

Board of Trade Power Breakfast

12th June 2001

Presentation by Robin Jeffrey FREng

This is a very special occasion for me.

The links between Scotland and Canada are numerous and deep. Over the years many Scots have come here ... put down their roots and made this their home. And for the past several years Ontario has been my home... first of all here in Toronto ... and then more recently up in Bruce County where the British Energy Canadian headquarters is now located.

Canada is a wonderful country and Toronto a marvelous city.

Back in the autumn of 1997 the Toronto Board of Trade was kind enough to invite me to give the very first Power Breakfast.

And the substance of what I said then, was that in the UK the Thatcherite policy of taking electricity out of government ownership and replacing monopoly with competition had pushed prices down by 15%-20% in real terms, that the standards of service to customers had gone up hugely and that in my own industry of nuclear power ... and that all of this had resulted in greatly improved productivity and most importantly ... an enhancement in safety culture and safety performance.

Although I made no mention of Ontario in my 1997 talk ... the inference was clear ... *go for it!*

That was the true beginning of Bruce Power.

And so I am delighted to be back today ... and to have the honor to outline my thoughts about how the electricity business on both sides of the Atlantic has moved on over these four years.

To start on a personal note, my 1997 work permit said “*Energy consultant.*” The new one issued earlier this month now reads “*Chairman of Bruce Power.*” I am no longer a visitor from a foreign land but now part of the fabric of business in Ontario ... heading up the Province’s largest independent electricity generator.

And who would have believed four years ago that the first part of the former Ontario Hydro to be transferred into the private sector could possibly be 6000 MW of nuclear power, particularly with half of that plant shut down?

Well that is what has happened and British Energy would like to see this as just a start in our investment here in Ontario ... we have made it quite clear that we would like to grow our business in this Province.

So before going any further I would to pay tribute to many of you in this room today. You believed that opening up the Ontario energy market to competition was the right way ahead for the Province. Without your lobbying and advocacy there would have been no Bruce transaction. To each and all of you I wish to say thank you.

Now I would like to cast back to the time of my 1997 talk ... and to what has changed between then and now. Some of you may be thinking quite a lot ... others thinking rather too little.

Four years ago electricity *was* Ontario Hydro. Since then we have seen:

- the government white paper on energy competition and choice,
- Bill 35,
- the market design committee recommendations,
- the Energy Competition Act,
- Ontario Hydro broken into its successor companies,
- the amalgamation of some of the smaller MEUs,
- the lease of the Bruce facilities to Bruce Power,
- more generation assets on the block, and
- the market set to open within a few months.

But let me try and calibrate this against what has been going on in the UK and the US over the same period.

In the UK, there has been an extraordinary amount of M&A activity. Eleven out of twelve of the Regional Electricity Company's (the equivalent of the MEU's) have changed ownership, some twice. Half are now owned by foreign companies. Electricity companies have acquired water companies and vice versa ... energy companies selling gas, telecoms and just about anything you can imagine including motor breakdown services

All in all some 70 GW of power plant has changed hands in four years, like selling the whole of OPGI twice over, a huge upheaval.

In particular, the generation scene has been transformed beyond all recognition, from three generators then to well over 20 today ... a major change in the competitive landscape.

Finally there is the beginning of a wave of cross-border mergers; PowerGen have acquired LG&E, the major Kentucky utility; Scottish Power have acquired PacifiCorp on the US western seaboard; National Grid have acquired New England Electric System and Eastern Utility Associates and are part way through the acquisition of Niagara Mohawk. Finally PowerGen themselves are currently the subject of acquisition by E.ON, the huge German conglomerate.

The industry in the UK is unrecognizable compared with when I spoke to you last. So the point I want to make is this. Don't think that once the current round of Ontario restructuring is complete things will settle down. They won't.

Change is never-ending... make it change for the good.

The US scene has been no less frenetic with around 50 major utility mergers, acquisitions and plant auctions all adding up to some \$105 billion US.

Even more remarkable has been the change in fortune of nuclear power.

In 1997, no less an authority than the Wall Street Journal first used the phrase **“renaissance of nuclear power”** to describe the acquisition of Three Mile Island by British Energy and its joint venture partner PECO. Now these words crop up all over the place!

Four years ago nobody in their right minds was considering buying a nuclear plant... until British Energy made its foray into North America. Yesterday's owners were proposing to shut down their nuclear plants. Today a whole new market exists for buying and selling nukes and utilities now see nuclear as the jewel in their generation portfolio. Today ... plant life extension is the name of the game.

Perhaps even more incredible is that new nuclear build is now on the agenda in the US ... with the recent Energy Policy Paper strongly advocating an expansion of nuclear power to help provide future US energy needs.

But what about California?

Well ... a few months ago I gave a talk in Ottawa called ... ***“Why Ontario isn't California.”***

So let me summarize this real life ... **bad change ... good change** story.

