by Consensus Economics Inc., London, England, and includes among other information, three month and twelve month forecasted yields for 10 year Canada bonds.

yield, the ROE would increase or decrease accordingly, providing the long Canada bond yield did not exceed 10 percent.

In further support of its requested increase in the ROE of 1 percentage point to 12.25 percent, Centra indicated that:

- ∃ an ROE of 12.25 percent is less than those returns currently allowed comparable companies in other jurisdictions;
- ∃ Centra's expert witness from Scotia McLeod recommended an ROE of 13 to 13.5 percent (including an allowance for flotation costs);
- ∃ the ROE must increase given increases in long-term interest rates over the past year;
- ∃ the requested ROE of 12.25 percent is less than that applied for by Union Gas and Centra Gas Ontario before the Ontario Energy Board ("OEB");
- ∃ a higher ROE is essential to maintaining Centra's interest coverage ratio which is necessary to support Centra's recently increased bond rating;
- ∃ a higher ROE is necessary to support both further improvements in Centra's bond rating as well as to support possible bond issues in 1996 and beyond.

Centra also requested that the Board approve the use of the formula for the 1996 test year provided that the forecast long Canada yield based on the Consensus Forecast Average is within plus or minus 2 percent of the current forecast long Canada bond yield now at 9.12 percent. In other words, the formula would continue to operate for forecast long Canada yields of between 7.12 and 11.12 percent.

#### **14.4 Intervenor's Position - Return on Equity**

CAC/MSOS filed evidence from its witnesses, Drs. Booth and Berkowitz, which critiqued the formula approach advanced by Centra as well as offering a number of alternatives to Centra's requested ROE.

##### **14.4.1 Formula Approach for ROE**

CAC/MSOS's witnesses accepted the use of long Canada bond yields as a basis for the determination of a formula driven ROE. They advocated the use of the Consensus forecast as an independent measure of the 10 year Canada bond yield. The witnesses also supported the use of the market spread between 10 year and 30 year Canada bonds at the end of November as an appropriate means of adjusting the Consensus forecast yields for 10 year Canada bonds to a 30 year Canada bond yield. During cross-examination, the witnesses confirmed Centra's calculation of the forecast long Canada bond yield of 9.12 percent determined on this basis.

CAC/MSOS's witnesses raised two fundamental disagreements with the formula proposed by Centra. Firstly, Drs. Booth and Berkowitz objected to the determination of the implied spread of 3.25 percent by reference to the spot rate for long Canada bonds provided by Centra's witness at the 1994 hearing. CAC/MSOS suggested that if this consideration was eliminated, the resulting implied spread would be 3 percent, a full 25 bps lower.

Secondly, the witnesses for CAC/MSOS disagreed with Centra's contention that the ROE should move in lock-step with the underlying change in the long Canada rate. They suggested that the implied spread is not necessarily fixed for a range of long Canada bond returns. CAC/MSOS advocated the use of an adjustment factor, proposed to be about 80 percent. Under CAC/MSOS's proposal, the ROE would increase or decrease by only 80 bps for every corresponding increase or decrease in the benchmark long Canada bond yield of 100 bps.

Based on their own forecast of long Canada bond yields of 8.5 to 8.9 percent, an adjustment factor of 80 percent and a currently allowed rate of return of 11.25 percent, Drs. Booth and Berkowitz concluded that a formula based ROE would be in the range of 11.65 to 11.72 percent.

#### **14.4.2 Use of Formula**

Notwithstanding the acceptance of the mechanics of the formula by CAC/MSOS's witnesses, CAC/MSOS proposed that the adoption of a formula approach be postponed for a year. CAC/MSOS indicated that both BCUC and NEB conducted generic hearings on the use of a formula in conjunction with a full ROE hearing. Since a full ROE hearing has not been undertaken to support the ROE calculated by the formula, CAC/MSOS opposes its adoption.

Drs. Booth and Berkowitz concurred with the recommendation by Centra that the formula be subject to a review at least every three years. However, CAC/MSOS

suggested that a full ROE hearing should be required, rather than be optional as suggested by Centra.

CAC/MSOS's witnesses also concurred that the formula should only continue to apply during the three year window within a stipulated band of long Canada bond yields. Whereas Centra suggested the band be plus or minus 2 percent of the current forecasted long Canada bond yield of 9.12 percent, CAC/MSOS suggested the band be plus or minus 1 percent. The witnesses indicated that the recent volatility in the marketplace and capital markets warranted the use of a narrower band. However, during cross examination, the witnesses also acknowledged that they had recommended a 2 percent band at a recent NEB hearing and the selection of 1 percent was largely judgmental.

#### **14.4.3 ROE – Alternative Determination**

Drs. Booth and Berkowitz also provided some broad updates to the expert evidence they have historically submitted to the Board and other tribunals. In providing the information, the witnesses acknowledged that it did not constitute a full ROE presentation in keeping with Centra's expressed wish of limiting the time committed to hearing expert evidence. Rather, the evidence was largely drawn from their evidence filed at a Union Gas rate hearing in November 1994.

CAC/MSOS's witnesses confirmed that, at least directionally, a number of their methodologies for assessing ROE supported an increase in Centra's currently allowed ROE. In conclusion, CAC/MSOS recommended an ROE increase of 25 bps to 11 percent compared to the ROE which they had recommended in the 1994 hearing. They also indicated that this return was consistent with the return which they recommended for Union Gas in November 1994.

#### **14.5 Formula Approach – Other Jurisdictions**

##### **14.5.1 British Columbia Utilities Commission**

BCUC recently conducted a generic hearing into a formula based determination of ROE in conjunction with a full ROE hearing. Extracts of the evidence presented to BCUC and the decision rendered were filed with the Board. BCUC, which regulates a number of LDCs within the province of British Columbia, approved the use of formula driven ROE and an implied spread of 3

percent (including an allowance for flotation costs). A number of the other elements of the decision follow:

- ∃ As proposed during the course of this hearing, BCUC approved the use of a forecasted long Canada bond yield based on the November report of the Consensus Forecast adjusted for the spread in the marketplace during the last week of November between 10 year bonds and 30 year bonds.
- ∃ The formula applies for all long Canada bond yields less than 13 percent.
- ∃ The formula is subject to review at least every three years.
- ∃ Although expert evidence was introduced concerning an adjustment factor of less than one to be applied to changes in the benchmark long Canada bond yield, the use of such an adjustment factor was rejected by the BCUC.

Centra's expert witness indicated that the ROE approved by the BCUC in this decision was poorly received in the marketplace with adverse implications for the regulated companies. However, it was unclear whether the ROE determined was poorly received on the basis of the implied spread or on the basis of an inappropriate forecast long Canada bond yield.

#### **14.5.2 National Energy Board**

Since the generic hearing conducted by the BCUC concerning the use of a formula based ROE calculation, the NEB, which also regulates a number of gas utilities, has engaged in a generic hearing of its own. As with BCUC, the NEB conducted its generic hearing in conjunction with a full ROE hearing.

Extracts of the expert evidence filed with the Board suggest the following:

- ∃ There is general concurrence among the expert witnesses that ROE does not move in lock-step with long Canada bond yields where those yields are more than about 10 percent. However, opinions among the experts differ as to whether ROE should move in lock-step with long Canada bond yields of less than about 10 percent. Opinions also differ as to what adjustment factor, if any, should be applied.
- ∃ An objective determination of the forecast long Canada bond yield is required.

- ∃ Some limitations (such as time and a range of long Canada yields) should be placed on the continued use of a particular formula.
- ∃ The use of a formula can improve efficiency in hearings and lower costs associated with the recurring filing of redundant and often polarized expert testimony.

## **14.6 Board Findings**

### **14.6.1 Capital Structure**

In Order 8/94, the Board approved "...an equity ratio not to exceed 40% as its allowed capital structure for Centra." Although the Board notes that no intervenor objected to the capital structure proposed by Centra, the Board does not find that an increase in the equity component to 40.66 percent is warranted. In response to Undertaking 31, Centra indicated that a decrease in the equity component of capital structure would be offset by an equivalent increase in short-term debt.

**Accordingly, the Board will approve a capital structure consisting of 40 percent equity and 60 percent debt (47.385 percent long-term debt and 12.615 percent short-term debt).**

#### 14.6.2 Return on Equity

In reviewing the appropriateness of the formula approach proposed by Centra, the Board notes the detailed analysis of Centra's formula performed by CAC/MSOS's witnesses. With the exception of the issue of an adjustment factor, CAC/MSOS largely concurs with the components of the formula methodology proposed by Centra. The Board also notes that CAC/MSOS witnesses have proposed similar formula based methodologies in both Ontario and British Columbia.

The rate of return of 11 percent recommended by CAC/MSOS's witnesses was based on evidence adapted from a hearing concerning a different company in another jurisdiction. Furthermore, CAC/MSOS's proposed ROE is based on updates to CAC/MSOS's 1994 recommended ROE and disregards the higher ROE actually approved by the Board Order 8/94. These updates also included consideration of some methodologies which were not fully endorsed by the Board in prior Orders. Since CAC/MSOS did not offer any further evidence in the form of a more detailed and specific ROE examination, the Board rejects the CAC/MSOS's recommended ROE prepared on this basis. Further, the Board is not persuaded to delay applying Centra's ROE formula for a further year given CAC/MSOS's general concurrence with the formula methodology. **Accordingly, the Board will adopt the formula approach in principle, subject to certain conditions outlined below.**

For the purposes of this application, Centra estimated an implied spread of 3.50 percent between the forecasted return on long Canada bonds and the calculated ROE. CAC/MSOS suggested that an implied spread of 3.25 percent would be more appropriate, determined by excluding the November 1993 yield of 7.50 percent on long-term Government of Canada bonds used by the Company's expert and relying instead on the 1994 forecast yield of 7.75 percent to 8.25 percent proposed by CAC/MSOS's expert. The Board's findings in Order 8/94 noted that both experts at the time agreed there was an expectation of increased long-term interest rates for 1994, which corroborates the higher forecasted yields proposed by CAC/MSOS. Therefore, it does not appear reasonable to determine the implied spread inherent in the return on equity allowed in Order 08/94 by reference to the spot rate which was in effect at November 1993. Expert testimony in 1994 confirmed a reduction of 25 bps in the implied spread to reflect the lower corporate risk associated with a future test year. Similar recommendations were advanced by both the Company and CAC/MSOS in the current hearing. **Accordingly, the Board will approve an implied spread for the current application of 3.0 percent (3.25 percent less 25 bps for future test year).**

The Board recognizes that both BCUC and NEB conducted a full ROE hearing in assessing the appropriateness of a generic ROE formula. In accepting the use of a formula, based in part on the 1994 hearing which did not contemplate a formula process, the Board does not accept as final the implied spread of 3.0 percent. Rather, the Board expects that all participants at the next full ROE hearing will fully examine the issue of an appropriate implied spread.

CAC/MSOS also proposed that future adjustments to the currently allowed ROE be based on 80 percent of the change in the underlying long Canada bond yield. CAC/MSOS's witnesses recently made a similar recommendation before the BCUC and NEB. In response to information requests filed by Centra and in cross-examination, CAC/MSOS acknowledged that the adjustment factor was somewhat arbitrary and was not fully supported by quantitative analysis. However, the Board notes that in prior years, the changes in long Canada bond yields did not necessarily translate into a similar corresponding change in ROE for Centra (i.e., past changes in ROE have not necessarily moved in lockstep with changes in the long Canada Bond yield). The Board believes that an adjustment factor is appropriate, although little corroborative evidence was given on the adjustment factor itself. **Accordingly, the Board will accept CAC/MSOS' recommendation of an 80 percent adjustment factor.**

Applying an implied spread of 3 percent to a forecasted long Canada bond yield of 9.12 percent yields a calculated ROE of 12.12 percent. Based on these findings, **the Board will approve a fair ROE range of 11.90 percent to 12.35 percent with a mid-point of 12.12 percent for rate setting purposes.**

The Board notes that the approved ROE of 12.12 percent is consistent with the year over year change in the long Canada bond rate, when adjusted by a factor of 80 percent and added to the currently allowed ROE of 11.25 percent, reduced by 25 bps for the effect of a future test year.

#### **14.6.3 Limitations on Use of Formula Approach**

On the basis that the components of the formula should be reviewed periodically in conjunction with a full ROE hearing, **the Board will require that a full ROE hearing be scheduled no later than in conjunction with the 1997 future test year application.**

Centra recommended that the formula continue to be applied for underlying yields in the long Canada bond of between 7.12 and 11.12 percent, based on the

current forecast yield of 9.12 percent plus or minus 2 percent. CAC/MSOS recommended that the band be limited to plus or minus 1 percent. On the basis that a benchmark long Canada bond yield and implied spread would normally be established in conjunction with a full ROE hearing, and since the benchmark implied spread was determined with reference to the 1994 hearing. **The Board will approve the use of the formula provided the forecast yield of long Canada bonds are within a level of 8 percent plus or minus 2 percent.**

Nevertheless, the Board reserves the right to require a full ROE hearing prior to the 1997 test year as a result of unusual or significant changes in the economy, the capital markets, or Centra's underlying business and financial risk. When the next full ROE hearing is held, the Board will request parties to provide further evidence.

#### 14.6.4 Overall Rate of Return

The Board will approve an allowed overall rate of return of 10.80 percent, based on the approved capital structure and an ROE of 12.12 percent as outlined below.

	Capital Structure	Weight Percent	Cost Rate Percent	Weighted Average Cost of Capital
Long-term debt	\$135,609,800	47.385%	10.287%	4.88%
Short-term debt	36,100,800	12.615%	8.500%	1.07%
Equity	114,473,800	40.000%	12.12%	4.85%
<b>Total</b>	<b>\$286,184,400</b>	<b>100.000%</b>		<b>10.80%</b>

## 15.0 Gas Sales

### 15.1 10 Year Rolling Average

Centra utilized a 10 year rolling average, from 1984 to 1993, to define its average year for use in its normalization process for 1995 test year volumes.

The use of the 10 year rolling average, using the traditional definition of degree day deficiency (with an 18 degree Celsius balance point), was first allowed by the Board in 1989. The 10 year rolling average methodology results in a different definition of a normal year every year. Centra once again requested the approval of the use of the effective degree day deficiency ("EDD") definition (with a 13.9 degree Celsius balance point) in determining the 10 year rolling average. The impact of deleting the 1983 EDD data and adding the 1993 data was to increase the 10 year average EDD deficiency from 4,336.1 to 4,449.3.

