

BC Hydro Chair and Chief Executive Officer, Larry Bell's October 8, 2003 Speech to the Vancouver Board of Trade. Larry Bell explains how and why providing low-cost, reliable electricity is a crucial part of BC Hydro's business now and in the future.

BC HYDRO: OUR BUSINESS IS RELIABILITY

Thank you for your kind introduction.

Our business is supplying you with low cost reliable electricity. We have the lowest cost in North America – tied with Quebec and Manitoba. Reliability – the provision of energy on demand – is “first quartile” in the metropolitan areas, but our weather and topography are challenges in the balance of the province.

Let me talk about how we are pursuing these twin goals relating to cost and quality.

Before I begin, though, I would like to provide some context for where BC Hydro is today. The great legacy of our company really began in the '50s. It was a time of visionaries, as there was a need to open up this province. That required bold policies, and energy would lead the way.

When it came to energy, the visionary – as most of you know – was W.A.C. Bennett. He saw the huge potential for energy development in B.C. – on both the Peace and Columbia rivers – that led us to where we are today.

And while the vision was impressive, how he did it is perhaps even more so. He stood up and proposed one of the largest and most expensive resource development undertakings ever. In today's dollars, the proposals for the Peace and Columbia would cost \$15 - \$20 billion! Can you imagine someone proposing that kind of idea today? Based solely on a vision for the future?

And he didn't just propose it; he did it. It was based on his confidence in the future of this province. So here we are today, with one of the greatest electric systems in the world.

BC Hydro is a regulated monopoly, with the responsibility of managing this system. The resulting business model has some very unique characteristics.

First, we have a legal obligation to meet your demand for energy today, and ten years from now. “Not enough is not an option.” Just enough or too much are our options

Second, we have a very long development cycle. For larger production facilities, in the order of ten years, and major transmission lines even longer.

These two factors lead us to be very conservative in our estimates of what you require. It is appropriate that our environmental impact and financial prudence be challenged through regulatory oversight. The irony is the more extensive these processes, the longer our response time, the higher the forecast margin of error, the more conservative we must be to meet our legal obligation to serve.

A third characteristic of our system mitigates the “surplus supply risk”. It is our ability to store energy in our very large reservoirs. For example, one inch of storage in the Williston Reservoir behind the Bennett Dam is worth \$1 million! Our reservoirs provide us with the ability to both buy and sell on a timely basis. The simplistic example is the purchase of energy at night, and sale during heavy load hours the next day.

Fourth, we price our product on average cost and not the marginal cost of new supply – 2.5 cents vs. 5.5 cents. You, our customers, are not getting the appropriate price signal as you trade off electrical energy expenditures against other alternatives. This is true for residential customers who buy electrical plug-in heaters when natural gas prices rise, and industrial plants that forego investment in energy efficient motors.

Power Smart and the new proposed stepped rates for industrial customers are designed to redress inappropriate price signals, while preserving “low cost electricity”.

Fifth, and the last of these unique characteristics that I will address today, is the very significant gap between the cost and value of electricity.

Electricity is an essential service, without which our modern infrastructure does not function. This places literally an infinite value on adequate supply. One study has suggested its economic value is 100 times its cost. Is it any wonder that with inelastic demand, prices in other jurisdictions, when they had inadequate supply, easily reached 20 times cost and beyond?

I now want to turn to how we will fulfil our commitment to our customers of reliable, low cost electricity, both now and in the future.

The first way is to plan and put in place an appropriate resource acquisition strategy.

The leading component of that strategy is our Power Smart program. In fact, we are counting on Power Smart to meet about 40 per cent of your growing electricity demand over the next ten years.

Why Power Smart? And – from a business perspective – why would we want to pay our customers not to use our product?

Well, because it makes sound, business sense. We look at Power Smart as purchasing energy, and it is the cheapest source we have. In fact, at around 2 cents per kilowatt/hour, it is less than half the cost of our recent IPP contracts.

Power Smart is a win/win proposition. We get access to cheap electricity supply, but you – all of you – can save a significant amount of money on your electricity bills.