Starting in 1996 there was huge interference by the Californian state government in the regulatory and pricing regime ... **bad change**. The sort of unhelpful thing governments do to win votes. The consequence was that for five years ... no one built any new generation plant because any investment would have lost money.

However demand for electricity kept on growing and eventually the state just ran out of electricity ... and prices rocketed sky high.

So what will stop the Ontario market behaving like California?

Well the guiding **policy** principles are straightforward; **reliability** through an adequate generation margin; **better service and value** for customers; **protection** of the environment and **innovation** in how to do business.

How to achieve these policy objectives can be expressed most simply ... **open the competitive electricity market ... good change.**

It was the boldness of Bill 35 that gave British Energy and our partners the confidence to invest in Ontario.

And how will Bruce contribute to ensuring that our lights, here in the Province, stay on?

Well we plan to bring back into service some of the shut down Bruce A units. We plan to restore the Bruce B units to their original design output. All of that adds up to some 2000MW of increased generation capacity in the Province. In addition, we have contracted the Bruce output through Power Purchase Agreements for periods of three to five years, quite fundamental to achieving price stability.

Market forces in a truly competitive environment will balance supply and demand and encourage investment. **Just remember telecoms.**

That is our experience of operating in three countries and owning ... on our own or through joint venture ... some 26 nuclear plants.

So let me give you a few more details about Bruce Power ... our joint venture with Cameco and the two main unions at Bruce.

We have leased the eight Candu reactors at the Bruce site and are now the licensed operator. The lease runs until 2018 with an option to extend for up to a further 25 years. The value of the transaction is more than \$3.2 billion representing one of the largest public/private transactions in Canadian history.

Our plan was to complete the transaction on June 1. Through much burning of midnight oil ... yes, fossil fuel does have its uses ... we completed the deal **ahead of target** on May 12. Early days, but since completion the Bruce B units have generated in excess of 2 TWh and achieved an average load factor of 100%. An excellent start to this exciting and groundbreaking venture ... **earnings ahead of our business plan forecast.**

Already we have launched two major initiatives.

The first is TOP, Target Outstanding Performance. In the past four weeks we have had more than 100 TOP tips from the Bruce staff, ideas that could make a good business even better. Remember, the Unions own 5% of the equity and so have a real interest in this.

And the second is a process called ISRS, the International Safety Rating System. This is part of our plan to achieve world class safety performance.

British Energy is **committed** to the success of nuclear power. We have confidence in Candu technology and intend playing a full part in the Canadian nuclear industry. Specifically, we have been impressed by the professionalism and thoroughness of the Canadian Nuclear Safety Commission.

The two full-day license hearings held in February at Ottawa and in April at Kincardine provided both the pro's and anti's with a full opportunity for intervention. A model for how this sort of important issue should be handled.

Finally if there to be new nuclear build in the US, could this also be the case in Canada? What is needed to make this happen?

First ... as an industry, we need to continue to demonstrate to the investment community that existing nuclear plant is one of the safest methods of producing electricity and that it will, with less overall risk, generate earnings for shareholders. Just think about the ample, long-term availability of uranium and the recent doubling or more of gas prices.

Second ... we must treat as a matter of urgency the provision of the permanent nuclear waste repositories. It is all very well for nuclear supporters to push the case for nuclear's considerable environmental benefits. But our arguments will ring hollow until we bring into service permanent, retrievable repositories. This is not a technology issue, for how to build and operate such facilities is straightforward. Rather it is a matter of government resolution.

Third ... as an industry we need to get much better in presenting the environmental case for nuclear power. We are a crucial part of the Kyoto solution but meantime most environmentalists see nuclear as a bridge too far. But just think about those summer days when the generation system is flat out. The smell in Toronto's air and the orange pall of pollution that stretches along Lake Ontario.

And finally ... any new build program must have a robust business case which fully recognizes the time value of money. This means that to attract investment, any new reactor design will have to be substantially cheaper and much quicker to build than today's plants.

And must be every bit as safe.

New build could be a derivative of a PWR or of Candu ... maybe even the new pebble-bed reactor design. The plant will need to be internationally licensed, with a high factory construction content. It must be part of a large production run and be cost competitive with other plant options, for example with gas cogen.

Herein lies an opportunity for Canada. Candu technology is simple with numerous inherent safety features. Furthermore ... the world's best performing nuclear reactor at present is a Candu, Wolsong 3 in Korea, Canadian built, which achieved a capacity factor of 103% last year.

If new nuclear power stations are going to be built, it could well be that the Candu is a serious contender.

That's good news for operators like Bruce Power and would be great for Canada.

And so on that positive note I end, other than to thank again the many people who have provided so much help over the past four years.

Should you invite me back in 2005, who knows what *good change* I might have to tell you about!

Thank you for your attention.