### 15.2 Effective Degree Days

Centra, as it did in the 1993 GRA filing, requested a change from the use of traditional to effective degree days for their volume normalization process.

The request was denied by the Board in 1993 for lack of sufficient data. The underlying reason for this request, in Centra's opinion, is that the balance point of 18 degrees Celsius to designate the outside air temperature at which heat load commences is no longer valid. Centra stated that the adoption of improved building insulation standards, greater heat generation from supplemental sources within a dwelling and a general trend towards conservation have resulted in the balance point reducing to 13.9 degrees Celsius over a period of years. The objective of redefining degree days is to improve load modelling and forecasting heat load. The use of the traditional degree days would result in overstating normal year volumes. In order to determine the actual relationship between air temperature and heating load, Centra used the results of two regression techniques: firstly, three years (1991, 1992, 1993) of monthly cyclical billing data and, secondly, 1993 daily gas receipt data from 20 receipt points. Centra's regression analysis, which utilizes a definition of base load and heat load, showed that heating load commences when the ambient air temperature is 13.9 degrees Celsius. As a check, Centra also regressed the daily receipts (without an adjustment for base loads) and degree days which yielded a balance point of 14.5 degrees Celsius. Based on the detailed regression methodology, the normalized year volumes for both firm and interruptible customer classes are determined, except for 15 of Centra's largest volume customers. These 15 customers'

volumes are based on actual 1993 consumptions. Simplot volumes are the average of the previous three years actual consumptions.

### 15.3 Test Year Normalized Volumes

In order to calculate the 1995 test year volumes for rate setting purposes, Centra used normalized volumes based on the most recent (1993) calendar year actual data and the regression methodology. The 1995 test year volumes were determined by adjusting the 1993 volumes for each of 1994 and 1995 for customer additions, conservation factors, impact of higher efficiency furnaces and impact of disconnected customer volumes. Year over year customer additions were assumed to remain at 1993 levels. The profile of customer attachments, which recognizes the time of year when attachments occur, is such that the first year volumes consumed are about 44% of a full years consumption. Additionally, new customers consumptions are based on the use of higher efficiency furnaces. In 1995 Centra has included additional volumes of 8,820  $10^3\text{M}^3$  for one new large volume (LGS 2) customer. Centra also included incremental volumes in 1995 of 711  $10^3\text{M}^3$  for the proposed natural gas vehicle program.

Conservation adjustments are estimated to be at 1993 levels: annual decreases of 0.9% for the SGS Class and increased per-unit use for the LGS Class of 0.7%.

Centra estimated that 4,700 existing furnaces would be replaced with higher efficiency units for each of 1994 and 1995 and that each unit would require 0.44  $10^3\text{M}^3$  less natural gas. Centra filed supplementary evidence on January 18, 1995. In this evidence, Centra identified 152 residential homes which had furnaces as the only natural gas appliance and which had been replaced with mid- or high-efficiency furnaces between January and July of 1993. Of these 152 residences, 96 were discounted from the analysis because of "...distortions in the billing histories due to billing corrections." The analysis of the 56 remaining residences showed an average reduction in normalized volumes of 0.30  $10^3\text{M}^3$ . Centra's requested downward adjustment was based on the engineering calculation of 0.44  $10^3\text{M}^3$ .

Centra calculated the disconnected customer volumes by, firstly, adding back 1993 disconnected volumes to the 1993 normalized volumes and then deducting estimated 1994 disconnected customer volumes. The same calculation applies to 1995 disconnected customer volumes. Centra also requested a change to the base heat value content from 38.0 to 37.8 GJ/ $10^3\text{M}^3$  due to decreased heat value

content of its gas supply over the past year. Although the difference between the assumed and actual heat value is accumulated in the PGVA, Centra submitted that this change should minimize the PGVA accumulation. In summary, Centra requested approval of 1995 normalized sales volumes of 1,820,792 10<sup>3</sup>M<sup>3</sup>.

#### 15.4 Normalized and Annualized Revenues

The 1994 normalized revenues of \$283,270,800 were determined by applying the annualized rates as approved in Board Order 11/94, dated February 4, 1994, to the 1994 normalized sales and transportation volumes, based on a heat content of 38.0 GJ/10<sup>3</sup>M<sup>3</sup>. Similarly, 1995 normalized revenues, at existing rates, of \$287,077,800 were calculated by applying the 1994 annualized rates to the forecast 1995 sales and transportation volumes, calculated at a heat content of 37.8 GJ/10<sup>3</sup>M<sup>3</sup>. A summary of the 1994 and 1995 annualized and normalized revenues, with a comparison to 1993 is shown below. The 1993 revenues are based on 1993 annualized rates.

#### Annualized normalized revenues (in 000' s)

Customer Class	1993 Historical	1994 Bridge	1995 Test Year
SGS	\$159,147.0	\$166,126.3	\$167,500.4
LGS - 1	4,501.9	4,844.3	4,869.9
LGS - 2	3,376.0		4,017.2
LGS - 3	6,724.7	3,585.6	7,189.4
LGS - 4	74,330.1	7,151.8	80,886.0
		79,179.6	
Total LGS	88,932.7	94,761.3	96,962.5
Interruptible - 1	11,550.0	12,449.0	12,514.9
Interruptible - 2	3,414.2	3,666.6	3,686.0
Interruptible - 3	2,935.6	3,168.1	3,184.8
Interruptible - 4	805.1	862.6	867.1
Total Interruptible	18,704.9	20,146.3	20,252.8
Total Sales	\$266,784.6	\$281,033.9	\$284,715.7
Special Contract	895.9	895.9	895.9

T-Service Firm	251.7	246.4	247.7
T-Service Interrupt	1,135.5	1,094.6	1,218.4
Total T-Service	1,387.2	1,341.0	1,466.1
<b>Total Revenues</b>	<b>\$269,067.7</b>	<b>\$283,270.8</b>	<b>\$287,077.7</b>

### 15.5 Intervenors' Position

CAC/MSOS was the only Intervenor to express any opinion in respect of the normalized volume determination. CAC/MSOS took issue with Centra's proposed method of determining the proper balance point and the volumetric adjustment for greater use of high efficiency furnaces. CAC/MSOS submitted expert testimony on the matter of proper balance point determination. In written submission, it was recommended Centra use a maximization technique, similar to that used by Consumers Gas in Ontario, to determine the balance point. The use of this technique, which regresses total daily receipts against degree days for a range of assumed balance points and then selects the balance point that maximizes the  $R^2$ , results in a balance point of 14.5 degrees Celsius. CAC/MSOS disagreed with Centra's proposal primarily because Centra's methodology did not consider the effect of water temperature variance between mild and cold winters. Subsequent to this submission, CAC/MSOS met with Company officials to clarify certain aspects of this portion of the evidence. As a result of this meeting, CAC/MSOS generally agreed with Centra's proposal for the 1995 test year.

In closing argument, Counsel for CAC/MSOS stated:

"Now, while we support, therefore, Centra's proposal to move to effective degree days, this is not unqualified support."

(Transcript - Page 3621)

CAC/MSOS recommended that the maximization technique regressing full daily gas receipts, not only space heat requirements, be adopted by Centra. They also expected Centra to undertake studies to determine if water temperature had any significant impact on the balance point determination and to report its findings to the Board.

CAC/MSOS also requested the Board to disallow, or to substantially reduce Centra's proposed volumetric reductions related to the greater use of high efficiency furnaces. CAC/MSOS contended that the evidence before the Board at

this hearing was not sufficient for the Board to properly assess the impacts as they had, to a large extent, already considered them in the allowed conservation adjustment, being an overall reduction of 0.9% of the SGS volumes. In summary CAC/MSOS stated:

"So, in summary, Mr. Chairman, it's our position that to give effect to the reduction requested by Centra on account of conservation and as well to give the reduction on account of high-efficiency furnaces would involve an element of double counting, it would be inappropriate to allow both, and that if there was some reflection for both adjustments, that the proposed reduction on account of high efficiency furnaces be reduced quite significantly."

(Transcript - Page 3627)

## 15.6 Board Findings

In Order 8/94 the Board refused Centra's request to use EDDs with a balance point of 13.9 degrees Celsius and required Centra to provide three year's data to support any further such requests. Centra has now provided this data which supports the proposed balance point. The Board notes that the 1990 data results in a balance point of 15.5 degrees Celsius. The Board is, however, satisfied with Centra's explanation that this result is an anomaly because certain assumptions were required due to lack of specific 1990 base load information. The Board further notes that Centra's maximization technique which regresses total daily receipts without any base load adjustment yields a balance point of 14.5 degrees. Further, Centra's preliminary calculations based on CAC/MSOS' maximization technique request yields a balance point of about 14.0 degrees. The Board acknowledges that the move to a 13.9 degree balance point, compared to the traditional balance point of 18 degrees, will have differing annual impacts depending on weather. The Board is, however, satisfied that the EDD balance point will provide less variation from year to year and will, over a period of time, equalize the impacts between Centra's shareholders and its Customers.

The Board also notes Centra submitted that the revenue impact of moving from a balance point of 13.9 to 14.5 degrees Celsius would be an increase of about \$80,000, while moving from 13.9 to 14 degrees Celsius would be some \$16,000. The Board is concerned that the costs of any studies to further refine the balance point may outweigh any benefits derived from such a refinement. **The Board will accept the use of EDDs with a balance point of 13.9 degrees Celsius. The Board will not expect any further studies with respect to EDD**

determination until the Company has tracked the necessary data for 1992 to 1997.

With respect to the disconnected customer volumes, the Board considers that Centra's estimates are not precise enough to warrant the "back out, add in" procedure. The Board is of the opinion that this impact has stabilized and consequently will not consider any further adjustments, unless Centra can clearly demonstrate a significant change or trend. **The Board will therefore order Centra to add the 1993 disconnected customer volumes into the 1993 base normalized volumes and will not allow any further adjustments.**

The Board refused Centra's request for a volumetric adjustment for the greater use of higher efficiency furnaces in Order 8/94 and also in Order 91/94 because of the lack of a sufficient data base. In reviewing the evidence at this hearing, the Board is satisfied that the number of furnace replacements, estimated at 4,700 for each of 1994 and 1995, is sufficiently accurate. However, the Board is still not satisfied that the volumetric adjustment estimated for these replacements is in any way precise. The Board is of the opinion that the review of 56 of the 152 residences selected by Centra is not sufficiently large to determine adequately the impact of newer furnaces. This is especially so, given that the theoretical calculation yields reduced volumes of  $0.44 \times 10^3 \text{M}^3$  per unit replaced, while the sample of 56 residences indicates an average volume reduction of  $0.30 \times 10^3 \text{M}^3$ .

The residence sample provided by Centra in supplementary evidence indicates that 12 of the 56 residences surveyed actually experienced increased consumptions after replacement with higher efficiency furnaces. Additionally, Centra provided evidence that 6,936 gas fired appliances were installed during 1993 and 9,050 in 1994. Centra contends that the incremental sales volumes for these appliances are reflected in the system average use. The Board is of the opinion that to include reduced volumetric adjustments related to high efficiency furnaces and not to include an upward adjustment for other new appliances is, at best, inconsistent. There is insufficient data to support Centra's position. The Board considers that the volumetric adjustment for conservation in the SGS Class of 0.9% of the annual volumes incorporates those higher efficiency furnaces replaced in the prior year. Annual consumptions for new customers assume use of higher efficiency furnaces. **The Board considers that the request for volumetric adjustment for higher efficiency furnaces is not warranted and will not be allowed.**

The Board will not allow the inclusion of the Natural Gas Vehicle Program to come within the regulated portion of Centra's business. This will require the

reduction of 1995 volumes by the 711 10<sup>3</sup>M<sup>3</sup> estimated for this program. Should Centra proceed with the NGV program in an unregulated entity in the future, normalized volumes will include future NGV sales.

In summary, the Board will allow 1995 normalized volumes of approximately 1,824,560 10<sup>3</sup>M<sup>3</sup>. While Centra continues to use its traditional definition of volume requirements for the maximum year/maximum day, Centra witnesses stated that the matter of the maximum year volumes would be reviewed. **The Board will expect Centra to conduct such a review and report the results to the Board by no later than the next GRA.** Such a review should include, amongst other matters, risk assessments of various weather and gas supply scenarios.

## **16.0 Gas Costs**

### **16.1 Gas Supply Portfolio**

Centra's source of gas supplies has changed slightly for the 1994/95 gas year. The majority of its supply is sourced from Western Canada and consists of WGML supply, spot market supply, as required, and gas provided by third parties (Broker supply). Direct to market supply also utilizes Oklahoma supply by way of displacement volumes. For purposes of rate setting, the 1995 test year filing assumes that the majority of the storage requirements will be filled with Western Canadian supply and with some Oklahoma gas used in the months of April and October. For 1995, Centra replaced the former arrangement with Union Gas for supplemental peaking supply with increased ANR volumes. Centra's peaking requirements will be met by a combination of Oklahoma direct market gas, storage gas and propane, as required. Centra has various firm, interruptible and backhaul transportation arrangements on the TCPL, Great Lakes Gas Transmission ("GLGT") and ANR pipeline systems to deliver its gas directly to market, into and out of storage. Centra is still paying a demand charge to ANR for Louisiana based supply, even though Louisiana supply is assumed at this time not to be required for 1995. The gas costs to be embedded in rates are based on the above supply assumptions for 1995. The difference between actual supply costs and those costs reflected in the 1995 sales rates will be accumulated in the PGVA.

### **16.2 Gas Dispatch Rules**

Centra's dispatch rules are similar to those followed in the 1994/95 gas year. The basic principle is that a maximum year will occur for Centra's firm customers and daily nominations and deliveries are based on this principle. Centra continues to use sales volumes experienced some 16 or 17 years ago to define the maximum year/maximum day volumes. In late January the rules may be altered if a maximum year has not yet occurred. Initially, all firm transportation capacity, from all supply sources, is utilized before storage gas is withdrawn. A combination of firm supply, storage supply and propane is used to supply Manitoba's total daily markets to the maximum capacity available. In the event that any daily demand exceeds this maximum capacity, Centra's Interruptible customers will be curtailed, as necessary. The dispatching of peaking supply for 1995 is different in order to recognize the replacement of the previous supplemental peaking supply arrangement with Union Gas with additional Oklahoma supply and associated transportation arrangements. Storage gas used in 1995 may be replenished from Western

Canadian Supply sources, Oklahoma supply and/or Louisiana supply, depending on prices during injection periods.

