

# **Perspectives**

**Brian Maynard**

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Brian Maynard is a graduate of Memorial University of Newfoundland with the designation of Bachelor of Commerce in 1983 and Chartered Accountant in 1985.

Brian began his career in government in 1983 as an Auditor with the Department of the Auditor General. He served as Director of the Hibernia Project Monitoring Committee in Executive Council from 1991 to 1996. In 1996 he was appointed Director, Petroleum Projects Monitoring with the Department of Mines and Energy.

In July 1998 he was appointed Assistant Deputy Minister of Energy with the Department of Mines and Energy, a position he held until his appointment on January 1, 1999 to the position of Deputy Minister of Mines and Energy.

# Perspectives

## Address to the Atlantic Institute For Market Studies and Electric Consumers Alliance of Nova Scotia - “ Plugging in Atlantic Canada”

### Newfoundland and Labrador Perspectives on Competition, Deregulation and Privatization in the Electricity Industry

- ◆ My paper has been titled “Perspectives” because a perspective on an issue is primarily how the balance of opportunities and challenges is viewed. Due to the geography and resource endowments of the two regions of our province, these are radically different for the Island and mainland regions.

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- ◆ So I must give two perspectives; one as an isolated domestic market, the other as a major exporter of competitive hydroelectricity.

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- ◆ First, I will present the perspective for the Island. Although St. John’s had its first power station operating in 1890, universal electrification in our province was achieved quite late, beginning in the late 1960’s. Demand growth slowed appreciably following an initial period of very high growth as people caught up with the conveniences of the modern world. Our present forecasts indicate modest growth into the future.

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- ◆ Our Island electricity system is not interconnected to any other system at present. With just under 2000 Megawatts, it serves a population of about half a million people and four major industrial plants. As you can see from the map, these 500,000 people are dispersed over a fairly large geographical area. It is this combination of factors: system isolation, small number of customers, and the large geographical area that makes Newfoundland unique from other jurisdictions that have undergone or are undergoing deregulation and the introduction of competition.
- ◆ The power supply on the Island is about 75% renewable over the year, and virtually 100% renewable in the summer. We are quite proud of that, and the people of Newfoundland and

Labrador staunchly guard the public ownership of the hydroelectric facilities that supply their power.

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- ◆ We have two domestic utilities: a crown utility, Newfoundland and Labrador Hydro, which holds 80% of generating capacity and 60% of transmission assets on the Island. Newfoundland Power, a private utility, owns the majority of the remaining transmission infrastructure on the Island and is the principle distributor, supplying 85% of the retail customers on the Island. The industry is regulated by the independent Board of Commissioners of Public Utilities.
- ◆ In the early 1990's, a previous government administration discussed the idea of privatizing Newfoundland and Labrador Hydro.
- ◆ The general feeling of our citizens at that time were that the rivers are a public resource and significant public funding has been invested in the infrastructure, therefore these assets should not be privatized. The point was also made that a profit orientated private sector would need higher rates, taking into account tax implications. Public reaction was sufficiently strong that privatization of the crown utility was not pursued.
- ◆ The current Government's policy is that privatization is not an option.
- ◆ More recently we have been looking at our industry in light of the other two themes of today's event: competition and deregulation (restructuring). In terms of rates, in many ways these concepts are complementary - if rates are not regulated implicitly by real competition and genuine market forces, explicit regulation is necessary to ensure that consumers are protected.
- ◆ In late 1998 the Government embarked on a review of all aspects of its electrical energy policy. This comprehensive review of the electricity industry in our Province included a review of alternative industry structures, and particular ways in which competition and efficiency could be fostered in the industry.
- ◆ The report summarizing the results of this review has not yet been submitted to Government, so I am unable at this time to provide details on the direction that will be undertaken in our Province except to say that we will be considering measures to:
  - ◆ encourage competition for the supply of new generation on the Island,
  - ◆ promote efficiencies through system rationalization to the extent possible, and
  - ◆ streamline the regulatory process, including changing the regulatory methodology to provide incentives for efficiency in the industry.
- ◆ Clearly, the industry structure on the Island must be related to our geographic, demographic and energy supply circumstances. A realtime energy clearing market system would not make economic sense in a small isolated market system. This of course may change one day with a connection to the North American grid.

