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Ontario Energy Board

E.B.O. 179

**RECOMMENDED UNDERTAKINGS FROM INTERPROVINCIAL PIPE LINE SYSTEM
INC. AND CONSUMERS' GAS TO THE LIEUTENANT-GOVERNOR-IN-COUNCIL**

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For

POLLUTION PROBE

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Introduction

Interprovincial Pipe Line Systems Inc. (IPL) is seeking permission from the Lieutenant-Governor-in-Council (LGIC) to acquire approximately 85% of the common shares of Consumers' Gas (Consumers').

The purpose of this testimony is twofold. First, to outline why it is in the public interest for the LGIC to make any approval of the proposed takeover contingent on undertakings from IPL and Consumers' that will help ensure that Consumers' aggressively promotes energy conservation.

Second, to propose and justify specific wordings for undertakings from IPL and Consumers' that are directly or indirectly related to the above objectives.

The Climate Change Convention, Energy Conservation, Government Policy and the Ontario Energy Board

At the 1992 Earth Summit in Rio de Janeiro, Canada signed the Framework Convention On Climate Change. The objective of the Convention is to stabilize concentrations of greenhouse gases in the atmosphere:

"achieve...stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner."¹

The level of concentrations is related to the level of emissions. Consequently the Convention commits its signatories to stabilizing their greenhouse gas emissions, excluding CFC emissions, at their 1990 levels by the year 2000.²

However, to stabilize present-day greenhouse gas concentrations in the atmosphere, greenhouse gas emissions must be substantially reduced.³ The

stabilization of greenhouse gas emissions at the 1990 level by 2000 is just a first step towards achieving the Convention's ultimate objective.

In 1990 carbon dioxide emissions constituted 61% of the world's greenhouse gas emissions, making carbon dioxide the main greenhouse gas.⁴

In 1990 Ontario's fossil fuel related carbon dioxide emissions, 144,259 kilotonnes, were responsible for 98% of Ontario's net carbon dioxide emissions.⁵ Furthermore, 40,665 kilotonnes or 28% of Ontario's fossil fuel related carbon dioxide emissions were due to the consumption of natural gas.⁶

As further steps towards stabilizing greenhouse gas concentrations in the atmosphere, the Ontario Round Table on Environment and Economy (see Appendix 1 for a list of the members of the Round Table as of September, 1992) has recommended that Ontario's carbon dioxide emissions be reduced: a) by 20% by 2005; and b) by between 70 and 80% by 2030.⁷

Energy conservation is a prerequisite for a permanent reduction in Ontario's carbon dioxide emissions. Furthermore, Ontario's total natural gas consumption must be reduced by at least 29%, and probably more, if Ontario's fossil fuel related carbon dioxide emissions are to be reduced by 80% by 2030.⁸

Energy conservation is also the Government of Ontario's "priority in meeting energy needs in Ontario."⁹

In its E.B.O. 169-III Integrated Resource Planning Report the O.E.B. recognized the "important role that the energy conservation programs of the gas utilities play in achieving the Government of Ontario's energy and environmental policy goals."

"The Board also recognizes the important role that the energy conservation programs of the gas utilities play in achieving the Government of Ontario's energy and environmental policy goals. In a letter to the Ontario Energy Board dated 28 February 1992, the then Deputy Minister stated that:

Energy efficiency has been identified as the Government's top priority in the energy sector ...[and] as a key to achieving the Government's objectives of economic competitiveness, environmental protection, energy supply security and sound energy planning ... Natural gas utilities, in conjunction with other energy supply service companies within the province, are also expected to be central players in achieving these objectives through the delivery of energy efficient services and programs.