### **16.3 Western Gas Marketing Limited ("WGML") Supply Contract**

Centra renegotiated the WGML 1988 supply contract in 1993. That renegotiation included, amongst other things, the use of the NYMEX index and a basis differential calculation to determine the commodity cost of the gas at the Alberta border. It also contained a term factor in recognition of security of supply for a portion of the annual volumes which, for the 1993/94 gas year, resulted in a premium of 2% on the commodity cost for 70% of the annual volumes taken. This term factor was to increase to 5% for the 1994/95 gas year representing a \$3,000,000 cost increase. That amended agreement also provided for a penalty payable to WGML by Centra, if Centra proposed a replacement index for purposes of price determination.

During 1994, Centra renegotiated three aspects of the 1993 Amending Agreement: term factor; the period for annual determination of the basis differential; and pricing mechanism for that portion of the annual volumes (30%) not subject to the term factor premium. The term factor was reduced from the 5% contemplated for 1994/95 to 3.75%. Centra submitted that this change resulted in an increase in annual costs of \$2,000,000, rather than the \$3,000,000 originally anticipated.

Additionally, Centra was of the opinion that this term factor renegotiation constituted a proposed change in the pricing mechanism and could have triggered the penalty payment clause contained in the 1993 Amending Agreement. The 1994 renegotiation resulted in an agreement to waive this penalty, thereby saving approximately \$700,000 which would have been payable to WGML and a further \$300,000 payable to direct purchasers.

The period for the annual determination of the basis differential was changed from the period when October was the near trading month to when September is the near trading month. Centra submitted that this earlier basis differential determination would better accommodate certain of Centra's price risk management transactions for the winter heating season and was not renegotiated for financial reasons. During the hearing Centra stated that, because of the way natural gas prices evolved during the year, this change resulted in increased 1995 gas costs of about \$1,500,000.

The renegotiation also clarified the amount of volumes subject to the term factor premium, so that to the extent that WGML elects to reduce annual volumes, up to the 30% limit, the portion of the volume that does not attract the premium is reduced by an equivalent amount.

#### **16.4 Transportation and Storage Arrangements**

In addition to the transportation of Western Canadian supply direct to market on the TCPL system, the proposed gas costs include various transportation arrangements to bring the Oklahoma supply direct to market. Gas costs also include fixed storage rental charges and fixed pipeline demand charges for delivery of gas into storage for both Canadian and U.S. pipelines. The Modified Fixed/Variable ("MFV") tolling structure for ANR Pipeline was replaced by a Straight Fixed/Variable ("SFV") toll, pursuant to a U.S. Federal Energy Review Commission ("FERC") Order. The impact of this change, which increases demand charges and reduces commodity transportation charges, is to increase demand charges by about \$4,500,000 and to decrease gas storage inventory costs by \$2,000,000, for the normal year. Centra's arrangement with ANR is governed by an annual revenue cap of \$14,700,000 for maximum year volume takes. The change in ANR tolling structure will not affect this revenue cap.

The GLGT transportation arrangements will be in place for the full 1995 year, as opposed to being available for only 10 months in the last test year period (1993). The result of this is that the GLGT transportation costs have increased by approximately \$1,000,000.

Centra is required to pay demand charges to ANR for Louisiana gas which may be required for storage, regardless of whether this supply is utilized in any given year. For 1995 these demand charges are included in the cost of gas, even though Louisiana supply is not contemplated.

Storage gas requirements for the January through March, 1995 period are costed at the average price of storage inventory as at October 31, 1994, being the end of the storage fill period. Storage gas requirements for November and December of 1995 have been costed at the average price of storage inventory as of October, 1995.

## 16.5 1995 Gas Costs

Centra's original application in October 1994, included gas costs based on an average of the NYMEX strip as quoted for the period from September 14 to October 12, 1994, a calculated basis differential of \$0.51/MMBtu and conversion to Canadian funds using an exchange rate of \$1.34 Canadian per \$1.00 U.S. The resulting weighted average price for Western Canadian gas at the Alberta border was \$1.996/GJ. By way of comparison, the rates approved in Order 11/94 contained an embedded Western Canadian supply cost of gas of \$2.169/GJ and the gas costs in the interim January 1, 1995 rates in Order 159/94 were \$1.90/GJ. The most recent NYMEX information suggests that the Western Canadian commodity cost of gas for 1995 will average approximately \$1.60/GJ.

Centra provided several updates in respect of the most current NYMEX strip gas costs. In its latest update, on February 10, 1995, Centra also changed the estimated U.S./Canadian exchange rate from \$1.34 to \$1.3733. These changes resulted in a commodity gas cost of \$1.483/GJ for Western Canadian gas. Commodity costs for Oklahoma supply and costs of gas in storage, as well as fuel costs, were also impacted by these changes. The annualized and normalized 1995 gas costs contained in the original filing were \$175,018,100.

This updated cost was revised to \$148,465,086. The 1993 annualized and normalized approved gas costs embedded in the 1994 rates were \$179,171,600. A summary of Centra's 1995 normalized and annualized gas cost, based on the February 9, 1995 updated data, is shown on the following table.

Annualized and Normalized Gas Costs (In 000')

Component	1993 Approved	1995 Requested	Change
<b>Fixed Costs:</b>			
TCPL demand	\$20,281.0	\$20,911.9	\$630.9
Storage capacity	5,869.6	8,532.6	2,663.0
Storage delivery	6,406.5	7,115.4	708.9
ANR Oklahoma demand	614.7	816.2	201.5
ANR Louisiana demand	630.8	2,470.6	1,839.8
GLGT - to Crystal	1,511.3	1,555.8	44.5
ANR - to storage	1,170.1	1,353.3	183.2
TCPL STS demand	1,173.7	1,202.2	28.5
GLGT backhaul	4,067.8	5,654.6	1,586.8
Union supply fixed	258.0	0.0	(258.0)
<b>SUBTOTAL</b>	<b>\$41,983.5</b>	<b>\$49,612.6</b>	<b>\$7,629.1</b>
<b>Transportation:</b>			
TCPL - FS	676.8	373.5	(303.3)
ANR Oklahoma to Crystal	373.2	22.7	(350.5)
GLGT - Oklahoma backhaul	108.0	101.1	(6.9)
GLGT Storage backhaul	446.5	335.7	(110.8)
TCPL backhaul	274.4	277.1	2.7
Compressor fuel	2,936.7	2,304.0	(632.7)
Storage withdrawal	100.9	41.0	(59.9)
GLGT storage	0.0	48.7	48.7
<b>SUBTOTAL</b>	<b>\$4,916.5</b>	<b>\$3,503.8</b>	<b>\$(1,412.7)</b>

Component	1993 Approved	1995 Requested	Change
<b>Supply Costs:</b>			
Western Canadian	\$103,472.0	\$71,441.0	\$(32,031.0)
Oklahoma	2,570.7	1,835.0	(735.7)
Storage	25,105.5	21,767.7	(3,337.8)
Union	858.0	0.0	(858.0)
<b>SUBTOTAL</b>	<b>\$132,006.2</b>	<b>\$95,043.7</b>	<b>\$(36,962.5)</b>
<b>Other:</b>			
Propane	25.8	65.5	39.7
Propane Shrinkage	41.2	41.2	0.0
Minell Pipeline	198.4	198.4	0.0
<b>SUBTOTAL</b>	<b>265.4</b>	<b>305.1</b>	<b>39.7</b>
<b>TOTAL GAS COSTS</b>	<b>\$179,171.6</b>	<b>\$148,465.2</b>	<b>\$(30,706.4)</b>

#### 16.6 Broker Reference Price

Under the existing Buy/Sell arrangements, a broker is able to supply all gas to a customer, except for U. S. source gas and peaking supplies. This means that a broker will be able to supply a firm customer with approximately 94% and an interruptible customer with approximately 80% of annual requirements. Centra has not changed its method of calculation of the Broker (Buy/Sell) reference price from that used in the last GRA. The price is calculated monthly and is the weighted average, at the Alberta Border, of Centra's WGML price and all of Centra's Western Canadian spot market price for any given month. At the present time, the financial results of Centra's price management activities, capacity release program and gas transactions are not included in the broker reference price. Financial results of these programs are included in the PGVA and either refunded to, or collected from all of Centra's sales customers.

#### 16.7 Intervenors' Position - Gas Supply

Three of the Intervenor (Municipal, CIGMA and CAC/MSOS) adopted positions on several matters related to gas supply. Additionally, CEPU, in closing argument supported Centra's continuing management of gas supply as well as the brokering of capacity which commenced in 1994. WGML, in a written submission, supported Centra's method of calculating the Broker reference price, including the exclusion of the results of any risk management activities from that price. WGML contended that this approach will result in a price which is reflective of average costs of the physical gas supply for any given month, will track market prices and will not create any artificial bias in the price.

Municipal expressed its views in three areas related to gas supply: Buy/Sell reference price, gas supply price management and storage arrangements. Municipal recommended that the reference price be adjusted by \$0.02/GJ to reflect those estimated (by Municipal) gas supply costs incurred by Centra, but not included in gas costs. Municipal contended that equivalent costs are incurred by brokers but cannot be recovered by them through non-gas cost allocations, as is done by Centra. As an alternative, Municipal suggested that Centra be ordered "... to eliminate this cost in the rate base to direct purchase customers." Municipal further suggested that last year's reference price be adjusted upward by \$0.07/GJ to reflect the \$4,000,000 in increased gas costs as a result of Centra's 1994 price management activities and that the appropriate monies be paid to direct purchase customers. Alternatively, Centra should be required to charge the Buy/Sell reference price as the inflow price into the PGVA.

Municipal requested the Board to order the gas supply price management program to be unbundled and to be operated as a separate entity. Any such activities undertaken by Centra should be done at the risk and cost of Centra's shareholders and not its customers. Municipal also recommended that the Board order Centra to renegotiate its ANR arrangements to ameliorate the effects of the FERC regulatory changes. Municipal contended that Centra's current ANR storage arrangement was less favourable than would be the former arrangement whereby all of Centra's gas supply was purchased in Western Canada, without any storage in place.

CIGMA's objectives in intervening in this proceeding were to:

- ensure all Manitoba gas consumers had access to a competitive gas market under terms and conditions which assured a level playing field for all suppliers

- foster the concept that all gas consumers had benefitted from deregulation, whether or not they had opted for direct purchase
- ensure that LDCs do not, intentionally or inadvertently take steps to place themselves in a preferred position or to impede the efficient functioning of the marketplace.
- explore the appropriateness of a regulated utility remaining in the business of buying and selling gas in the current environment.

CIGMA concentrated on four matters related to Centra's gas supply portfolio. Firstly, CIGMA requested that the Board instruct Centra to change its method of calculating the Broker Buy/Sell reference price by including the costs and revenues of the price management program in this price. CIGMA contended that the current method violates the principle that the LDC pay its Buy/Sell customer the LDC's avoided gas costs. The result is that the customer is prejudiced if it enters into a direct purchase agreement. It further submitted that including such costs and revenues would result in the proper market signals being sent in a timely fashion. CIGMA also stated that Consumers Gas (in Ontario) includes such costs in determining the reference prices.

Secondly, CIGMA urged the Board to reserve its decision on Centra's price management strategy for the test year because it did not have sufficient evidence filed to allow it to make a prudent determination. Centra's actions to date had resulted in all of its system and Buy/Sell customers being worse off by some \$4,000,000 and these actions had been undertaken prior to being approved by the Board. CIGMA argued that Centra could achieve price stability by properly forecasting gas prices. Also, the nature of risk management practices will make it increasingly difficult for the Board to assess the prudence of gas cost incurred by Centra.

Thirdly, CIGMA urged the Board to instruct Centra not to place any impediments in the path of its customer's freedom of choice in the matter of entering into direct purchase arrangements, without penalty. CIGMA suggested that the WGML contracts may contain such impediments.

Lastly, CIGMA requested the Board to order Centra to renegotiate its storage and transportation arrangement with ANR to reduce the costs of the toll restructuring. CIGMA suggested that Centra would need the leverage of such an order to ensure renegotiations would be taken seriously by ANR.

CAC/MSOS expressed concern in three areas of gas supply matters: 1995 gas cost forecasts and 1995 rates; price risk management; and ANR storage and transportation arrangements.

With respect to gas costs, CAC/MSOS, in pre-filed testimony which was based on the then estimated gas cost questioned why storage gas would cost about 26 cents/GJ more than last year when Western Canadian supply was forecast to cost 35 cents/GJ less than last year. They also contended that there was no evidence to show that Centra's 1995 proposed supply portfolio represented a least cost plan, especially for its peaking arrangements. In closing argument, CAC/MSOS, relying on Exhibit 72 (response to CAC/MSOS Information Request 20(d), Revised February 16, 1995) stated that forecast gas costs were of a major concern and concluded that:

- WGML supply for an estimated 48.162 Peta Joules ("PJ") at an average unit cost of \$1.49/GJ, representing a gas cost decrease of \$26.5 million was appropriate and should be reflected in the 1995 rates.
- The Oklahoma supply was priced at an average unit rate about \$1.25 higher than the Western Canadian supply. CAC/MSOS assumed that Centra purchased Oklahoma supply on a short term spot market basis and had no contractual obligation other than for the commodity costs and could therefore avoid the entire variable costs of \$2.2783/GJ.
- The average cost of storage gas including an assumed 10% working capital allowance requirement, for 10.116 PJ, was about \$3.00/GJ greater than the Western Canadian supply, disregarding timing differences for storage gas purchases. Considering that the prior Union Gas peaking arrangement was valued at some \$3.50/GJ and that the overall cost of storage gas for 1995 is some \$5.50/GJ, the additional premium for storage gas to Manitoba consumers is about \$20,000,000.

In addressing the matter of the ANR contractual arrangements, CAC/MSOS contended that these were no longer efficient and that the Board should no longer give any weight to Centra's claims about the benefit of this arrangement versus the TCPL/WGML load factor arrangements in 1991. CAC/MSOS recommended that a special deferral account to track 1995 premium costs above the \$3.50 per gigajoule market value for storage and transportation arrangements be established to encourage Centra to make serious efforts to restructure these ANR arrangements. CAC/MSOS concluded on this matter by stating:

"We are not ordaining the breaking of contractual commitments, we are speaking of contractual revisions which is a commercial reality and not a dream world."

(Transcript - Page 3570)

CAC/MSOS stated that it was too early for Centra to be able to demonstrate that its proposed gas supply price management plans represented optimal arrangements. CAC/MSOS recommended the Board:

"...ordain very conservative techniques and not put the consumers of Manitoba at risk for experiences that have recently been borne out."