I hope all of you got your coupon for the new energy efficient light bulbs we are giving away. They use 75% less energy than traditional bulbs, and installing just five of them in high use areas of your home can reduce your monthly bill by about 3 per cent!

These bulbs are just one of the Power Smart opportunities for residential customers. And there are similar kinds of initiatives for commercial and industrial customers as well. Power Smart partners like YVR, UBC and others, for example, have taken advantage of our programs and have already saved millions of dollars.

One of our largest industrial customers – Weyerhaeuser – is now self-sufficient; they are completely off our grid, except for backup supply! The energy we purchased from their wood waste co-gen cost about 1.5 cents a kilowatt hour! Look for another announcement like this in the next month.

We have Power Smart leading the way. Then there is Resource Smart – our internal program of investment that, as with Power Smart, we consider an energy purchase. Costs are under 3 cents, and about 3 percent of today’s supply is from Resource Smart. Tailrace excavation and more efficient turbines reduced friction in penstocks are typical examples. This program will provide about 15 per cent of the new supply over the next decade.

So where is the rest coming from?

Well, I am very pleased to say from you – customers and private power producers. In fact, you will provide at least a third – and probably more – of the electricity to meet our growing needs over the next ten years.

This is a key element of the provincial government's new Energy Plan. It is also one that BC Hydro has been working hard to implement.

Now, I know some people have been skeptical of this idea, saying the private sector can't deliver and/or the costs are too high. I am happy to say that, on both of these accounts, nothing could be further from the truth.

The results of our latest call for green power were announced about a week ago. We decided to sign up all 16 qualified bidders and ended up taking over twice what we were originally looking for – enough electricity for 180,000 homes! A hedge against increased demand and, remember, we can store and sell.

The potential private sector investment of around \$800 million, and up to 1000 jobs during construction, is also great news for the entire province!

So, there is enough supply, but what about the cost?

Well, there is good news here too. For all of our private sector calls to date, we have set a price cap of 5.5 cents/kWh that proponents have to meet. That is the cost of power from the next cheapest, large scale, supply side resource – a combined cycle gas turbine – whether we build it, or someone else does.

All of the IPPs and customers we have signed up to date have come in at or under that cap. This ensures that we, on your behalf – through a transparent competitive process – will provide you with new supply at least cost.

That seems like a good lead into my next subject – what is the outlook for rates!

Well, we are going to find out soon. As many of you know, we will be filing a revenue requirements application with our regulator, the BC Utilities Commission, in December, and it will include a proposal for rate increases. The exact number we don't know yet, although our most recent Service Plan (February 2003) suggested a range of 3 – 6.5 % per year for three years to cover our current and expected future costs.

Why do we need a rate increase? Well, we haven't had one in ten years, and whose costs in this room haven't gone up during that period?

We managed to maintain profitability for a number of reasons. There were some great trading years on the export market. As well, BC Hydro management did a great job with internal efficiencies, which saved about \$75 million per year by the end of the decade.

In addition, we rolled over most of our debt to significantly lower interest rates.

But our costs – like yours – are going up. The new supply I just mentioned is a contributor. Fortunately, we can blend that 5.5 cent power from new resources with the cheap Power Smart/Resource Smart energy and the existing 2.5 cent power from our heritage resources to limit the impacts.

In addition, we have increasing expenditures for maintenance, upgrades and replacements. Many of our facilities are reaching the stage where they need more investment. The replacement costs of BC Hydro assets are estimated at \$32 billion. We estimate annual capital expenditures to be 1 – 1.5 per cent of replacement costs.

Some people have asked why the need for all this investment now? Have we been neglecting it in the past? The answer to this question is "no", but the overall answer has to do with the somewhat unique nature of electric infrastructure.

Those familiar with similar capital assets know of the "bathtub curve". It is a graph that charts capital investment and maintenance costs over time. What you find with generating stations and transmission lines is that, for the first few years after they are built, they need a fair bit of tweaking, and that leads to high expenditures. But then over the next 30 years, you go through a phase where you don't need to put that much money into them, and the curve bottoms out. That's where we have been and, now, as we approach 30 plus years in service, costs rise significantly as maintenance, upgrades and – sometimes – replacements are required.