The Board concurs with these policy goals..."¹⁰

Energy Conservation and the Corporate Self-Interest of IPL

According to IPL, its long term goal is "building value for shareholders".¹¹ At the Technical Conference, Mr. McCurdy of IPL confirmed that building shareholder value means increasing earnings per share.¹²

Unfortunately, due to the O.E.B.'s rate-making principles and due to IPL's ownership of InterCoastal Pipe Line, the aggressive promotion of energy conservation by Consumers' could conflict with IPL's goal of building shareholder value.

i. The O.E.B.'s Rate-Making Principles

As a result of the application of the O.E.B.'s rate-making principles, the promotion of energy conservation by Consumers' Gas could be contrary to the financial self-interest of its shareholders for at least two reasons.

First, between rate cases, Consumers' earnings are linked to its natural gas throughput volumes. That is, the higher are Consumers' throughput volumes the higher are Consumers' earnings and conversely, the lower the volumes, the lower the earnings. This is true whether or not the throughput volumes are above or below their forecast levels. As a consequence, Consumers' is financially penalized if it promotes energy conservation, since conservation by definition reduces throughput volumes, and therefore earnings, from what they otherwise would have been.¹³

Second, in the long run, Consumers' total earnings and earnings per share are linked to its rate base. In the long run, the total earnings of Consumers' will increase in proportion to increases in its total rate base. More importantly, with respect to earnings per share, as long as Consumers' O.E.B.-approved return on equity exceeds its bare-bones cost of equity, a rise in Consumers' rate base will lead to a rise in Consumers' earnings per share even if its O.E.B.-approved return on equity remains constant. This result is illustrated in Table 1.

Table 1

Initial Situation

Investors' committed capital = \$400,000.

Outstanding stock = 10,000 shares at \$40 per share book value.

Earnings = \$40,000 per year = 10% = \$4.00 per share.

New Project

Additional capital investment = \$100,000. Additional earnings = \$10,000 per year = 10% as initially.

The situation after making the new investment: capital investment = \$500,000; annual earnings = \$50,000 per year; return = 10%.

	Number of Shares New Financing	Price Per Share	Total Shares	Earnings Per Share
Scenario A	2,000	\$50	12,000	$\frac{50,000}{12,000} = \4.17
Scenario B	2,500	\$40	12,500	$\frac{50,000}{12,500} = \4.00

Source: Paul H. Jaynes, Profitability and Economic Choice (Ames Iowa: Iowa State University Press; 1968), p. 19.

Under Scenario A, the utility's allowed rate of return on equity, 10%, exceeds its

bare-bones cost of capital and hence its share price, \$50, exceeds its book value, \$40. As a result, if \$100,000 of rate base growth is financed by issuing new shares, its earnings will rise from \$4.00 to \$4.17 per share. [Needless to say, the growth in earnings per share would be even greater if some or all of the rate base growth is financed by retained earnings.]

Under Scenario B, on the other hand, the utility's allowed rate of return on equity, 10%, equals its bare-bones cost of capital and hence its share price equals its book value. As a result, if \$100,000 of rate base growth is financed by issuing new shares, its earnings per share will not rise.

In short, if Consumers' allowed return on equity is greater than its bare-bones cost of capital, an energy conservation measure that reduces Consumers' rate base growth, will also reduce its growth in earnings per share.¹⁴

ii. IPL's Ownership of InterCoastal Pipe Line

InterCoastal Pipe Line, a subsidiary of IPL, is seeking permission from the National Energy Board to provide natural gas transmission service to Consumers' Gas. Thus, the aggressive promotion of energy conservation by Consumers' may be contrary to the financial self-interest of IPL if it entails a reduction in Consumers' demand for natural gas transmission service from InterCoastal Pipe Line.¹⁵

The Role of Undertakings to the Lieutenant-Governor-in-Council

Undertakings from a utility and its parent(s) to the Lieutenant-Governor-in-Council are a means to protect the public interest when there is a conflict of interest between a utility's shareholders and the public interest. As the O.E.B. stated, in its E.B.R.L.G. 34 Report with respect to the takeover of I.C.G. by Westcoast Energy, undertakings:

