

# Hawkins Gas Review

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Comments on Rates of Return for Canadian Pipelines

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## *Introduction*

A recent report<sup>1</sup> on rate of return submitted to the Office of Gas Access Regulation (*OffGAR*) in Western Australia (WA) provided comprehensive comments on regulatory practices in Australia, and various issues relating to rate of return. The Institute for Research into International Competitiveness (IRIC), at the Curtin Business School prepared this report<sup>1</sup>. Hawkins Gas Consultants Ltd. (HGC) has some comments relating to comparable circumstances in North America. HGC hopes that these comments may assist *OffGAR*, the authors of the IRIC report, and pipeline companies in WA in their assessment and interpretation of the relevant facts.

The specific comments in the IRIC report that attracted HGC's interest were the quoted rates of return for US gas pipelines, and the relevance of the rates of return for gas distribution companies in Canada.

## *US Pipelines*

Figure 1 in the IRIC report shows the return on equity for all US gas pipelines during the 1990 to 2000 period. HGC has not verified the data; however, any analysis of the rate of return data for the overall US gas pipeline industry should be treated with caution. Rather than expound on all the reasons, HGC believes that more relevant comparisons should be to the rate of return on equity for new pipelines, which have been constructed in recent years. Some of the new construction has been new pipelines including Alliance and Maritimes and Northeast, and the expansion and/or extensions of existing systems including Kern River, Northern Border, and the pipelines from the US Gulf Coast to Florida.

Because these new pipelines required new investment there was a need to attract capital. There are several factors that would affect the ability to finance these projects, including the allowed or expected rate of return, the length of the contracts, the credit of the shippers, the gas supply dedicated to the pipeline, and competition. HGC believes that rates of return and other aspects applicable to these new pipeline investments would be a more important reference in assessing the appropriate benchmark for new Australian and other pipeline investments rather than the historical averages presented in of the IRIC report for all federally regulated US gas pipelines. Most of the existing US gas pipelines did not have required major new investments during the 1990s. For this and other reasons the composite average rate of return on equity for all US gas pipelines may not be very helpful as an appropriate benchmark for new pipeline investments.

## *Evolution of the Regulation of Pipelines in Canada*

In Canada, the regulatory process has matured considerably over the last 30 years. The NEB began setting the cost of capital for the pipelines under its jurisdiction in 1973. Canada's National Energy Board (NEB) eventually decided to deal with rate of return and cost of capital on a generic basis. In a report<sup>2</sup> published in 1995, the NEB stated:

"The Board has noted that the evidence submitted by expert financial witnesses has tended to be much the same from one proceeding to the next. While the financial parameters change from year to year, the techniques and interpretations used in making rate of return on common equity recommendations do not. This led the Board to consider what potential economies could be realized from the implementation of a formulaic adjustment mechanism for rate of return on common equity."

The 1995 NEB report is now referred to as "the Multi-Pipeline cost of Capital Decision". In recent years, the NEB has issued one page letters outlining the appropriate rate of return for common equity. Since 1995, the approved rate of return on common equity generally reflects a premium

over the forecast bond yield for a 10-year Government of Canada bonds. For 2004 the NEB approved a 9.56% rate of return on common equity. This rate applies to the major gas transmission systems and oil pipelines that are regulated by the NEB. For 2004 the NEB relied upon a 10-year Government of Canada forecast bond yield of 5.15%.

Initially, the major gas transmission systems had long-term contracts for gas sales with their customers, which were largely gas distribution customers. Because many Canadian gas pipelines were merchants, they also had gas supply contracts with a portfolio of gas producers. During the late 1970s and 1980s, the structure of the gas industry in Canada started to change. Several merchant entities or marketing companies were created. These merchants represented producer groups, or purchased gas from producers, and contracted for transmission services. The evolution to transportation was accelerated by the difficulty or inability of the pipelines to meet take-or-pay obligations in gas purchase contracts. In Canada, there was an orderly transition from the earlier era in which the pipelines were merchants with take-or-pay obligations, to the currently prevailing system of transportation in which various merchants contract with gas distribution companies, industrial end-users, and electric power companies for the sale of gas.

For gas transmission within Canada, the customers or merchants serving the domestic market now generally hold the gas transmission contracts for domestic sales. For export sales, exporters, which may be producers or merchants generally hold the gas transmission contracts. In some cases the ultimate customers for the gas have assumed obligations to pay for the gas transmission under gas sales agreements. It is possible that the format of transportation contracts, and the specific terms applicable to the transmission services in Canada may offer precedents for transmission services in other locations.

In most cases, the NEB has generally calculated the return component for all pipelines based on an historical cost rate base. The overall rate of return is based on a composite based on actual cost of debt, and any preferred share as well as the allowed return on equity. In principle, a specific pipeline may argue that it has a higher risk than other pipelines. The NEB has exercised the discretion relating to risk premium to increase the deemed common equity ratio in pipelines that may face higher risks.