(Transcript - Page 3574)

## 16.8 Board Findings - Gas Supply

The Board will accept the gas cost consequences resulting from the renegotiated WGML contract for the 1995 test year. The Board will accept the use of the NYMEX pricing mechanism for the 1995 test year, but continues to encourage Centra and WGML to develop a Canadian based pricing mechanism for variable price contracts so as to eliminate the risk associated with foreign exchange. The Board remains hopeful that such a mechanism, or some other pricing mechanism, can be agreed upon within one or two years. **The Board will direct that the 1995 rates reflect commodity costs of gas which, based on the most current information, will utilize a 1995 average NYMEX price of \$1.60/GJ.**

The Board, as it did last year, has concerns about the prudence of the term factor premium of 3.75% on up to 70% of the annual take from WGML. The Board considers the premise underlying the term factor, that of being a premium for security of supply, to be redundant in the current circumstances. The Board notes that Centra did renegotiate the premium payable down to 3.75% from the proposed 5% and expects that this term factor premium will disappear over a period of time, perhaps as early as for the 1995/96 gas year.

The Board accepts the logic that an earlier determination of the annual basis differential will allow Centra more flexibility in its gas supply price management. This is, of course, only valid, if the assumption is made that a fixed annual differential is preferable to one that is indexed on a monthly basis. As will be discussed later in this Order, the Board will expect Centra

to conduct a detailed review of its existing and proposed gas supply portfolio.

The Board notes that three of the Intervenors urged that Centra be ordered to renegotiate the ANR arrangements. The Board notes that the change in the FERC ordered method of determining tolls has resulted in an increase in fixed gas costs of some \$4,500,000 and decrease in commodity transportation tolls of about \$2,000,000. The Board considers the matter of arranging an optimal gas supply portfolio to consist of many elements, all of which must be estimated for the year, but managed on a daily basis. The Board believes that Centra has estimated this matter in a reasonable fashion for 1995. As a result of the change in FERC methodology, the Board will expect Centra to provide evidence when 1995/96 gas costs are investigated including the matter of storage arrangements and any attempt at renegotiation with ANR. The Board notes that costs of the ANR arrangements are, as are all gas costs, estimates for 1995.

Any difference between gas costs incorporated in rates and "As Billed" gas costs will be accumulated in the 1995 PGVA and all such variances will be reviewed at a future time.

The Board recognizes the importance of the cost of gas, the single largest cost of service component, to Manitoba consumers. 1993 approved gas costs totalled \$179,171,600 and represented 62% of the total revenue requirement, while the 1995 gas costs, based on the February 9, 1995 update, represent 56% of the total revenue requirement. On an overall basis the cost of gas has decreased by about \$30,706,500 from that embedded in the 1994 rates. Centra's portfolio has changed in only one major aspect - the previous Union Gas supplemental peaking supply has been replaced by additional ANR storage volumes and associated transportation.

An analysis of the cost of gas reveals that the major drivers of cost change forecast for 1995 are the market price which is indexed to NYMEX, the change in the tolling structure in the U.S. as ordered by FERC, the use of the GLGT transmission facility for a full year and the change in the supplemental peaking supply. Minor cost changes have resulted from different annual volumes and different relative volumes for various services and other tolls as decreed by other regulatory authorities. The commodity cost has decreased by approximately \$36,963,000. This cost has generally been offset by \$7,629,000 because of an increase in fixed costs related to the new ANR tolling structure, the full year's utilization of the GLGT facility and the change in peaking supply. A corresponding decrease in variable transportation costs amounts to about \$1,413,000. The Board has difficulty in accepting the conclusion arrived at by CAC/MSOS that Centra's storage arrangements represent

a premium charge to Centra's customers of \$20,000,000 per year. The Board does not consider this comparison to be valid as it would appear to assume erroneously that all the services which have been allocated to the "Storage Gas" represent the same type of service as that provided by the "WGML Supply".

The comparison ignores the fact that the purchase load factor is considerably enhanced because of the existence of storage and appears to relate the total storage requirement to peaking requirements.

Commodity charges are, of themselves, variable charges and gas purchased in Oklahoma must be moved to market or to storage and this requires a variable transportation cost to be incurred. As previously stated, the Board will accept Centra's gas costs and supply arrangements as updated in its February 9, 1995 revisions, but expects to conduct a detailed review of these matters later in 1995. The Board sincerely hopes that such a proceeding will investigate specific gas supply arrangements. The Board will not unduly dwell on hypothetical circumstances which ignore the realities of Centra's position in the global gas marketplace and the customer mix, weather patterns and other Manitoba conditions. In the Board's view, comparisons such as the attempt to determine what might have transpired had Centra not entered into the current downstream storage arrangements in 1991 are meaningless in today's circumstances. What is meaningful is Centra's prudence in achieving an optimal gas supply for a particular year considering all elements and conditions when such decisions are made.

The Board will not order a change in the calculation of the Buy/Sell reference price at this time as recommended by CIGMA and Municipal. The Board considers that this matter should be further investigated, in light of the evolution of gas markets and management of gas supply over the past several years. **The Board will direct Centra to consult with direct marketers and Board staff with a view to resolving the matter prior to November 1, 1995.**

## 17.0 Gas Supply Price Management

### 17.1 Background

Prior to the deregulation of natural gas prices in 1985, Centra purchased all of its system gas from Alberta under long-term supply and transportation contracts with Trans Canada Pipeline Ltd. ("TCPL") with federally regulated gas prices. As a result of deregulation of natural gas prices, Centra became responsible to negotiate its supply and transportation agreements with TCPL's marketing arm, Western Gas Marketing Ltd.

Centra renegotiated its supply contracts and, *inter alia*, a commodity price of natural gas was set at \$2.20/GJ for a 2 year period. Thereafter, for the ensuing 3 year period, the commodity cost of natural gas was to be the weighted average long-term 100 percent load factor price paid by the Ontario LDCs to WGML. For the gas year commencing November 1, 1990, the commodity price was \$2.20/GJ; for the gas year commencing November 1, 1991, the commodity price was \$1.996/GJ; and for the gas year commencing November 1, 1992, the commodity price was \$2.089/GJ.

Because of fluctuations in gas prices on the open market, Centra (and other LDCs) and WGML were having difficulty in negotiating an annual commodity price effective November 1, 1993. Rather than a fixed commodity rate, an agreement was reached between Centra and WGML whereby the commodity price would be market sensitive and variable.

The pricing mechanism contained in the Centra-WGML agreement was based on the daily price discovery resulting from the trading of natural gas on the New York Mercantile Exchange (NYMEX). The commodity cost of natural gas is determined for each month from the simple average of settlement prices for each day that the futures contract, for that month, was trading as the near month. The near month is defined as the period of time where the contract is the most current month trading on the exchange.

To determine an Alberta border price, a basis differential is calculated and deducted from the NYMEX price prior to conversion to Canadian funds.

This agreement took what was once an annual fixed price for natural gas and converted it to one where the commodity price fluctuates and is calculated monthly based on the daily future contract price.

The adoption of an indexed pricing mechanism within the WGML long-term gas supply agreement provides for the determination of a market responsive price for natural gas and has led to a general acceptance that the value of this commodity is determined frequently, through short-term cash markets, either daily or monthly.

## 17.2 Risk

The use of an indexed pricing mechanism, such as the NYMEX, brings with it the risk of upward and downward fluctuations in the resulting commodity price. At the 1993 Test Year GRA, Centra supported the use of the NYMEX and accepted responsibility for the development of the philosophies and policies of a price/risk management program which would manage the fluctuating commodity price.

In Order 8/94, it was noted that:

AThe Company witnesses also stated that the Company had begun to investigate the principles and mechanics of a risk management program which would attempt to minimize risks associated with an indexed variable price arrangement. The Company also indicated that it expected to have a strategy in place by about the end of January, 1994. ≅

and ordered that:

Athe Company file its proposed strategies with the Board in respect of its approach to management of the cost risks associated with the use of the NYMEX pricing mechanism. The Company advise the Board, on a monthly basis, in conjunction with the PGVA reporting requirements, of its activities in respect of risk management for the previous month and proposals for the future. ≅

In the 1995 Test Year GRA filing, Centra advised that Athe development of a comprehensive program complete with goals, strategies and tactics is in the final stages of completion≅ and would be filed prior to the public hearing.

On January 13, 1995, Centra filed its response to the above-quoted Board directive on a confidential basis, and advised that the successful management of the WGML supply price would involve the use of risk management products such as futures contracts and over-the-counter instruments. To assist in the

development of Centra's price management program, an outside consulting firm had been retained. The price management program contained Centra's philosophy, goals and strategies and the related policies, procedures and controls for managing its gas supply process.

On January 13, 1995, Centra also filed a 75 page Summary Report in which its consultant summarized the commodity markets in general, the commoditization of the natural gas market, the price risk management techniques available and the utilization of their techniques within the natural gas industry.

### **17.3 Philosophy**

Centra's philosophy is that the risks of gas price fluctuations are those of the consumer and that Centra will manage the gas supply prices through the prudent use of appropriate financial instruments. Centra maintains that its supply price management program does not contain any speculative elements.

### **17.4 Goals**

The goals of Centra's price management program are:

- X achieving a market responsive price;
- X introducing stability to temper adverse volatility inherent in achieving a market responsive price; and
- X where appropriate, adjusting the portfolio of fixed prices, and in so doing, relying on statistical analysis and other objective measures.

### **17.5 Strategies**

Centra intends to ensure that it purchases gas in a manner which is in the best interests of its customers and is responsive to emerging methods of managing prices and price discovery, through the many hedging mechanism alternatives available. Centra's price management program is designed to shift the price risks associated with buying gas in a volatile, competitive environment to others who are willing to assume such risk. Centra also maintains that its price management program will have certain rigorous

controls, checks and balances to ensure that the program is adhered to as designed.

## **17.6 Price Risk Management Plan**

The actual price management plan was filed by Centra with the Board, in confidence, during the hearing in January, 1995 though Centra had expected a final plan to be available in January, 1994. Initially, work was done in early 1994 by senior executives of Centra Manitoba, Centra Ontario and Union Gas. Thereafter, a consultant was retained to perform specific risk assessments and calculations relative to supply portfolios prior to writing the final report. In light of the GRA hearing schedules of the 3 LDC=s, Union Gas= report was prepared first, followed by Centra Ontario and then Centra Manitoba. However, the drafts were examined by Centra Manitoba by May, 1994 and Centra proceeded with its price management program rather than wait for the final report and approval from Centra=s Board of Directors. The report for Centra Manitoba was finalized in August, 1994 and filed with Centra=s Board of Directors. The plan was reviewed by Centra=s Board in November, 1994 although formal approval has not been given. Centra requested some indication from this Board as to whether it is supportive of the general philosophy of the price management program that Centra has developed.

Centra has calculated that if it had done nothing in calendar year 1994 in terms of price management, gas costs would have been approximately \$4 million lower than they were as a result of the actions taken by Centra.

The particular transactions which gave rise to the \$4 million additional cost were not reviewed during the hearing. Centra proposed that these particulars be reviewed as part of a public hearing to consider the PGVA balances. For such a review, Centra proposes that it file its quarterly price management plan, perhaps its annual price management plan for the period under review, together with a synopsis of each transaction which would include management discussion of the reasons for the hedge and how it relates to the overall objective of the plan. Centra also urges the Board not to evaluate the price management plan based on hindsight. Centra acknowledges that a price management plan can not ensure the lowest price possible for consumers. Rather, Centra wants to be evaluated with regard to when the decision was taken and determining whether the steps taken or not taken were reasonable and prudent.

Centra hoped the end result of such a review would demonstrate to the Board that Centra acted prudently and reasonably in executing its price management plan.

### **17.7 Intervenor's Positions**

CIGMA urged the Board to reserve judgment on Centra's price management strategy for the test year because without detailed information on previously executed transactions, the Board can not judge the effectiveness and prudence of the program and the soundness of the strategy. CIGMA agrees with Centra that it would not be fair to measure the price management plan performance solely on hindsight but because of the lack of specific information filed, it also would be premature to pass judgment at this time.

CAC/MSOS suggested that Manitoba consumers should be able to obtain market sensitive prices, with rate making stability, without the need of any financial derivatives or speculation. CAC/MSOS advocated the Board fix a retail rate with the differences between the NYMEX indexed price and the retail rate accumulating in the PGVA.

Alternatively, CAC/MSOS advocated the use of a one year theoretical demonstration period for Centra to gain experience, without making costly mistakes.

A further alternative was CAC/MSOS's suggestion that Centra should only conduct very conservative price management techniques so as to minimize the risk to consumers.

### **17.8 Board Findings**

Centra wants to be taken off the hook with respect to its price management plan such that its shareholder is not put at risk for the results of Centra's exercise of judgment in arranging for lowest reasonable cost gas supplies for consumers.

Centra has filed a price management plan that it intends to use in Manitoba. Centra acknowledges it is in its infancy in the area of price management and also that it has not yet put in place the rigorous checks and balances needed to ensure the integrity of price management. The Board notes the Company activities have taken place notwithstanding the Centra Board itself has not taken a decision on whether risk management is an appropriate strategy.

There was no evidence at this hearing as to details of the specific price management transactions and the reasons for them. Therefore, the Board is not prepared, at this time, to Atake Centra off the hook≅. Rather, the Board concurs with the suggestions of Centra that there be a public review of Centra=s execution of its price management plan, including all details of the activities with a management discussion of the reasons for the particular decisions taken. It is hoped that through such a process, the Board will be able to determine whether Centra=s price management plan should continue in Manitoba.

In general terms, the Board is satisfied that a price management plan may be of benefit to consumers, but is concerned with what the cost might be to the consumer of an unsuccessful plan. However, it is the demonstrated proficiency and prudence in carrying out such a plan that must be examined before determining whether it will be of benefit to Manitoba consumers.

**The Board will therefore order Centra, in connection with the upcoming PGVA reviews, to provide:**

- X specific details of all price management decisions, including instances where Centra determined that no price management techniques be utilized;**
- X quarterly price management plans for the periods under review;**
- X annual price management plans for the period under review;**
- X management discussion of the reasons for the transaction taken - or not taken - and how that related to the overall plan;**
- X details of the checks and balances that Centra has in place;**
- X details of additional steps or personnel that Centra intends to provide as part of its plan;**
- X details of all costs associated with the price management plan; and**
- X ability and experience of personnel to undertake activities in risk management.**

The Board has concerns with both the Price Risk Management Strategy and Centra's plans to implement the Strategy. Centra has been undertaking risk

management contracts prior to filing their Strategy with the Board. In Order 8/94, the Board requested that this Strategy be filed with a view that prior to Centra implementing such activities, the board and other interested parties could examine the extent to which the consumers would benefit or be at risk. That Strategy was not filed until the commencement of the 1995 GRA.