"are the currently accepted mechanism by which the Government of Ontario attempts to ensure protection of the Ontario public interest, over and

beyond the protection currently provided in the Act, by:

- (1) extending regulatory control over the gas utility and its corporate parents into matters not specifically encompassed by the Act, but which, nonetheless, are matters which could affect the public interest in Ontario; and
- (2) obtaining the agreement or promise of companies which are not subject to the Act, but which control regulated gas utilities in the province, to conduct themselves in the public interest in Ontario."¹⁶

Conservation Undertakings

The existing 1990 British Gas/Consumers' Gas Undertakings to the LGIC require British Gas to encourage Consumers' to take an aggressive approach to energy efficiency.

"British Gas will encourage Consumers in an aggressive approach to energy efficiency.

Either directly or through Consumers, British Gas will encourage:

- the promotion of efficiency of energy use throughout the Consumers franchise area. Efforts would be made to co-ordinate this program with Ontario Hydro; but would proceed regardless of arrangements with Hydro.
- an active program to promote the installation of high efficiency residential gas furnaces and boilers in new housing, and as replacements in existing housing.
- an active program of substitution of natural gas hot water and home heating to replace electric hot water and home heating throughout the Consumers franchise area.
- promoting the installation of efficient gas fired water heating systems in commercial and institutional applications.
- work with Ontario manufacturing and processing companies by advising and demonstrating the performance of advanced commercially available gas utilization technologies to improve efficiencies of utilization to enhance the competitive position of these companies.

- expansion of energy efficiency mandate and activities of Rose Technologies.
- working with Canadian appliance manufacturers in the development and promotion of energy efficient appliances."

The British Gas Undertakings with respect to energy efficiency are not fully satisfactory in at least six respects.

1. The British Gas Undertakings do not include any commitments with respect to the promotion of energy conservation. This is a serious omission for at least two reasons.

First, energy conservation is a prerequisite for realizing the objective of the Framework Convention On Climate Change. That is, in order to stabilize the concentration of greenhouse gases in the atmosphere, the global community must limit its total annual consumption of fossil fuels.

Second, energy conservation is the Government of Ontario's "priority in meeting energy needs in Ontario."

2. The British Gas Undertakings merely require British Gas to "encourage" Consumers' to take an aggressive approach to energy efficiency. On the other hand, the British Gas Undertakings with respect to the public float, the board of directors, the auditors, the head office, change of control, treasury operations, affiliate transactions, the financial integrity of Consumers, acquisition and reorganization costs, diversification, research and technology and employment levels use verbs such as "shall", "will" and "undertakes". Undertakings with respect to energy conservation and efficiency should be at least as strong and binding as undertakings with respect to other matters.

3. While the British Gas Undertakings require British Gas or Consumers' to make efforts to co-ordinate their energy efficiency programmes with those of Ontario Hydro,

there is no similar obligation to co-ordinate their programmes with those of the Ministry of Environment and Energy, the municipal electric utilities, energy service companies, financial institutions or builders. In its E.B.O. 169-III Report the Board encouraged the gas utilities to co-ordinate their energy conservation programmes with other organizations.

"The Board also considers it preferable for a utility to design energy conservation programs which include all relevant energy forms, rather than just focusing on natural gas conservation measures in isolation. This more efficient, cost-effective and environmentally sound approach will require cooperation with other organizations such as Ontario Hydro and municipal electric utilities. The Board encourages such cooperation." [p.42]

4. While the British Gas Undertakings require British Gas or Consumers' to encourage the substitution of natural gas for electricity for residential space and water heating, they do not require British Gas or Consumers to promote the substitution of high-efficiency natural gas space and hot water systems to replace existing electric space and water heating systems. In order to meet customers' energy service needs at the least cost and to avoid "lost opportunities" all fuel switching programmes should simultaneously deliver the most-efficient gas equipment that is cost-justified.