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- ◆ From Labrador things look very different. There are two key issues for the mainland portion of our Province: the development of Labrador's tremendous hydroelectric resources and meeting demand in isolated rural communities which are not interconnected to the grid. Currently, 16 communities in Labrador are supplied by diesel generation, representing approximately 7 % of domestic load in Labrador. These rural customers, along with the interconnected communities and industrial customers in Labrador, are all served by NLH.
- ◆ The existing hydraulic infrastructure in Labrador is held by CFLCo. - a Corporation owned 65% by NLH, with the remaining interest held by Hydro Quebec. The majority of the energy generated from the 5400 MW plant at Churchill Falls is sold to Hydro Quebec under a contract which does not expire until 2041.
- ◆ In terms of "Plugging in Atlantic Canada", Labrador, being part of the mainland of Canada, is in a better position to participate actively in the type of inter-jurisdictional market being discussed here today. This is even more so because it has the Churchill River. Historically, however Labrador has not been able to participate directly in the energy markets to the South.

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- ◆ Potential new hydroelectric developments downstream from the existing Churchill Falls plant, represent up to 2500 MW of competitive power for the North American Market. This power can be developed with very low impact on the environment.

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- ◆ Specifically, the Gull Island Project (with estimated 11 Twh of energy) is run of the river and involves a remarkably small flooding footprint of 80 sq km. Not only is it low cost generation and low impact, this resource has the potential to contribute significantly to Canada's emission reduction efforts. Every megawatt hour of hydroelectricity can displace up to approximately 1 tonne of greenhouse gas emissions (assumes displacement of coal powered generation).
- ◆ Our negotiations with Hydro Quebec for the development of Gull Island, on the Lower Churchill River, are ongoing, significant progress has been made and we are optimistic on the outcome of these discussions.

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- ◆ Theoretically, introduction of competition to the U.S. markets and the associated principles of open access should have opened the door for the development of projects such as Gull Island. However, achieving real open access is still a work in progress.

- ◆ I understand that preliminary meetings have been held regarding the possibility of forming an Eastern Canadian, North Eastern Maine Transmission Organization and that an informational filing to this effect was recently submitted to FERC. Such a development would greatly facilitate Atlantic Canada's participation in the continental electricity market. We see potential economic benefits for our electricity industry from such a development. However, under current circumstances and without significant investment in transmission infrastructure, we are not in a position to realize these benefits with our Atlantic neighbors if Quebec is not a participant too.
- ◆ In terms of the impact of market deregulation on future investment in generation projects, it is evident that during this current transition period, less capital intensive supply options become more attractive - this is due in part to uncertainty over exactly what the industry will look like in the future.
- ◆ Wholesale market price volatility and the up front financial commitment associated with advance long-term transmission bookings do not encourage projects with significant capital investment. Industry and government must find ways to address these matters. If they fail, ultimately consumers will not receive the benefits that proponents of all these changes have promised.
- ◆ All around, this industry is in transition, supposedly with the objective of increased benefits for consumers. However, we need to consider what consumers want from their electricity industry. I believe price stability, and service and supply reliability are primary concerns. One of the major pitfalls is the failure to accommodate the unique features of this industry in which timing of delivery is critical, thus making system planning and reliability equally important. Traditionally, regulated utilities have had long-term planning cycles with new production capacity added in significant blocks. Can overall system planning be effectively accommodated in a deregulated market system? Price volatility is accentuated and more transparent in a marginal pricing system than under traditional average pricing methodology. When electricity is commoditized in a competitive wholesale, unregulated, real-time market, its price can become extremely volatile. Wholesale electricity prices are changing hourly, often in excess of 100%, and as we saw previously in New England and the Midwest, and this year in California, sometimes by much more.
- ◆ Customers do not want volatile prices. Electricity is so fundamental to our lives and economies, significant price swings are not long tolerated. Regulators and politicians have reacted with short-term measures such as price-caps. These measures interfere with a free, competitive market, and do not encourage development of new generation or transmission, which may have contributed to price spikes in the first place.
- ◆ As potential suppliers to a large, growing energy market to the south, we would certainly like to see restructuring and deregulation proceed, but to be successful it must achieve the benefits that its proponents declared - principally, lower end-user prices, together with meeting customers' other needs.

- ◆ Key to that, in my estimation, is taking steps during this transition period to ensure that competition is real and fair, and that requires effective, and true open access to all markets. Also, there is a need for effective market signal mechanisms. This is a key challenge given the lack of tolerance for price volatility.
- ◆ There are no easy answers to these fundamental challenges. Undoubtedly, these problems have occurred to varying degrees in the different jurisdictions which have undertaken industry restructuring. Solutions to some of the problems appear to have been found and put into effect in areas such as Britain, Scandinavia and PJM, however the market evolution is continuing.
- ◆ I would like to close by noting the future of the energy sector in the continental market is very positive - with increasing demand, higher natural gas prices and, for those of us with green supply sources, increasing environmental constraints. I would like to think that one day North America will continue to be served by a reliable, secure electricity grid which is supplied with power produced by generators competing in a fair market where transmission functions as well as our roads today. We need to steer in this direction.

Thank You.