The Board is also concerned that it does not see any specific limits to the activities in dollar terms, volumes hedged and the terms of such contracts. Since Centra has just, in the last 18 months, moved to market based pricing mechanism on NYMEX, there is a very limited historic pricing track record. Natural gas futures tracking with NYMEX has had a limited history itself and the Board believes a cautious approach must be taken. Since the Company exposure to NYMEX and future contracts has been limited both in time and quantity the consumer's risk should be limited.

## **18.0 Operating and Maintenance Expenses**

### **18.1 General**

Operating and maintenance (O&M) expenses for the 1995 test year are forecast to be \$48.1 million, an increase of approximately \$2.7 million from the level approved in Order 8/94 of \$45.5 million. The individual components of O&M expenses are not directly comparable to 1993 O&M expenses because there have been some minor internal changes from 1993 as to how some expense categories have been classified. Nevertheless, the major areas of cost increases include payroll costs, employee benefit costs, bad debt expense, and expenses related to various specific programs including the NGV program and the ERP program.

### **18.2 Payroll Costs and Benefits**

Payroll costs have increased approximately \$1.3 million in 1995 over 1994, mostly related to annualization of new positions created in 1994 and the new positions created as a result of new initiatives including the NGV program and the ERP program. The total forecast payroll costs for 1995 are approximately \$200,000 greater than 1993 levels, with decreased overtime costs and increased base salary costs. Centra testified that overtime costs have been reduced from \$2.2 million in 1993 to \$1.3 million in 1994 and 1995. While some of the reduction is related to the abnormal flooding in 1993, much of the change is due to practical changes in resources used by customer service and engineering and distribution operations. Centra also testified that the salaried employees at Centra received no annual salary adjustment in 1994. Winnipeg unionized employees received no general wage increase in 1993 or 1994 and rural unionized employees will receive no increase in 1994. Salary increases for employees are included in 1995 forecasts.

Employee benefits have increased approximately \$780,000 over 1993 levels, primarily related to the extension of the employees savings plan to rural unionized employees, government legislated employer contribution increases for 1995, and the assumption of rebates from insurance plans at the same level as 1994, which is significantly lower than 1993 and 1992.

### **18.3 Executive Compensation**

Centra included a discussion on executive compensation as part of the GRA filing. A Human Resource and Compensation Committee, assisted by a firm of

independent compensation consultants, approves compensation for all executives after considering the recommendations of the chief executive officer. The Committee determined that the corporation's overall compensation goals should be set at approximately the 60th percentile of a reference group of large publicly traded national corporations.

Centra testified that, in addition to the base salary, executives may qualify for annual incentives and long term incentives. Centra also testified that salaries paid to the executives today are below both the 60th percentile and salary levels recommended by an independent consultant. In addition, short term incentives are determined on four different factors, of which profitability accounts for approximately 40% of the weighting.

#### **18.4 Shared Services**

In response to a Board directive, Centra filed information indicating that the shared services for 1995 are forecast to be \$440,000. The shared services in 1994 were approximately \$300,000. Centra reviewed the nature of each of the components of these shared services indicating why Centra believed those costs to be fair. Centra also indicated that the NEB had ordered WEI to review its allocation methodology, and as a result of that review, conducted by an independent consultant, the new allocations for 1995 were determined.

#### **18.5 Vehicle Policy**

Centra testified that a new vehicle policy was implemented September 1, 1994, and will become fully effective January 1, 1995. The revised policy is expected to reduce the number of assigned vehicles from 59 to 32 and to reduce the average cost. The combined effect of the revised policy is an expected cost reduction of \$130,000 per year.

#### **18.6 NGV and ERP**

Forecast operating expenses for 1995 include approximately \$826,000 for the NGV program and approximately \$297,000 for the equipment rental program. The merits of these programs are discussed in Sections 10 and 11.

#### **18.7 Employee Count and Cost Per Customer**

Centra provided evidence that the total employee count has increased from 645 in 1993 to 647 in 1995, including 5 new employees hired in 1994 relative to the NGV program, 2 new employees hired in 1994 relative to the ERP, and 2 additional employees expected to be hired in 1995 relative to the NGV.

Centra also provided evidence that, after adjusting gross operating and maintenance expenses for cost increases related to bad debts, the NGV program and equipment rental program, the cost per customer for 1995 is \$198.89 compared to \$198.63 in 1993.

### 18.8 Intervenors' Position

CAC/MSOS argued that either productivity gains that are being realized are substantially less than that suggested by Centra, or productivity gains are being realized, but the resources that are being freed up are not being effectively redeployed. Centra should be expected to do its job with fewer resources, and resulting cost reductions to the customer.

CAC/MSOS takes the position that, as a matter of principle, the ratepayer should not pay for any incentive program tied to the performance of Centra. CAC/MSOS further argued that employee benefit costs should be reduced by \$100,000 to reflect a higher rebate from insurance companies.

### 18.9 Board Findings

The Board notes the efforts by Centra to get operating and maintenance costs under control. The Board is encouraged that the operating and maintenance cost per customer in 1995 is the same as it was in 1993, after adjusting bad debt expense and expenses related to NGV and ERP. However, more must be done.

The Board agrees with the observations of CAC/MSOS that productivity gains which Centra argues have resulted from various initiatives do not seem to have resulted in reduced operating costs. Employee numbers are increasing and discretionary costs such as travel and professional development have increased significantly. The Board directs Centra to continue its attack on controlling and reducing Operating and Maintenance expenses.

With respect to the expenses related to NGV and ERP, in accordance with earlier decisions in Sections 10 and 11, **the Board will direct Centra to remove all forecasted expenses in 1995 from revenue requirement with respect to these programs.**

The Board agrees with the position taken by CAC/MSOS that the ratepayers should not be expected to pay for executive incentive packages that are based on profitability, and therefore directs Centra to remove any such component from revenue requirement.

All other operating and maintenance costs will be approved as filed.

## 19.0 Bad Debt Expense

Revenue requirement includes \$1.1 million for bad debt expense, which is equal to the gross amount allowed in Order 8/94 and is considered by Centra to be a normal level of bad debt expense. The bad debt component of revenue requirement included in 1994 rates was reduced by approximately \$419,000 which was the amount accumulated to the benefit of the customer in the bad debt deferral account up to the end of 1993. This amount was refunded to customers during 1994. As a consequence, even though the bad debt amount has not changed from the \$1.1 million level, the 1995 revenue requirement related to bad debts must increase because the deferral account credit is no longer available. The deferral account will remain in place.

### 19.1 Intervenors' Position

No intervenors expressed a position on the bad debt expense or the deferral account.

### 19.2 Board Findings

The Board will approve the bad debt component of revenue requirement at the requested amount of \$1.1 million and will approve the continuance of the bad debt deferral account for 1995. The need for this account in the future, as well as the disposition of any remaining balance in the accounts will be reviewed at the next GRA.

## 20.0 Amortization Expense

### 20.1 General

Amortization expense included in the revenue requirement has increased from \$1.6 million allowed in Order 8/94 to \$3.7 million requested. The following table shows the various components of the requested amortization expense (in 000's).

Component	
General Rate Applications	\$2,860.2
Depreciation Studies	27.7
Gas Supply Risk Management	49.4
Long-term Storage	144.0
Propane Storage Plant	204.8
Technology Platform Study	155.9
Operational Audit	151.7
Meter Shop Study Costs	148.4
<b>Total Amortization Expense</b>	<b>\$3,742.2</b>

The Technology Platform Study ("TPS") costs of \$440,000 are being amortized on a straight line basis over 36 months beginning in January 1995. In the current application, Centra stated that Centra will not be allocating any of the TPS costs to other WEI companies which is contrary to the information Centra gave the Board at the 1993 GRA. Centra believes that it has realized benefits from the TPS in two broad categories, those relating to having adopted a corporate perspective and those relating to the definition of a platform architecture. In addition, the study was in response to the operational audit, and other WEI companies have already made a significant contribution by providing senior Information System ("I/S") resources.

Rural expansion costs estimated to be \$784,000 to the end of 1995 are deferred until the program proceeds, and no amortized amount is included in the revenue requirement. The gas supply risk management study and carrying costs of

approximately \$153,000 will be amortized on a straight line basis over 36 months commencing January 1995. All other amortization amounts are in accordance with previous Board Orders.

The major reason for the increase in amortization expense of \$2.1 million relates to a "one-time" catch-up of rate hearing costs related to the transition to a future test year. The rates approved to be effective January 1, 1994 included a provision for rate hearing costs of approximately \$739,000 which was based on the 1992 test year rate hearing costs. The rate hearing costs actually incurred related to the 1993 test year (for rates to be effective January 1, 1994) were approximately \$1.6 million, and the rate hearing costs estimated for the 1995 future test year hearing are approximately \$1.2 million. Therefore, revenue requirement for 1995 includes \$1.6 for 1993 test year plus \$1.2 for 1995 test year less the \$739,000 already provided in rates, for a net increase of approximately \$2.1 million.

## **20.2 Intervenor's Position**

No intervenors took any specific position on amortization costs, and in particular, did not oppose the amortization of TPS costs, the amortization of the risk management study costs, or the one time catch up for rate hearing costs as a result of a transition to a future test year.

## **20.3 Board Findings**

The Board is of the opinion that the amortization component of revenue requirement should provide for normal amortization of certain expenditures, and in the case of material items such as rate hearing costs, should not be adjusted to provide for "one time" catchup such as contemplated by Centra in this application. In the unlikely event that a general rate application was not filed for the 1996 test year, the amount included in rates for amortization would be inappropriately high, and rates would have to be adjusted downward. **The Board is of the opinion that amortization expense allowed in revenue requirement should reflect normal levels, and in this instance, will order that amortization expense in revenue requirement for General Rate Applications be reduced to \$1.2 million.**

Centra's amortization policy for each item included in the amortization expense component of revenue requirement was reported in an information request. When applied to the amortization expense requested by Centra, two

items, namely operational audit and propane storage tank should be adjusted. As a consequence, amortization expense should be increased by \$159,500 for Operational Audit and \$109,500 for Propane Storage Tank, for a total of \$269,000, to correct the understatement of amortization expense.

With respect to all other amortization expenses, the Board accepts Centra's amortization policy as appropriate for inclusion in revenue requirement.

## **21.0 Depreciation Expense**

### **21.1 Depreciation Study**

As part of the 1989 GRA, Centra filed a depreciation study prepared by Stone and Webster Management Consultants Inc. That study was based on plant records as at December 31, 1988. The decisions relative to that study are set out in Order 133/90. One of the Board's directives in that Order was to file an updated depreciation study within five years. In response to that directive, Centra had Stone and Webster complete a study based on the plant balances at December 31, 1992, "on the same methodology as the 1988 Study except where specifically noted in the study itself." Centra further stated that "As the study is an update rather than a new study, Centra does not intend to call Mr Strand as an expert witness, but rather expects that questions regarding the study will be dealt with through the information process."

The study results in an increase in depreciation expense of \$322,000 in 1995. This increase is the net resulting from a decrease in depreciation expense of approximately \$230,000 due to changes in depreciation rates, and an increase in depreciation expense of \$552,000 as a result of negative salvage value.

### **21.2 Computer Hardware/Software**

During the 1993 GRA, Centra stated that it would await the depreciation study update to recommend an approach for depreciating hardware and software. In the current Application, Centra recommends that computer hardware and software development costs be depreciated over five or ten years respectively, with depreciation stopping at the end of the useful life. Mr. Strand, in his letter dated September 22, 1994, states that,

"Approximately 8% of Centra's plant is comprised of computer equipment and related software and system development investments, transportation and heavy work equipment, and rental equipment - (water heaters). These accounts exhibit rapid turnover and to a significant degree are subject to rapid obsolescence. Centra has been amortizing them at rates from 10% to 20%. We have reviewed the rates and the account activity and conclude that the current rates are appropriate and should be continued."

### **21.3 Change in Depreciation Rates**

Centra's evidence filed in support of the depreciation study states,

" Several accounts exhibit more than nominal changes in depreciation rates compared with those recommended in the previous depreciation study performed in 1989, based on plant balances as of December 31, 1988." However, the evidence suggests that the majority of the accounts affected have minimal effect on the ultimate depreciation expense because the plant balances and/or depreciation rate changes are immaterial. There are, however a few accounts that do have a significant impact.

Transmission Mains - account 465, reflects a shortening of the average service life from 44 years estimated in 1988 to the current 36 years. Since the plant balance is approximately 22 million and the unrecovered service value, including negative salvage value is approximately 21.5 million, the significant change in average service life will have an important impact on depreciation expense.

Regulator and Meter Installations - account 474.10 reflects a reduction in service life from 50 years in 1988 to 38 years in 1992. The evidence filed by Centra suggests that the 38 year service life "closely agrees with U.S. industry averages." The plant balance is approximately 16 million, and the unrecovered service value is approximately 11 million. As a consequence, this dramatic change in depreciation rate also has an important impact on depreciation expense.

Other accounts that reflect significant changes in depreciation rates which materially impact on depreciation expense because of the amount of dollars in the plant account include Account 477-measuring and regulating equipment (a reduction in average service life from 29 years to 27 years) , Account 478 - meters (an increase in average service life from 26 years to 27 years) and Account 473 - Services (an increase in average service life from 34 years to 38 years).

## 21.4 Negative Salvage Value

Centra's evidence supports the position that the amount of depreciation to be accrued over the life of an asset is the original cost less net salvage value.

If the amount of the salvage value is negative, i.e., the cost of removal exceeds the gross salvage, then that amount must be added to the depreciation that would otherwise be recorded. Centra argues that "This treatment will remove from the income statement fluctuations caused by erratic, although necessary, abandonment and uneconomical removal operations. It also has the advantage that current consumers pay a fair share, even though estimated, of costs associated with the property devoted to their service. "

In the current application, Centra added approximately \$13.5 million estimated negative salvage value to plant balances for depreciation purposes, with three accounts, Account 465 - Mains (\$4.million), Account 473 - Services (\$5.0 million), and Account 475 - Mains (\$3.3 million) representing 94%of the total.