5. The British Gas Undertakings do not require British Gas or Consumers' to quantify the objectives of their energy efficiency programmes. Consumers' should be required to quantify its conservation objectives so that the O.E.B. and others can determine: i) if Consumers' is aggressively promoting conservation; and ii) if Consumers conservation programmes are achieving their objectives.

6. Finally, while the British Gas Undertakings require British Gas to encourage Consumers' to take an aggressive approach to energy efficiency, they do not prohibit Consumers' from selling, renting, financing or promoting inefficient appliances or equipment. From a public policy perspective it would be contradictory and self-defeating for Consumers' to be simultaneously promoting energy conservation in one area and the

inefficient use of energy in another.

In order to avoid the above noted deficiencies of the existing undertakings, any approval of the takeover of Consumers' by IPL should be subject to the following energy conservation undertaking:

"IPL undertakes that Consumers will aggressively promote the conservation and efficient use of energy within its service areas. In particular, without limiting the generality of the preceding sentence, Consumers will:

- make efforts to co-ordinate its conservation and energy efficiency programmes with Ontario Hydro, the municipal electric utilities, the Ministry of Environment and Energy, energy service companies, one or more financial institutions and the building industry;
- have an active programme, with specific numerical targets, to promote the installation of high efficiency residential gas furnaces and boilers in new housing, and as replacements in existing housing;
- have an active programme, with specific numerical targets, to promote the substitution of high-efficiency natural gas hot water and home heating systems to replace electric hot water and home heating throughout the Consumers' franchise area;
- have an active programme, with specific numerical targets, to promote the adoption of advanced commercially available gas utilization technologies to improve the utilization efficiencies and to enhance the competitive position of Ontario's manufacturing and processing companies;
- have an active programme, with specific numerical targets, to work with Canadian appliance manufacturers in the development and promotion of energy efficient appliances;
- have an active programme, with specific numerical targets, to work with Ontario builders and manufacturers to improve the thermal integrity of Ontario's built environment;
- work with one or more financial institutions to facilitate low interest loans for energy conservation and efficiency investments; and
- not sell, rent, lease, finance or promote inefficient energy consuming appliances or equipment."

Affiliate Transaction Undertakings

As we have noted above, it could be in the financial self-interest of IPL for Consumers' to contract with InterCoastal Pipe Line for natural gas transmission services even when energy conservation could meet its customers' energy service needs at a lower cost.

The British Gas Undertakings require Consumers' to obtain O.E.B. approval for any affiliate transaction in excess of \$100,000:

"Other than the sale and transportation of gas by Consumers, any affiliate transaction aggregating \$100,000 or more annually and relating to the supply of goods, services or information, including gas purchases, between British Gas and its affiliates or associates, and Consumers shall require prior approval of the Board.

It shall not constitute a violation of this undertaking if Consumers or the associate of affiliate did not know or could not have been reasonably expected to know that a transaction was an affiliated transaction."

Any approval of the takeover of Consumers' by IPL should be subject to a similar undertaking to ensure that Consumers' does not enter into gas transmission service contracts with IPL or an affiliate of IPL when energy conservation could meet its customers' energy service needs at a lower cost.

IPL is proposing that the existing British Gas/Consumers' Gas affiliate transaction undertaking should be amended so as to require the O.E.B. to approve a proposed affiliate transaction if:

"the transaction is shown to be of benefit to Consumers Gas and not to the detriment of any of its customers or if a purchase takes place at or below fair market value or if a sale takes place at or above fair market value."¹⁷

IPL's proposed amendment is not in the public interest for at least three reasons.

First, it would require the Board to approve a natural gas transmission contract between Consumers' and IPL or InterCoastal as long as its price is "at or below fair market value". That is, the Board would be required to approve an affiliate gas

transmission contract even if energy conservation could meet Consumers' customers' energy service needs at a lower cost. Similarly, the Board would be required to approve an affiliate gas transmission contract even if a non-affiliate gas transmission contract could provide Consumers' customers with greater security of supply.