These circumstances are widely known within the pipeline industry in Canada. In recent years, practice in the Canadian pipeline industry has evolved, and pipelines have been encouraged to review and to negotiate various matters pertaining to tolls, toll design, terms of service, and overall cost of service with their stakeholders. In many cases involving existing pipelines, these negotiations have allowed stakeholders and the relevant pipelines to find consensus on many issues, but in critical matters some issues have not been and cannot be resolved by negotiation. The NEB decisions on the allowed rates of return equity are examples of circumstances, in which the NEB has taken the initiative. For new pipelines, where there may be competitive alternatives, the competing proposals will strive to obtain capital structures that proposed projects to present favorable economics.

The recent IRIC report contained a table, which showed rates of return on equity for gas distribution companies in Canada. HGC believes that rates of return on equity for pipelines in Canada may provide a more appropriate benchmark for pipelines in Australia, and elsewhere.

### *Conclusions:*

The regulatory principles and practices in Canada and the US relating to rate of return on equity may be helpful to parties in Australia. For the US, HGC believes that rates of return on equity for new pipelines in the US and Canada, may be an appropriate benchmark for pipelines in Australia. In certain cases such as the possible development of new pipelines from Wyoming to Eastern markets, there are several competing proposals, and thus the rates of return on equity are likely

to be competitive. Analyses of calculated rates of returns for all US gas pipelines for historical periods may not be a valid benchmark for a variety of reasons.

The NEB's recent practices relating to rate of return in Canada may also provide principles for establishing rates of return for pipelines in Australia. The NEB did have over 20 years of experience dealing with these issues. There were very few objections to the procedures outlined in the 1995 NEB decision<sup>2</sup>. The NEB has listened to arguments about risk factors applicable to individual pipelines, and the NEB has used its discretion in these matters to apply a deemed equity component in the capital structure, which is greater than the actual equity ratio. This effectively means that the pipeline owners can achieve a higher rate of return.

For any major pipelines in Canada or the US, the pipeline owners and the shippers can and will often negotiate contractual terms, access arrangements, and financial terms including rates of return, and depreciation rates. If there are competitive alternatives, then the possible competition may ensure that the shippers and pipelines will negotiate mutually satisfactory arrangements. For the expansion of existing systems, it may be more difficult for the parties to negotiate matters like rate of return, and thus there may be a legitimate and necessary role for regulators in these circumstances.

The actual or negotiated rates of return for new gas pipelines in Canada and the US are likely to be more in line with the rates allowed by the WA regulator. In Canada, one of the major developments during the last 10 years was the approvals for, and actual construction of a new pipeline, which competes with existing gas pipelines in Alberta, and the gas transmission systems flowing to markets in Eastern Canada, and the US Midwest. The overall competitive situation has changed, but there were also changes in the details such as the rights to overrun capacity, which exceeds the firm capacity of a pipeline. For Alliance, these rights were given to the firm shippers.

*References:*

1. "Review of Rate of Return Methodologies and Practice, Final Report," Peter Kenyon, Nick Wills-Johnson, and Laksham Alles, The Institute for Research into International Competitiveness, Curtin Business School, Curtin University of Technology, September 2003.
2. "Reasons for Decision, Cost of Capital," Document RH-2-94, National Energy Board, March 1995.
3. "Rate of Return on Common Equity (ROE) for 2004," National Energy Board, 28 November 2003.

About Hawkins Gas Consultants Ltd.

HGC offers a broad range of services relating to natural gas. These services include:

- Market research, supply, and pricing analyses,
- Technical and economic feasibility studies,
- Economic assessments, asset evaluations, and due diligence,
- Project development and implementation,
- Competitor and joint venture analysis,
- Review of technical, commercial, and operating practices of gas transmission systems,
- Assistance in the negotiation of contracts for processing, purchase and sale, and transportation,
- Expert testimony and litigation support, and
- Strategic and operational planning.

HGC prepares technical, economic, and business evaluations of specific assets, business activities, new projects, and contractual entitlements. HGC's experience is diverse and includes natural gas marketing, natural gas processing, natural gas supply, gas transmission, gas distribution, gas storage, and petrochemical facilities. HGC's assignments have been performed for various reasons including asset divestiture and acquisition, operational or business planning, corporate development, contract negotiation, and tax purposes. HGC has also assisted in the due diligence for the acquisition of various energy assets.

HGC has prepared various assessments of gas supply including a gas supply assessment for the Alliance Pipeline feasibility study. In several assignments, HGC has analyzed the outlook for gas prices and gas markets. HGC has assessed the implications of gas pricing on the business outlook for gas consumers, gas marketing, gas supply and production, and gas storage. Dr. Hawkins has also authored reports on regulatory practices in North America for international clients. The subjects considered have included rate of return.

Dr. Hawkins was the principal author and supervisor of the market and supply analysis component of the feasibility study for the Alliance Pipeline. Dr. Hawkins also has international gas industry experience in Latin America, Europe, the Middle East, Asia, and Australia, as well as North America. During 1996, Dr. Hawkins was an advisor to the Energy Projects Division of the Victorian Government on gas industry re-organization, and the preparations for privatization. In 1994, Dr. Hawkins prepared a report on gas quality in pipelines for the Office of Energy in Western Australia.

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