In the 1988 study, Centra requested a negative salvage value for Account 465 - Mains calculated at 10% of the plant balance. This request was denied by the Board. The current application reflects negative salvage value calculated at 20 % of plant balance. This item, if allowed, would add in excess of \$170,000 to depreciation expense in 1995 and each subsequent year.

In the 1988 study, Centra requested a negative salvage value for Account 473 - Distribution Services calculated at 80% of the plant balance. This request was denied by the Board. The current application reflects negative salvage value calculated at 5% of plant balance. This item, if allowed would add in excess of \$175,000 to depreciation expense in 1995 and each subsequent year.

In the 1988 study, Centra requested a negative salvage value for Account 475 - Distribution Mains of 5% of plant balance. That amount was allowed by the Board, and the current application also reflects a 5% negative salvage value.

## 21.5 Intervenors' Position

CAC/MSOS was the only intervenor to take a position on the depreciation study.

In its closing argument, dealing with changes in depreciation rates, CAC/MSOS stated "so it is our position that there's insufficient retirements in the account to indicate a reason why you should be changing the average service life particularly to the extent recommended by Mr. Strand." CAC/MSOS also took the position that there is insufficient evidence to support Centra's request for negative salvage value, and with respect to Transmission Mains, stated "once again, it's our respectful submission that there's just not sufficient retirement data over this four year period to justify and warrant an increase in salvage value from zero to 20 percent". CAC/MSOS also took the position that since there has been positive salvage value in Distribution Mains over the last four years, and since there is currently allowed a 5% negative salvage value "...we think there should be some serious consideration given to perhaps adjusting that negative salvage value to reflect just the opposite having occurred."

## 21.6 Board Findings

The Board does not agree with Centra's view that the information filed in this application is an update rather than a new study. The Board agrees with CAC/MSOS and finds that there is insufficient evidence related to retirements in the last four years to change the estimated service life for certain major plant accounts by the significant amounts requested. The Board also agrees with CAC/MSOS that there has been insufficient evidence put forward by Centra to support any increase in negative salvage value over that already allowed by the Board. **The Board will therefore order Centra to file a revised schedule of depreciation rates that reflects no negative salvage value for transmission mains and distribution services, and that reflects no change in average service life for transmission mains, distribution services, regulators and meter installations, measuring and regulating equipment. These revised depreciation rates should then be used in calculating a revised depreciation amount for 1995 revenue requirement.**

## **22.0 Municipal Taxes**

The municipal taxes component of revenue requirement has increased approximately \$165,000 from that allowed in Order 8/94, to a level of \$12.3 million. The application as originally filed reflected an increase in municipal taxes of approximately \$280,000 as a result of growth in fixed assets and an anticipated increase in mill rates. This amount was subsequently reduced by \$115,000 to reflect revisions and updates to the original application, primarily in the area of reduced additions to plant of approximately \$1.8 million.

### **22.1 Intervenor's Position**

No intervenors took a position on the request for municipal taxes.

### **22.2 Board Findings**

**The Board will approve the revised municipal taxes as filed.**

## **23.0 Income Taxes**

The income tax component of revenue requirement as originally filed in October of 1994 was \$11.3 million, approximately \$100,000 greater than that allowed in Order 8/94. Since then, as a result of various updates and a significant reduction in the unit cost of gas, the income tax component of revenue requirement has increased to approximately \$13.3 million, some \$2 million greater than that allowed in Order 8/94. Centra has testified that their income tax component of revenue requirement is calculated on the flow through basis where income taxes are calculated on utility operating income after deducting actual financing costs and other deductions allowed for income tax purposes, and after adjusting for unbilled revenue. The significant reduction in the unit cost of gas in the current application will cause the unbilled revenue at the end of 1994 to be greater than the unbilled revenue at the end of 1995. As a consequence, a larger income tax provision is required. The income tax increase related to unbilled revenue is approximately \$1.5 million of the total increase.

### **23.1 Intervenors Position**

No intervenors took a position on income tax.

### **23.2 Board Findings**

The Board will allow Centra's income tax calculation methodology and resultant income tax provision subject to the components being revised to reflect the directions of the Board in other areas of this decision.

## 24.0 Other Income

Other income of \$3,069,000 for 1995 reflects an increase of \$233,000 from other income approved in Order 8/94. Other income includes an estimate of \$183,300 incremental revenue from the Equipment Rental Program, and \$241,200 incremental revenue from the NGV program. With the exception of these two items, the components of other revenue are generally consistent with previous years.

## 24.1 Intervenors' Position

No intervenors took a position with respect to other income.

## 24.2 Board Findings

The Board' findings with respect to the natural gas vehicle program and the equipment rental program are discussed in Sections 10 and 11 respectively. **Consistent with these findings, the other income related to the ERP and NGV programs must be removed for rate setting purposes.** The Board will approve other income as filed for purposes of determining revenue requirement, subject to the above two adjustments.

## 25.0 Summary of Revenue Requirement

The Board will direct Centra to file for approval a revised calculation of revenue requirement including all supporting schedules to reflect the adjustments made by the Board. The Board will review the revised filing and issue a separate Order approving revenue requirement.

## **26.0 Cost Allocation**

### **26.1 Allocation Methodology**

Centra submitted a fully allocated Cost Allocation Study as part of the original GRA filing and provided subsequent revisions to reflect the numerous changes made during the hearing. The Cost Allocation Study was based on a methodology consistent with that filed for the 1993 test year, being updated to reflect 1995 forecast volumes, customers and other costs impacting on classification and allocation factors. For purposes of functional classification and class allocation, capital costs for the NGV Program and ERP Program were treated as General Plant. NGV and ERP operating and other costs were not identified for purposes of the cost allocation study. The cost allocation study also reflected the use of effective degree days, as opposed to the use of traditional degree days which were used in the 1993 Test Year study.

### **26.2 Broker Cost Allocation**

Centra stated that it had not changed its previous method of functionally classifying Broker costs, nor had it changed the amount of costs recovered from brokers directly, as a Broker Administration Fee pursuant to the Terms and Conditions of Service. The treatment of Broker related costs was consistent with the requirements of Order 8/94.

### **26.3 Other Cost Allocation Matters**

Centra's original proposal included a request for approval of the disposition on an interim basis of deferral accounts dealing with 1993 PGVA, 1994 Heat Content, Volume impacts related to the Board's decision in review Order 91/94, 1994 Gas Sales/Swaps and 1994 Capacity Release Transactions on an interim basis, pending a full review. The balances in these deferral accounts were allocated to the various customer classes. The revised filing of February 9, 1995 contained updated balances, including carrying charges for 1994 (but not including revised 1995 carrying costs), for the above accounts and proposed disposition of the 1994 PGVA, together with the proposed allocation to the customer classes of all six of the deferral account balances. Centra did not provide any details of the individual transactions or proposed allocation methodologies for these accounts.

Centra also stated that, pursuant to Order 8/94, it would complete a review of its Cost of Service Study in 1995 and that the results of such a study would be incorporated into Centra's next test year filing.

#### 26.4 Customer Class Impacts

Centra currently has four classes of customers to which all costs are allocated. The table below shows the impacts on these customer classes compared to the 1993 test year filing.

Customer Class	Allocated Costs - 000's		Percent of Total		Change in Percent
	1993	1995	1993	1995	
SGS	\$171,384.5	\$163,441.7	60.25%	61.80%	1.55%
LGS	91,890.1	83,001.2	32.30%	31.38%	-0.92%
Special Contract	590.6	662.0	0.21%	0.25%	0.04%
Interruptible	20,589.3	17,373.1	7.24%	6.57%	-0.67%
Total Company	\$284,454.5	\$264,478.0	100.00%	100.00%	0.00%

#### 26.5 Intervenor's Position

Three of the Intervenor's commented on the matter of cost allocation during the hearing. CAC/MSOS did not pursue the matter of cost allocation to any great extent. They did, however, question Centra on the impact of allocation of costs due to the change in calculating volumes from traditional to effective degree days and on the relatively larger increase in most cost categories to the SGS class compared to other classes. CAC/MSOS stated that customers from most classes had expressed some concerns with the cost allocation and/or rate design over the past several years. CAC/MSOS indicated that such concerns would be best dealt with when Centra had refiled its new cost of service study and rate design, at the next GRA.

Municipal requested the Board to review the "Rate Base Methodology", to ensure that the resultant rates do not create predatory or discriminatory pricing and

cross subsidization of rates by different customer classes. Municipal also questioned the functional classification of Gas Supply Department costs and the allocation of costs and financial results associated with Centra's price risk management program.

CIGMA questioned whether Centra's existing method of allocating costs properly preserved a level playing field between the LDC as a supplier and direct purchase suppliers. The Gas Supply Department costs classified to Gas Overhead were, in CIGMA's opinion, largely related to activities solely required for system supply and not for direct purchaser's supply. CIGMA urged the Board to ensure that such costs would be recovered from system customers and suggested that this could be accomplished by, for example, including such costs in the calculation of the Buy/Sell reference price. CIGMA also argued that some part of the Marketing and Sales costs were incurred for the use of system gas customers and urged the Board to properly allocate these costs so that they would only be recovered from system customers.

## **26. 6 Board Findings**

The Board notes that all parties to this proceeding, including Centra, have generally agreed that the cost of service study should be reviewed. Two of the Intervenors have requested the Board to direct Centra to make some changes in the allocation of costs to those customers who purchase their natural gas from third parties in this Order. CAC/MSOS suggested that no changes be made until a detailed review of both the cost allocation methodology and rate design is held. The Board does not feel it appropriate to deal with cost allocation on a piece meal basis. The Board considers that a change in functional classification and/or allocation of one element will impact on all customers of Centra. **The Board will, therefore, accept the Cost of Service study as filed by Centra but will require Centra to refile all schedules to include Board ordered revisions to both capital and operating costs.**

**The Board considers the cost of service study review to be of an urgent nature and will therefore direct Centra to complete a review, using an interactive process with all stakeholders, and submit the results of such a review to the Board prior to Centra's next GRA filing.** The Board will expect such a review to consider the appropriateness of all methods and systems to be employed to functionalize and classify all capital and operating costs and to allocate such costs to proper customer class definitions. The Board further expects that the primary driver will be cost causation giving due regard to Centra's current operations in the Manitoba market, direct purchase

activities, storage arrangements, risk management activities, transportation tolls, weather and use patterns for each specific customer class and all other relevant issues.

## **27.0 Rate Design**

### **27.1 General**

Centra did not change its method of rate design, with the exception of a change in certain of the customer class Revenue to Cost (R/C) ratios, from that utilized in the 1993 Test Year GRA filing. The Fixed Monthly Charges which are recovered by Centra from the SGS and LGS customer classes, although now called a Basic Monthly Charge, remain at \$10.00 and \$50.00 respectively. Changes in cost of service, as necessary, are recovered through the proposed commodity rates for all four of its customer classes.

### **27.2 Rate Design Policy**

Centra filed its rate design policy in response to a directive in Order 8/94, on January 13, 1995.

The rate design policy goal is to establish rates to recover costs which reflect the way in which costs are incurred. The goals of this policy are to yield revenues to facilitate the maintenance of Centra's financial integrity; to seek a balance of fairness; to maintain rates that reflect costs and are not unduly discriminatory; to encourage new customers and uses for natural gas; to provide appropriate cost/consumption signals; and are understandable, acceptable and, as far as possible, free of controversy.

Centra submitted it had evaluated its current rate philosophy, as well as a cost based and a value based rate design philosophy. Centra stated that once fully implemented, the rate design would send out proper pricing signals, provide for commodity impacts of future capital natural gas equipment purchases and for direct purchase decisions while maintaining rate fairness. The rate policy is also designed to minimize the effect of rate increases due to conservation driven rate increases. Centra did not indicate any proposed rate structure changes at this time, nor did they indicate a schedule for full implementation.

### 27.3 Revenue to Cost Ratios

The following table summarizes the annualized customer class R/C ratios which Centra proposed to use in order to recover its costs. The table also shows the annualized customer R/C ratios based on the Board approved 1993 test year filing.

Customer Class	Revenue to Cost Ratio	
	1993	1995
SGS	0.979	0.979
LGS	1.033	1.032
Special Contract	1.014	1.015
Interruptible	1.022	1.029
<b>Total Company</b>	<b>1.000</b>	<b>1.000</b>

### 27.4 Customer Class Impacts

In its SGS rate structure, Centra uses a basic monthly charge of \$10.00 to recover a portion of its costs with the balance being recovered through a single commodity charge, regardless of consumption. Allocated non-gas costs are recovered from its Special Contract Customer (Simplot) pursuant to a contract, due to expire in 1995. The allocated costs are recovered from the LGS class by way of a \$50.00 basic monthly charge from both sales and Firm T-Service customers. The balance of the costs are recovered by a declining block rate structure (four rate blocks), with overall commodity rates being initially determined for the sales customers. The corresponding Firm T-Service rates are determined by deducting the allocated gas costs for this class from the LGS sales rates. Allocated gas costs are adjusted for unaccounted for gas and a working capital allowance requirement for storage gas inventory. Interruptible sales and Interruptible T-Service rates are determined in a manner similar to that used for the LGS Class, except that no fixed monthly charge is used for this class. All interruptible customer class costs are recovered by way of a declining block (four rate blocks) structure.

The table below summarizes the annualized impacts of Centra's most recent updated filing on the various customer classes and sub-classes, compared to the 1993 approved test year filing. This table also compares the proposed April 1, 1995 rates (with all rate riders) to the interim January 1, 1995 rates currently in place.

	Annualized 1994 - 1995	April 1, 1995 to January 1, 1995
	% Increase	% Increase
SGS	-4.29 to -5.00%	+0.23 to +0.27%
LGS	-9.27 to -12.85%	-10.00 to -14.10%
Special Contract	0.00%	0.00%
Firm T - Service	+2.60 to +7.79%	+3.44 to +10.3%
Interruptible	-17.83 to -18.35%	-17.07 to -17.61%
Interruptible T-SE	+8.26 to +9.74%	+17.98 to +21.2%
<b>Total Company</b>	<b>-7.02%</b>	<b>-5.32%</b>

### 27.5 Intervenors' Position

Municipal's only suggestion for Board consideration in the area of rate design was to disallow the proposed NGV and ERP plans which would reduce costs and rates for all classes, including the T-Service customers. CIGMA suggested that the Board order Centra to decrease the R/C ratio for the Interruptible class to 1.022, the same as it was in the approved 1993 GRA. CAC/MSOS suggested that no change be made at this time and that a review of the rate design be conducted in conjunction with the cost of service study review.