Second, it is not fair. Under IPL's proposal Consumers' could always purchase certain goods, services or information from an affiliate as long as the selling price is at "fair market value". That is, under this proposal, the O.E.B. could not prevent Consumers' from purchasing certain goods, services or information exclusively from IPL or its affiliates - at the expense of their competitors (e.g., Union Gas). Furthermore, while the earnings per share of IPL or its affiliates could rise as a result of acquiring a captive customer, IPL's proposal provides no corresponding financial benefit for Consumers' ratepayers. That is, under IPL's proposal, affiliate transactions could consistently provide net financial benefits for Consumers' affiliates and no net financial benefit for Consumers' ratepayers. This is asymmetrical. If IPL and its affiliates are to be Consumers' preferred suppliers, it might be appropriate for the affiliate transactions to be priced at less than "fair market value" in order to ensure that Consumers' ratepayers as well as its controlling shareholder derive a net financial benefit from this arrangement.

Third, IPL's proposal unnecessarily fetters the Board's discretion. Everything else being equal, it is not in the public interest for undertakings from a gas utility and its parent(s) to fetter the discretion of the O.E.B. Furthermore, it is especially not in the public interest to do so when there is a significant potential conflict between public and private interests.

Committee of Independent Directors Undertakings

Section 2.0 of the 1992 Westcoast Energy/Union Gas Undertakings to the LGIC

requires the establishment of a committee of independent directors:

"At all times, Gas shall have a special committee of directors the members of which shall be Independent Directors (the "Committee").

Prior approval by Union's independent directors of all affiliate transactions is required:

"No Affiliated Transaction shall be entered into by Gas without the approval of the Committee."

Furthermore, the independent directors are required to monitor Union's compliance with its Undertakings to the LGIC:

"The Committee shall monitor the compliance by Gas with these undertakings."

Union's committee of independent directors will help ensure that affiliate transactions are in the public interest and that Union's management complies with Union's Undertakings to the LGIC.

Any approval of the takeover of Consumers' by IPL should be subject to similar undertakings to the LGIC.

Monitoring Undertaking

The British Gas Undertakings to the LGIC require British Gas and its affiliates to provide the Minister of Energy with any information that the Minister may require related to compliance with the Undertakings. The 1992 Westcoast/Union Undertakings have a similar, but broader, undertaking with respect to monitoring. To be specific, the Westcoast/Union Undertakings also require Westcoast and its affiliates to provide the Ontario Energy Board with any information it may require related to compliance with the Undertakings.

The O.E.B. is the logical agency of the Government of Ontario to monitor

Consumers' compliance with its energy conservation and other undertakings.

Any approval of the takeover of Consumers by IPL should be subject to the following undertaking:

"At the request of the Minister of Environment and Energy or the Ontario Energy Board, IPL and its affiliates will provide the Minister or the Ontario Energy Board any information the Minister or the Ontario Energy Board may require related to compliance with these undertakings."

Public Notice Undertaking

The existing British Gas Undertakings do not require public notice of an application by British Gas or Consumers' pursuant to the British Gas Undertakings. As a consequence, applications by British Gas or Consumers' pursuant to the British Gas Undertakings have been approved by the O.E.B. before at least one interested party was even aware that the applications had been made.

In order to ensure that interested parties will have an opportunity to make submissions with respect to any application that is made pursuant to undertakings by IPL or Consumers', any approval of the takeover should be subject to the following undertaking:

"IPL or Consumers will provide appropriate public notice of all applications by IPL or Consumers to the Ontario Energy Board pursuant to these undertakings."

Endnotes

1. United Nations Framework Convention On Climate Change, Article 2.
2. *ibid.*, Article 4. CFC emissions are controlled by the Montreal Protocol.

