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PUBLIC INTEREST CRITERIA

FOR

EVALUATING TRANSMISSION FACILITY EXPANSION PROJECTS

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On Behalf Of

POLLUTION PROBE

for

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INTRODUCTION

According to section 48(8) of the Ontario Energy Board Act, the O.E.B. can only approve the construction of a natural gas transmission facility if it is in the public interest.

In its E.B.R.L.G. 28 Report the O.E.B. said:

> "The public interest is dynamic, varying from one situation to another and the criteria by which the public interest is judged may also change according to the circumstances."[1]

To determine the appropriate public interest criteria for evaluating transmission facility expansion proposals it is necessary to evaluate the answers to at least the following interrelated questions:

1. what should be the primary objective of Ontario energy policy;
2. what is the primary objective of Ontario energy policy; and
3. what criteria has the O.E.B. used to evaluate natural gas supply side expansion proposals?

What Should Be The Primary Objective of Ontario Energy Policy?

Consumers do not purchase energy for its own sake but rather for the energy services it can provide (i.e., heat, light and power). That is, they want warm houses and cold beer, not electricity, oil or natural gas.

Energy service requirements can be met by a wide variety of options. For example, the need for a warm house can be met by a combination of: electricity, oil, natural gas, propane or solar energy; a high, mid or low efficiency furnace; varying

degrees of insulation; single pane, double pane or low E argon-filled windows.

If we minimize the social (economic and environmental) cost of meeting our energy service needs, we will maximize the quantity of other market and non-market goods and services that present and future generations can enjoy on a sustainable basis. That is, we will maximize our potential for achieving our non-energy-related goals, such as, a clean and healthy environment, wilderness and species conservation, good schools, affordable housing, a decent standard of living for all our citizens and a prosperous and competitive economy.

Thus the primary objective of Ontario energy policy should be to ensure that we meet our energy service needs at least social cost.

What Is The Primary Objective Of Ontario Energy Policy?

According to the 1990-91 Annual Report of the Ontario Ministry of Energy:

> "The primary goal of Ontario's energy policy is to meet energy needs based on reliability, cost effectiveness and environmental protection."[2]

Furthermore, according to the February 1992 letter to the O.E.B. from the then Deputy Minister of Energy:

> "Conservation is the priority in meeting energy needs in Ontario...
>
> The Government has conducted extensive consultations on energy efficiency with groups representing industry, the environment and energy consumers within the province Energy efficiency has been identified as a key to achieving the Government's objectives of economic competitiveness, environmental protection, energy supply security and sound energy planning...

> The Government also supports the greater use of natural gas within the province where such use would reduce reliance on less efficient and environmentally harmful forms of energy. The substitution of natural gas for electricity in space and water heating is an example. Utilities are expected to work with consumers to substitute natural gas for less efficient and environmentally harmful forms of energy. Such programs should encourage the installation and use of more energy efficient equipment and appliances where gas substitution may occur."

In short, the above policy statements indicate that the primary objective of Ontario energy policy is to meet our energy service needs at least social cost.

What Criteria Has The O.E.B. Used To Evaluate Natural Gas Supply-Side Expansion Proposals?

In its December 1986 E.B.R.L.G. 29 Report with respect to a proposal by Consumers' Gas to build a liquified natural gas (LNG) storage facility near Cobourg, the Board stated its three key public interest criteria:

> "In this context, the term "public interest" means to the Board:
>
> - to provide the service at the lowest possible cost to the Ontario consumer;
>
> - to ensure that security of supply and system reliability and flexibility are maintained and enhanced; and
>
> - to ensure that safety and environmental concerns are adequately met."[3]

It is important to note that in its E.B.R.L.G. 29 Report the Board acknowledged that consumers should be provided "service" from the least cost mix of demand-side and supply-side options:

> "The Board is of the view that demand management techniques have not

been fully explored by the company. The Board recognizes that it is a clear advantage for a utility to construct facilities since a rate of return is earned on incurred costs. Load management techniques, on the other hand, do not earn a rate of return. Regardless of the volume of future peak day demand, the need may best be served by obtaining additional gas from underground storage together with emphasis on enhanced demand management techniques to encourage additional interruptible load."[4]

In its E.B.O. 134 Report on the expansion of the natural gas system in Ontario, the Board endorsed the following public interest criteria:

"1. Economic feasibility;

2. Community benefits
   - Industrial development
   - Alternative fuel considerations
   - Increased revenues to government (e.g. taxes)
   - Local employment
   - Regional development;

3. Utility benefits;

4. Security of supply and safety;

5. System flexibility;

6. Route/site selection and landowners' concerns;

7. Environmental impact;

8. Government policy; and

9. Other factors."[5]

The Board also stated that system expansion should not be unlimited:

"The Board considers that system expansion should not be unlimited and that it is required to continue to determine whether the expansion of gas service is in the public interest."[6]

Public Interest Criteria For Evaluating Transmission Facility Expansion Projects

In light of the above it is my recommendation that the O.E.B. should adopt the following public interest criteria for transmission facility expansion projects:

1. Ontario's natural gas transmission capacity should only be expanded to meet the needs of Ontario consumers if transmission capacity expansion is the socially (economically and environmentally) least cost means to meet Ontario consumers' energy service needs; and

2. Ontario's natural gas transmission capacity should only be expanded to meet the needs of ex-Ontario consumers if:

a) the transmission capacity expansion will not increase the cost of meeting Ontario consumers' energy service needs (e.g., a transmission capacity expansion for ex-Ontario consumers must not raise the gas rates of Ontario consumers);[7] and

b) the transmission capacity expansion will not harm the Ontario environment.

Filing Requirements

An Ontario Transmission Facility

A proponent of a transmission facility to serve Ontario consumers should be required to show:

1. that, everything else being equal, there will be a need for the transmission facility, over its forecast economic life, given reasonable assumptions with respect to:

a) the rate of economic growth in Ontario;

b) the prices of oil, natural gas, coal and electricity in Ontario;

c) the relationships between Ontario's gross domestic product and the prices of oil, natural gas, coal and electricity on the demand for natural gas;

d) provincial and federal policies with respect to greenhouse gas emissions, energy conservation and energy efficiency;

e) the demand side management programs, policies and targets of Ontario utilities; and

f) technological change with respect to the conservation and efficient use of energy; and

2. that the forecast need for the transmission facilities cannot be reduced and/or eliminated by more aggressive and comprehensive socially cost-effective conservation programs.

Furthermore, it is important to remember that the O.E.B. has already stated that alternatives to a proponent's supply-side proposal can include options that are not under the direct control of the proponent:

> "While the Board respects the judgment of Consumers' experienced management, in this instance, the public interest requires that the Board review other alternatives beyond those strictly within the control of Consumers' and confined in impact to Consumers' customers."[8]

Furthermore, Ontario Hydro's Demand/Supply Plan Report acknowledged that conservation options that are beyond its direct control are desirable and viable alternatives to the expansion of its supply-side facilities:

> "Ontario Hydro will give top priority to demand management to reduce load growth through electricity use efficiency and load shifting. Demand management options that contribute to low customer cost of electrical service will be aggressively pursued. The cooperation of municipal utilities, customers, governments and the electrical industry will be essential for the successful delivery of demand management programs."[9]

An Ex-Ontario Transmission Facility

At a minimum, a proponent of a transmission facility to serve ex-Ontario consumers should be required to show that:

1. it is reasonable to assume that the net present value of the facility's ex-Ontario revenues will equal or exceed the net present value of the facility's ex-Ontario costs;

2. if, ex-post, the net present value of the facility's ex-Ontario revenues are less than its ex-Ontario costs, the proponent's ability to provide high quality utility service to its Ontario ratepayers will not be impaired by its ex-Ontario transmission losses; and

3. the ex-Ontario transmission facility will not lead to a net reduction in the quality of the Ontario environment by causing a net increase in global emissions of carbon dioxide, methane, nitrous oxides, sulphur-dioxide and/or particulates (e.g., an expansion of Ontario's ex-Ontario transmission facilities could lead to a net increase in carbon dioxide emissions if it causes U.S. consumers to reduce their energy conservation or renewable energy investments or if the displaced oil or coal consumption in one location leads to a net increase in coal or oil consumption somewhere else).

ENDNOTES

1. E.B.R.L.G. 28, Report Of The Board, Vol. 1, p. 6/10.

2. Ministry of Energy Annual Report 1990-1991, p. 2.

3. E.B.R.L.G. 29, Report Of The Board, p. 9/13.

4. ibid., pp. 8/18, 8/19.

5. E.B.O. 134, Report Of The Board, pp. 20, 21, 24, 25.

6. ibid., p. 25.

7. This criterion implies that if the forecast net present value of the ex-Ontario transmission revenues are less than the forecast net present value of the ex-Ontario transmission costs, the deficiency must be recovered from the ex-Ontario customers by means of a contribution-in-aid-of-construction and/or incremental tolling and/or be borne by the proponent. Furthermore if, ex-post, the net present value of the ex-Ontario revenues are less than the net present value of the ex-Ontario costs, the revenue shortfall must be borne by the proponent, not the proponent's Ontario ratepayers.

8. E.B.R.L.G. 29, Report Of The Board, p. 9/13.

9. Ontario Hydro, Demand/Supply Plan Report, p. 1 - 6.