Those are the two main reasons, why our costs are going up and why we need rate increases. As I said, how much isn't yet known, but I can tell you that our goal is to keep the increases – and our rates – as low as possible.

But whatever the final increase might be, we will offer opportunities to help you deal with the impacts. Once again, Power Smart is the solution. With the recent launch of our programs in the Lower Mainland – and across the province – there are a range of ways to help offset whatever increases are coming.

Our average monthly bill is about \$60, and a typical bill for a family with a three bedroom home with gas heat is around \$600 per year. Power Smart programs, typically, can save you about 25%. Look for more specific information in the next couple of months on how Power Smart can help you – and your company – deal with any rate increases.

Before leaving the topic of rates, I should add that we actually look forward to the upcoming BCUC process and the discussion and input from all interested parties. When you think about it, this is all about asking our customers for their approval to operate our business for them. We will go into this process firmly believing that the best result comes after open, honest and factual discussion. I ask you to be equally concerned about reliability as cost.

The last topic I want to touch on is how the organizational structure at BC Hydro contributes to a continued supply of low cost, reliable electricity.

Over the past two years, we have moved the company from a traditional vertically integrated utility to an interdependent “lines of business” model. Why? Well, the main reason is to allow the different parts of our business to better focus on their individual goals, priorities and customers. This differentiated business model creates much clearer accountabilities and an ability to adopt best practices.

Because we have done this internally, you shouldn't notice any change when you are dealing with us. With the exception of the new BC Transmission Corporation, externally there is still “one BC Hydro”. All of these changes support “one face to the customer”, either through our staff or through external service contracts. The result, however, is even greater efficiency and levels of service for you.

Our staff at BC Hydro continue to be another reason we can deliver the product and service we do. They are some of the best in their fields, and have been for some time. But, like a number of companies, we are facing challenges because of demographics. An increasing number of our senior managers and technical staff are at or close to retirement. For example, over forty per cent of our engineers are eligible for retirement over the next five years. They carry a huge amount of institutional memory with them, and it is an ongoing challenge to not only replace them, but ensure that important business knowledge is not lost. Our employees have always been a key to our business, and that will not change as we move into the future.

To conclude, I want to go back to where I started today. Specifically, where are we with respect to the great vision and legacy of W.A.C. Bennett?

Well, no one would disagree that we have benefited, and continue to benefit. But times have also changed. For one thing, we have “consumed” a great deal of that legacy. BC Hydro has built no major projects since Revelstoke in 1983. IPPs have provided all greenfield supply since then. There no longer is a surplus of low cost power.

You could also argue that we have “consumed” the vision that led to this great system. The days of bold vision and policy have been replaced by increased scrutiny on all fronts and a culture that produces very finely calibrated estimates.

This culture, which is widespread in our industry, leads to significant risks to our reliability. The danger is we believe that we can make precise and accurate forecasts.

Will we – BC Hydro and you our customers – be able to make the case for adequate replacement capital and maintenance budgets? Will we have the conviction required to maintain our redundancies and ensure future supply to meet the coldest day or a sustained period of economic growth?

The provincial government's Energy Plan sets an excellent strategic direction for the future. BC Hydro – as was the case back in the 50's – is once again at the forefront of that Plan. We learned from other jurisdictions and "low cost, reliable electricity" is our goal, joined by the development of clean energy sources and opportunities for private sector development, both in services and new supply.

But, with the new Energy Plan comes the same factors we have always had to wrestle with – the legal obligation to have enough electricity and the need to be conservative in our planning and supply strategy.

Will you be able to rely on us? Will the condition of our plant be sufficient? Will we be able to secure timely future supply? We will be working very hard to make sure the answer to these questions is a resounding 'yes'!!

So given where we have come from as a company – and where we are today – I hope you can see why I chose to talk about reliable, low cost electricity. That defines our business. Our overall goal is to be "first quartile" performers among North American electrical utilities. We want to drive to be "best in class" in all components of our company, as many of our functional areas are today.

What will the future hold? It is my hope, on behalf of all of you – our customers – that we will be seen to be "too reliable" with "too much low cost energy", for the cost of the alternative is enormous.

Thank you, and I would be happy to answer any questions you may have.