3. World Meteorological Organization/United Nations Environment Programme, Scientific Assessment Of Climate Change: The Policymakers' Summary of the Report of Working Group I to the Intergovernmental Panel on Climate Change, (1990), p. 9.
4. World Meteorological Organization/United Nations Environment Programme, Scientific Assessment Of Climate Change: The Policymakers' Summary of the Report of Working Group I to the Intergovernmental Panel on Climate Change, (1990), p. 12.
5. Assuming that there are no net carbon dioxide emissions from biomass in Ontario.
6. Economic and Financial Analysis Branch, Energy Sector, Natural Resources Canada.
7. Ontario Round Table on Environment and Economy, Restructuring For Sustainability, (September, 1992), p. xiv.
8. If Ontario's total fossil fuel related carbon dioxide emissions in 2030 equal 20% of their 1990 level, Ontario's fossil fuel related carbon dioxide emissions in 2030 will be 28,852 kilotonnes (144,259 x 0.2). A 2030 emissions cap of 28,852 kilotonnes entails that Ontario's natural gas related carbon dioxide emissions must be reduced by at least 29% [(40,665 - 28,852)/40,665] relative to their 1990 level. If natural gas' 2030 fossil fuel market share is less than 100%, the reduction in natural gas consumption must be even greater.
9. Letter from George Davies, Deputy Minister of Energy to S.A.C. Thomas, Ontario Energy Board, February 28, 1992.
10. Ontario Energy Board, E.B.O. 169-III, Report Of The Board, para. 4.1.27.
11. IPL, 1992 Annual Report, p. 3.
12. E.B.O. 179, Technical Conference Transcript (February 16, 1994), p. 25, l. 6 - 17.
13. See also Ontario Energy Board, E.B.O. 169-III, Report Of The Board, p. 103, para. 10.3.1.
14. At the Technical Conference Mr. McCurdy of IPL agreed that if the aggressive promotion of energy conservation reduced Consumers' rate base growth, it would also reduce its rate of growth of earnings per share. E.B.O. 179, Technical Conference Transcript (February 16, 1994), p. 29, l. 18 to p. 30, l. 4.
15. IPL response to Pollution Probe interrogatory # 19.
16. Ontario Energy Board, E.B.R.L.G. 34, Report Of The Board, pp. 67, 68. See also p. 89.
17. E.B.O. 179, Interprovincial Pipe Line System Inc., Response To Interrogatories Of Pollution Probe, Schedule A.

APPENDIX 1: MEMBERS OF THE ONTARIO ROUND TABLE ON ENVIRONMENT AND ECONOMY

- The Honourable Ruth Grier,
Chair, Minister of the Environment and
Minister Responsible for the Greater
Toronto Area
- Jon Grant, Vice-Chair,
Chairman and C.E.O., Quaker Oats
Company of Canada Ltd.
- Ted Boswell
President, E.B. Eddy Forest Products
- The Honourable Elmer Buchanan
Minister of Agriculture and Food
- Rosalind Cairncross
Environmental Consultant
- The Honourable Brian Charlton
Minister of Energy
- Grant Collins
Regional Director, Ontario Federation
of Agriculture
- The Honourable Dave Cooke
Minister of Municipal Affairs
- Janine Ferretti
Executive Director, Pollution Probe
- Ursula Franklin
Massey College, University of Toronto
- Colin Isaacs
Environmental Consultant
- Dean Jacobs
Executive Director, Walpole Island
Heritage Centre
- Bill James
President and C.E.O., Denison Mines
- The Honourable Ed Philip
Minister of Industry, Trade and
Technology
- David Runnalls
Director, Institute for Research on
Public Policy
- Pat Sullivan
Amalgamated Clothing and Textile
Workers Union
- Sylvia Sutherland
Downtown Peterborough Business
Improvement Area
- Richard Thomson
Chairman and C.E.O., Toronto-
Dominion Bank
- Toby Vigod
Commissioner, Commission on
Planning and Development Reform
- The Honourable Bud Wildman
Minister of Natural Resources and
Minister Responsible for Native Affairs