### 27.6 Presentations

Seagram Company Limited ("Seagram") appeared before the Board, requesting that the Board not allow the proposed 22% increase in Interruptible T-Service Rates. Seagram indicated that this was almost twice as large an increase as the Firm T-Service Rate and that the Seagram Rate increased by more than 116% since 1990, an average annual increase of 23%. Seagram had experienced average increases of 3% on the TCPL System over the same time period. Seagram had implemented conservation efforts over the past years but rate increases of the magnitude sought by Centra could result in plant relocation. The Seagram Plant Manager submitted a further communication to the Board, in which he requested that the Board consider a rate structure which would include a

demand component to more accurately reflect the actual costs for each customer class. Should the Board feel this to be impractical in the short term, he requested that rate increases in the interim be adjusted so that only a fair share of costs are paid by all customers.

CanAmera Foods, in a communication dated February 10, 1995, submitted that the increase sought for the Interruptible T- Service Rate would result in an increase to CanAmera from \$112,000 to \$378,000 annually for their two crushing plants. CanAmera stated that this was irresponsible in light of the 1 to 1 1/2% inflation rate and would result in uncompetitive operations in the two Manitoba plants.

Domtar Gypsum requested, in a letter of January 16, 1995 that the Board limit increases to the existing rate to correspond with the impact of any change in rate of return granted by the Board. These increases requested by Centra cannot be controlled through competition as can costs of goods or services of Domtar Gypsum's other suppliers. Domtar Gypsum anticipates a much larger natural gas consumption this year and resultant revenue increase would exceed the increase in rates Centra is seeking.

Burns Meats Limited wrote to the Board on January 23, 1995, requesting that the increase in rates of 22.2 percent sought by Centra be limited "to the changes in the rate of return calculation."

E. S. Kovach, a citizen from Winnipeg, wrote to the Board on January 10, 1995, requesting the Board to "please ensure that the requested changes are not prompted solely to accommodate lobbying by large commercial and industrial users to gain advantage on the backs of small users who can ill afford the constant increases that seem to come along on a regular basis."

## **27.7 Board Findings**

The Board wishes to point out that, on an annual basis, rates for all of Centra's classes, with the exception of the Special Contract will decrease. Because T-Service rate increase percentages are calculated based only non-gas costs from year to year (representing some 44% of overall costs) and these costs have increased over 1993 by some 9.5% the T-Service rates will also increase. Sales rates decrease because decreased gas costs for sales customers are greater than increases in non-gas costs of about 9.5%. As an example, the annualized non-gas cost increase to the SGS class from that last approved by the Board, based on Centra's most recent revision, would be about

13.8%. If T-Service customers are able to purchase their gas at an amount equivalent to Centra's reference price, then T-Service rates would be identical to Sales rates, within a class. To the extent that T-Service customer's gas costs are less, then the annual energy bills for those customers would be less than for a Sales Customer, for equivalent consumptions.

The Board also notes that because of prior and proposed rate riders, and the impact of 1995 rates not coming into effect until May 1, 1995, the rate increases from those currently in effect will almost double the Interruptible T-Service rate increase from the annualized impact. The Board also recognizes that the current cost allocation methodology and rate design has basically remained unchanged since about 1990 and that circumstance with respect to the entire gas supply, transmission and distribution within Manitoba has changed dramatically, especially since 1993. The Board, in Order 8/94 directed Centra to review the matter of rate design and to file the results of such a review with the Board as soon as possible. This was due, in part, to the Board's concern over the relatively large rate increases being experienced by the T-Service customers, relative to other Company customers over the past two years. **The Board will order Centra to complete its rate design review in conjunction with the review of the cost of service study and to file a report with the Board before the next GRA.**

The Board will not, therefore, order any change in Centra's rate structure at this time. **The Board will, however, order Centra to reduce the R/C ratio for the Interruptible Class to no greater than 1.0220.** As the R/C ratio for the LGS class is already at 1.032, any foregone revenues due to this reduction from the Interruptible Class will be recovered from the SGS Class. Based on the Company's revised filing, the Board estimates that the foregone Interruptible Class revenue, on an annualized basis, would have been approximately \$127,000. The impact of recovering this amount from proposed SGS revenues of \$160,052,210 would be less than 1/10th of a percent. This impact will be somewhat changed because of the various adjustments which the Board has made throughout this Order. The Board will order Centra to refile all appropriate rate schedules, rate impacts and backup material to reflect various Board adjustments and the change in R/C ratios.

## 28.0 Deferral Accounts

### 28.1 General

Centra's revised filing of February 9, 1995 requests Board approval for disposition of six deferral accounts. Centra indicated that it had not updated the 1995 carrying costs to reflect the change in short term interest rates from 7.44% to 8.5%.

- 1993 PGVA
- Disconnected Volume reduction pursuant to Order 91/94
- 1993 Heat Value
- 1994 Gas volumes transportation sales/swaps
- 1994 Capacity release Program
- 1994 PGVA

Centra requested the Board to approve the disposition of the balance of these accounts, on an interim basis, by way of appropriate rate riders for each of its customer classes. Centra further proposed that a detailed review be conducted outside this proceeding to investigate the amounts and allocation of balances in these accounts. Centra further requested that an additional rate rider be utilized to recover, or refund, any revenue deficiency or surplus for the months of January, February and March of 1995, assuming approved rates became effective on April 1, 1995.

Centra stated that the allocation of the deferral accounts and rate "retroactivity" rider was in accordance with the existing cost allocation study. Individual amounts and/or transactions within specific accounts could have different allocation factors.

The status of the six deferral accounts, based on the February 10, 1995 updated information, is that approximately \$943,431 is owed to Centra.

None of the Intervenors expressed any opinions regarding the matter of Deferral Accounts or rate retroactivity.

## 28.2 Board Findings

The Board has some concerns in allowing the disposal of the balances in the existing Deferral Accounts without full review of the details of each of the accounts and the allocation of these balances to the various customer classes.

The Board notes that Centra has stated that it did not expect the detailed review to result in any major changes to any of the balances or allocations, except for the required update for 1995 carrying charge increase from 7.44% to 8.5%. The Board is also cognizant of the previously expressed desire by most Intervenor Groups that any refunds or recoveries due, for whatever reason, be dealt with in a timely fashion. **The Board will therefore allow, the disposition of the Deferral Accounts as requested by Centra on an interim basis, revised to reflect the short term carrying charges.** The Board will further expect Centra to make application for a detailed review of these Deferral Accounts in advance of Centra's next GRA filing.

## 29.0 Other Matters

### 29.1 Interim Order 133/94

The Board issued Order 133/94 which authorized Centra to track and accumulate certain 1994 costs, including those associated with Centra's price risk management and hedging activities. Order 133/94 also authorized the establishment of a deferral account to track and accumulate incremental "non-traditional" revenues associated with the efficient management of Centra's gas supply portfolio not presently accumulated in the PGVA. These revenues are primarily related to the Capacity Release program and Centra's Gas Volume and Transportation Sales/Swaps. During this hearing, Centra stated that the costs incurred in developing the risk management program had been written off in 1994 and as a result that portion of the Deferral Account was not required. The request for the confirmation of the remainder of Order 133/94 remained unchanged.

### Board Findings

The Board will be conducting a review of the details of all costs and revenues resulting from 1994 transactions which were tracked and accumulated pursuant to Order 133/94. The Board recognizes that the cost portion of this account dealt only with 1994 costs and that 1995 costs are estimated and form a portion of the general expense of Centra. However, until the Board reviews and disposes of the entire matter of Deferral Accounts and risk price management, **the Board will require Centra to track and accumulate both costs and revenues for 1995.** As a result, Order 133/94 will continue to remain in full force and effect until a further order of the Board.

### 29.2 Bill Estimating and Bill Design

During the hearing, Centra indicated that the design of the monthly bill had been somewhat altered by renaming the "Fixed Monthly Charge" to "Basic Monthly Charge". The Company was of the opinion that the Fixed Monthly Charge had some connotations that may "carry some emotionalism that was inappropriate" and that the charge was, in fact, more a charge for provision of some basic services, as opposed to a recovering a fixed cost. The matter of fixed or basic charges would be further addressed in Centra's rate design studies and bills would very likely require redesign subsequent to implementation of new rate structures.

In response to a number of customer complaints, Centra also indicated that it had commenced a review of the methods it employed for the purposes of estimating bills. Centra indicated that this study would be completed and the results filed with the Board in 1995.

## **Board Findings**

The Board considers the entire matter of bill design to be quite important in communicating the various cost components of an annual energy bill to the consumers. As well, it is a potential vehicle for notifying the public of various regulatory and other Company business matters. The Board will expect a total bill redesign to form a part of the study related to the review of the Cost of Service and Rate Design. **The Board further expects Centra to file the results of its review of the bill estimating procedures with the Board as soon as possible and no later than the next GRA filing.** The Board is aware of the various misconceptions surrounding the use of the "Fixed Monthly Charge" and accepts Centra's action in renaming that charge.

### **29.3 Customer Equipment Service Policy**

#### **29.3.1 Background**

As noted in Order 10/93, there has been a concern over Centra's burner-tip service for several years and the Board directed Centra complete a policy on the issue of burner-tip service for the next GRA. Centra retained a private consultant to perform a burner-tip service awareness satisfaction study and on completion of the study, Centra formulated its policy entitled A Customer Equipment Service Policy.

At the 1993 GRA, Centra's Customer Equipment Service Policy was reviewed and 2 distinct programs were contemplated:

1. Equipment Problem Program (AEPP); and
2. Equipment Safety Inspection and Tune-up Program (AESITUP).

#### **29.3.2 Equipment Problem Program (AEPP)**

The Equipment Problem Program (AEPP) is the core of the previous Burner-Tip Program which is a no labour charge response to small general service customer's equipment problem calls. The EPP focuses on safety and advice to the consumer. Under the EPP, Centra completes a diagnosis on the problem, make immediate safety repairs, provides operating advice and makes referrals to heating dealers for more significant repairs. Under the EPP, Centra responds to No heat calls in critically cold weather, completes some repairs and eliminates the health risk associated with no heat.

While the EPP is a no labour charge service to small general service customers (costs for parts are paid by the customer), there is a significant cost to this program recovered in rates from all consumers. Since 1992, these costs are as follows:

	1992	1993	1994
Total Cost	\$1,426,178	\$1,761,100	\$1,317,200
Burner Tip Calls (EPP)	37,622	49,543	34,980
Cost Per Call	\$37.91	\$35.55	\$37.66
Total SGS Customers	217,210	217,737	220,338
Cost Per Customer	\$6.57	\$8.09	\$5.98

In this 1995 GRA, Centra indicated that it did not intend to increase the scope of this program but did plan to make more customers aware of the existence of the EPP.

### 29.3.3 Equipment Safety Inspection and Tune-up Program

ESITUP is the second program under the Customer Equipment Service Policy and was developed as a result of the Burner-Tip Awareness and Satisfaction Study performed for Centra in 1993 wherein it was determined that:

AParamount to customers is that Centra Gas offer services which help protect and ensure the safety of its customers. As the primary supplier of natural gas in the province, customers view this as Centra's responsibility and corporate duty rather than its choice.

The ESITUP was developed for consumers' existing equipment in conjunction with heating dealer associations. The ESITUP is offered by the dealers and Centra is to promote, in its literature, the need for customers to use this Program to maintain the safe, reliable and efficient use of natural gas. Centra's reason for developing and promoting the ESITUP to be performed by heating dealers was to maximize customer safety. Centra believes periodic equipment inspection and tune-ups maximize the safe use of natural gas, as well as providing reliable and efficient use of that energy source.

Centra recognized that a strong communication program would be required to inform customers of the services that are available to them. Also recognizing that this Program would impact on the heating dealer=s workloads and livelihoods, Centra wanted to be sensitive to phase the program in gradually to get a better understanding of the magnitude of the workload shift that would occur for Centra and the heating dealers.

In terms of delivery of the ESITUP for existing equipment, Centra was quoted in Order 8/94, at page 100, as advising:

AOur intention as it relates to that is to develop in conjunction with the dealer associations a program that will in fact provide equipment safety checks or inspections as well as tune-up components. The activity would be carried out by the dealers and it would not be our intention at this point in time to provide that service to customers, . . . My personal preference is to work towards building a strong dealer association and to try to assist consumers in knowing that they have a program which is endorsed by Centra Gas.≡

Also noted in Board Order 8/94 was:

AThe Company also testified that part of the program being put before the Board was as a result of meetings conducted with plumbing and heating contractors in both Winnipeg and Brandon. The Company also testified that copies of the survey were provided to any interested parties and specifically to the plumbing and heating associations themselves . . . The Company confirmed that no changes would be made in its present burner-tip policy until such time as the Board approved this matter in a Board Order.≡ (page 101 to 102)

Centra advised the Board that to implement a strong communications program to educate customers about the existence and details of the Customer Equipment Service Policy, including the EPP and ESITUP, would increase annual costs about \$430,000 to \$1.7 million. By creating greater awareness of its EPP by instituting the ESITUP, Centra estimates that an additional 6 personnel would be required to the existing 20 to 25 personnel engaged currently in EPP.

### **\$50 Service Charge**

In this GRA, Centra also seeks Board approval of a \$50 service charge to consumers when Centra performs the safety and tune-up program. While the initial ESITUP design contemplated Centra only promoting the program with heating dealers providing the services, there has been a change whereby Centra, on rare occasions, performs an inspection and tune-up, including the cleaning of furnaces.

Centra reviewed the genesis of their position that they would not only promote but perform the tune-up program by reviewing evidence from the GRA on November 10, 1993:

AIIt would not be our intention at this point in time to provide that service to customers, but we have indicated to the dealer associations that we would monitor really the reaction and response of customers to that, and if for any reason customers were requesting that we participate in a stronger way in that program, then we would.≡

Centra now contends that:

AThere were a portion of our customers, a very small portion, who were in fact requesting/demanding that we participate in a stronger way and that we do that safety and tune-up program ourselves and our customer service folks worked up a rate of \$50 which was intended to cover all costs plus.≡

(Transcript, page 2793)

Centra testified that they received 700 calls for this service and completed fewer than 20 inspections with approximately 680 being referred to heating dealers that met Centra=s eligibility criteria.

#### **Intervenors= Positions**

CAC/MSOS, in its closing submission, indicated that it did not put any evidence forward on the Customer Equipment Service Policy or its component parts (EPP and ESITUP) because it considered the program to be operating in the manner in which it was intended and submitted that the Board=s approval of the program in Order 8/94 should be continued.

In its closing submission, HVAC indicated that Centra had started to offer a furnace cleaning service in 1994 without any prior dialogue with dealers. They contended that:

ATo the dealer network it represented yet another instance of the utility doing whatever it wanted without regard for the industry representatives, without regard for anyone=s input, and without regard for permission from The Public Utilities Board.≡

(Transcript, page 3502)

HVAC submitted that Centra should be concentrating its efforts on those products and services not able to be provided by the private sector.

HVAC recommended that the EPP should be abandoned. Steps should be taken to ensure that Centra does not engage in furnace cleaning or replacement of parts.

## Board Findings

In respect of the EPP, the Board reaffirms its findings from last year in that Centra should, at all times, be responsible for customer calls that are of an emergency nature. There has been no evidence for the Board to conclude otherwise.

Particularly, there has been no evidence to suggest that all calls of an emergency nature can adequately be handled throughout the province by only heating dealers. Unless Centra determines that customer safety would be compromised, Centra should confine its service activities to ensure the safety objectives of the EPP are met and confine the list of components on gas furnaces and hot water heaters that it will replace under the EPP to the following:

- X High limits;
- X Pressure temperature relief valves;
- X Gas valves;
- X Regulators manifold;
- X Thermocouples;
- X Ignitors;
- X Flame Monitoring components;
- X Unitrols;
- X Single pole thermostats;
- X Fan controls;
- X Transformers; and
- X Millivolt relays.

With respect to the ESITUP which is also under the Customer Equipment Service Policy, the Board expects Centra to adhere to the Program's original intent whereby Centra would promote the Program to its customers with heating dealers providing the actual services. The Board is concerned about Centra expanding its services into a market that is already being served by the competitive heating dealer industry. Notwithstanding, **the Board will approve the \$50 service charge for Centra to perform the ESITUP, but only under circumstances where Centra determines that customer safety is an issue.** The Board recognizes that it has only been in rare circumstances (i.e. 20 inspections out of 700 calls) that Centra has performed the ESITUP, however, there has been no evidence provided to justify Centra entering into that competitive business. Rather, the Board encourages Centra to contain its involvement in the promotion and advertisement of the ESITUP. Centra is to report at the next GRA on its activities on this program.

### 29.4 B.C. Sugar Delivered Service Contract

On December 14, 1994, Centra applied to the Board for approval of the provision of natural gas service to the British Columbia Sugar Refining Company Limited (A.B.C. Sugar) which operates a sugar beet refining company

in Winnipeg. Historically, B.C. Sugar has arranged its own gas supply and transportation service with a third party and only required the use of Centra's published and Board-approved transportation service rates to deliver their supply of natural gas from the City Gate to its plant in Winnipeg. Apparently, B.C. Sugar was unable to make these arrangements in the fall of 1994 and sought Centra's assistance. Centra is of the view that of the various alternatives available to B.C. Sugar, Centra's proposal was the most attractive.

To complete this arrangement, Centra purchased gas under its existing supply contracts for the months of September and October, 1994. For the months of October, 1994 through March, 1995, Centra entered into a separate arrangement for gas supply. As B.C. Sugar only needed that gas supply until the end of February, 1995, Centra sold the March, 1995 gas to some other party ex-franchise.

In Board Order 4/95, the Natural Gas Sales Agreement, dated September 1, 1994, between Centra and B.C. Sugar was given interim approval. In the Order, the Board noted

A. . . the provision of this type of service raises a significant question regarding the role of a natural gas distributor. Should a natural gas distribution company provide transportation services exclusively or be allowed to provide merchant services at a profit for either the shareholder or the distributors, customers or both?

Because of that significant issue, Order 4/95 remains interim. Centra is seeking confirmation of this Order.

### **Intervenor Positions**

CIGMA urged the Board to conduct a review of the B.C. Sugar Order and the general principles raised therein at the earliest opportunity.

CIGMA raised concerns about the B.C. Sugar transaction, including:

- X the secrecy of the transaction;
- X whether there was competition for the business that Centra obtained and whether Centra took advantage of utility transportation and storage assets to give it an unfair advantage over potential suppliers of gas;

- X the sale was made at non-tariff rates and constituted a streaming of gas supply; and
- X from a cost allocation perspective, the results of the transaction would appear to visit transportation capacity costs that would have been paid by one customer on all of the other customers of the utility.

CIGMA also sought an opportunity to review an abridged version of the Application which Centra was to file before commenting further.

### **Board Findings**

The seeking of confirmation of Board Order 4/95 was not contained in the public notice of this General Rate Application. In fact, an intervenor with significant interest in this matter, CIGMA, was unaware of the Order until the hearing commenced. Furthermore, there are still matters outstanding with respect to Board Order 4/95 for Centra to complete.

That being the case, the Board is not prepared to confirm Board Order 4/95 at this time. Rather, the Board intends to review the principles raised in this Order at a subsequent hearing with Centra and other interested parties at its earliest opportunity.

### **29.5 Future Test Year Reporting and Monitoring**

In Centra's 1993 Historical Test Year GRA, it sought approval to file its next GRA based on a future test year. Because of the significance of the change in the requested regulatory regime, together with there being no financial impact in the 1993 Test Year GRA, this issue of a future test year was the subject of a separate Board hearing in 1994.

The Board, in Order 89/94 dated May 26, 1994, gave Centra the option of utilizing a future test year model in its next GRA filing.

Included in Order 89/94 was a directive that:

"3. The Board will convene a further meeting at a later date to discuss transition issues as well as the monitoring and reporting requirements ..."

Until such a "further meeting" was held, the Board listed certain interim reporting requirements that would be required.

Centra has chosen to file their GRA based on a 1995 future test year, and has agreed to file the interim reports listed in Order 89/94 so as to satisfy the Board and other parties to the process that Centra's financial data is credible.

However, Centra also suggests that the filing of copious quarterly information may not be required as more emphasis and review shifts to annual financial updating.

On January 13, 1995 Centra filed the results of its review of the transitional effect on revenue requirement of the move to a future test year method of rate setting. Centra's review was based on a comparison of the original 1995 Test Year revenue requirement with the 1994 Bridge Year after adjustment to approximate a year end historical year.

The result of the review indicated that the 1995 Test Year revenue deficiency is \$234,700 less than what it would have been in a 1994 Historical Test Year.

In Order 89/94 the Board noted Centra's estimate of a future test year having an approximate \$900,000 additional impact on revenue requirement. The most significant reasons for the reduced revenue requirement under a future test year methodology were the inclusion of the NGV and ERP revenue, investment and expenses, higher amortization catch-up costs due to the final cost of the 1993 GRA, and a more detailed income tax calculation that yields a significantly higher expense in 1994.

### **Board Findings**

As the Board has not yet convened a "further meeting ... to discuss ... the monitoring and reporting requirements" of a future test year, the Board will require Centra to schedule such a public meeting to finalize the future test year reporting and monitoring requirement and the timing of such reports. The Board expects the future test year reporting and monitoring requirement issues will be included in the public hearing respecting the finalization of the interim disposition of the various deferral accounts included in this GRA.

The Board also expects Centra to use such a public hearing to review all of its current reporting and filing requirements with the Board, together with proposals to streamline such reporting.

Until such a public hearing is held, Centra is required to continue with all of its reporting and filing requirements, including those future test year reporting requirements itemized in Order 89/94.

## **29.6 Responses to Board Directives**

In previous orders the Board has issued directives to Centra on numerous issues that have been the subject of evidence and submissions at the hearings.

Many of the directives in the last GRA Order (8/94) have been satisfactorily addressed and some are of a continuing nature. There are also some directives that have yet to be addressed but which the Board expects will be addressed throughout 1995 such as:

- ∃ review of cost of service study;
- ∃ review of rate design including the feasibility of heat content based rates;
- ∃ providing various performance measures including benchmarking.

Should Centra want the Board to review any of the previous Board directives, Centra should include that information with the process to finalize the future test year reporting and monitoring requirements.

## **27.7 Other Matters - Section 82 Public Utilities Board Filings**

Centra is a member of the Westcoast Energy Inc. group of related companies. As such, it is prohibited by provincial legislation from contracting with a company in which Centra or any of its directors have an interest unless Centra files with the Board full details of and receives written acknowledgment from the Board that the filing has been made as required by the legislation. During the hearing Centra acknowledged that it was in default of this filing requirement but intended to remedy that default immediately after the hearing.

## **Board Findings**

The Board finds that Centra remains in default of its legislated filing requirements and will **require Centra to remedy its default before June 30, 1995.** Future filings of this nature are to be made prior to entering into any such contracts with affiliated companies.

**28.0 IT IS THEREFORE ORDERED THAT:**

**Page Ref.**

1. Rate Base, as requested by Centra Gas Manitoba Inc. in its updated material dated February 9, 1995 BE AND IS HEREBY APPROVED subject to the following adjustments:
  - 20 a) Removal from Rate Base of the amount that would be required as a customer contribution for each project listed in Undertaking No. 115 sufficient to achieve a revenue to cost ratio of 1.00 by year 5.
  - 27 and 31 b) Removal from Rate Base of all expenditures related to the NGV and the ERP programs.
  - 37-38 c) Removal from Rate Base of planned 1995 computer expenditures related to computer aided dispatch, CSS/CIS user interface, DFIS - Phase 2, DFIS - Phase 3 and SCADA projects.
  - 41 d) The working capital allowance for cash requirement, calculated in a method consistent with the application, be adjusted as required as a result of Board directives elsewhere in this decision.
- 20 2. Feasibility studies be completed in the future for all main extensions in excess of 500 metres and filed in summary form at all future GRAs.
- 20 3. Evidence be filed at the next GRA that Centra's total vehicle requirements are reasonable, are consistent with the new vehicle policy and do not require inordinate annual expenditures.
- 27 and 31 4. Utility income be adjusted to remove all revenue and expenses related to the NGV and the ERP.
- 31 5. a) The request for approval of equipment rental rates in the schedule of other charges under the terms and conditions of service is hereby denied.

- 31                   b) Centra file a report within 60 days of this Order that describes in detail Centra's plans for the ERP.
- 31                   c) Centra remove from the Rental Agreements all references to the Public Utilities Board of Manitoba.
- 41                   6. Centra lead evidence at the next GRA on the matter of non-cash items included in the calculation of cash requirements for working capital.
- 50                   7. a) A capital structure for rate setting purposes of 40 percent equity and 60 percent debt BE AND IS HEREBY APPROVED.
- 51                   b) A rate of return on equity of 12.12 and an overall allowed rate of return of 10.80 for the 1995 future test year BE AND IS HEREBY APPROVED.
- c) The Board approves the use of the following formula approach for the determination of future rates of return on equity:
- i) currently allowed return on equity (12.12%);
- ii) plus 80% multiplied by the change in the forecast long Canada bond yield.
- where the long Canada bond yield is determined as the average of forecast 3 month and 12 month 10 year Canada bond yields as reported in the November Consensus Forecast report, adjusted for the average spread between 10 year and 30 year Canada bond yields at the end of November.
- d) The Board will approve the use of the above formula approach subject to the following:
- i) the forecast long Canada bond yield as discussed above falls within  $\pm 2\%$  of the 1994 forecast yield of 8%;
- ii) the Board will require a full ROE hearing to be scheduled no later than in conjunction with the 1997 GRA.

- 57 8. The use of effective degree days with a balance point of 13.9 degrees Celsius for purposes of calculating normalized sales volumes BE AND IS HEREBY APPROVED.
- 58 9. No further studies with respect to effective degree day determination be conducted until the necessary data for 1992 through 1997 is accumulated.
- 57 10. The 1993 disconnected customer volumes be added to the 1993 base normalized volumes with no further adjustment.
- 58 11. The maximum year volumes be reviewed by Centra and the results reported to the Board by no later than the next GRA.
- 66 12. The 1995 rates reflect a commodity cost of gas which, based on the most current information, will utilize a 1995 average NYMEX price of \$1.60 per GJ.
- 68 13. Centra should consult with direct marketers and Board staff with a view to resolving the matter of the buy/sell reference price.
- 73 14. In connection with upcoming PGVA reviews, Centra provide price risk management information as set out in the Order.
- 77 15. Expenses related to the executive incentive package that are based on profitability should be removed from revenue requirements.
- 78 16. The bad debt component of revenue requirements in the amount of \$1.1 million and the continuance of the bad debt deferral account for 1995 BE AND IS HEREBY APPROVED.
- 80 17. a) Amortization expense for Operational Audit and Propane Storage Tank be increased \$159,500 and \$109,500 respectively.
- 80 b) Amortization expense in revenue requirement for general rate applications be reduced from \$2,860,200 to \$1,200,000.
- 83 18. a) Revised schedule of depreciation rates be filed with the Board that reflect no negative salvage value for

transmission mains and distribution services and that reflect no change in average service life for transmission mains, distribution services regulators and meter installations, measuring and regulatory equipment.

- 83           b) Depreciation expense included in 1995 revenue requirement be recalculated to reflect the revised depreciation rates.
- 84           19. Municipal taxes included in revenue requirement are approved as filed.
- 85           20. Income taxes included in revenue requirement should be recalculated to reflect the directives of the Board in this decision.
- 86           21. Other income should be adjusted to remove income from the ERP.
- 57           22. The request for volumetric adjustment for higher efficiency furnaces is denied.
- 90           23. Centra complete a review of the cost of service study, using an interactive process with all stakeholders, and submit the results to the Board prior to the next GRA.
- 95           24. Centra complete its rate design review in conjunction with the review of the cost of service study and file a report with the Board before the next GRA.
- 95           25. The revenue to cost ratio for the Interruptible Class for 1995 be no greater than 1.0220.
- 97           26. The disposition of the deferral accounts as requested by Centra, revised to reflect the short-term carrying charges BE AND IS HEREBY CONFIRMED on an interim basis.
- 98           27. Centra track and accumulate both costs and revenues for 1995 with respect to deferral accounts required by Order 133/94.
- 99           28. Centra file the results of its review of bill estimating procedures before the next GRA.

29. Centra should file for approval a revised calculation of Rate Base, revenue requirement, cost of service, and rates to reflect these and other adjustments made by the Board. The Board will review the revised filing and issue a separate Order approving rates for 1995. The impact of the new rates on the various customer classes will be discussed in that Order.



THE PUBLIC UTILITIES BOARD

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Chairman

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Acting Secretary