

**Select Standing Committee on
Finance and Government Services**

Pre-budget Consultation Presentation

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Surrey*

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President**



Thank-you for this opportunity to speak today.

This is the third time that IPPBC has made a submission to this committee.

The first time was in 2004 when we illuminated the high level of electricity imports and the costs and risks therein. Although B.C. is still a net importer of electricity, we commend the government on taking solid steps to reverse that 7 year trend, especially most recently, with the recent Energy Plan's goal of making BC self-sufficient by 2016.

Last year our submission responded to your Consultation Paper theme, "What Choices Would You Make for a Greener Future" by showing that IPPs, Independent Power Producers, are in a unique position to help B.C. make Greener Choices.

Almost all of the IPP projects currently being developed in B.C. produce green electricity. They produce zero greenhouse gases and, compared to power plants in other provinces and states, they have a very small environmental footprint.

In addition to helping B.C meet its greenhouse gas reduction goals, IPPs are the least costly form of new electricity and they generate substantial new revenue for government treasuries plus jobs for British Columbians all around the province, especially in rural B.C.

My presentation today will focus on three points:

- IPP jobs and investments that are happening right now in B.C. - today.
- The recent spread of misinformation that is creating barriers to our industry.
 - And some examples of corrections to those myths and false allegations.
- Why both IPPs and BC Hydro, that is both the public and private sector, are needed to continue to develop B.C.'s electricity industry.

We close with 4 recommendations for your Committee; including how the pace of building new generation should be considered in light of the recent global financial crisis.

I am pleased to state that today over 1100 workers put on IPP hardhats and went to work on 18 green IPP construction projects located in rural areas all around B.C. Those projects represent new private sector investment of about \$2.5 billion.

Another several hundred workers put on hip waders or climbing boots and picked up fish nets or bird or bat watching binoculars to do environmental baseline investigations of dozens of potential new green energy projects around rural B.C.

Finding and developing these green electricity projects are good for the environment, good for B.C.'s economy and good for BC Hydro ratepayers.

However, late last year we noticed that a few people started making false allegations about IPP projects and about the Energy Plan.

- They said we owned the creeks.
- They said IPPs needed few environmental permits and approvals.
- They said our priority was to sell the electricity to the US.
- They said that BC Hydro was banned from building any generation and was **forced** to buy from IPPs.

These allegations are nonsense.

Then they started to suggest that B.C. should rely on importing dirty brown spot electricity from the U.S. and Alberta rather than returning to being self-sufficient by producing our own green electricity right here in B.C.

This approach is environmentally irresponsible and economically reckless.

In the spring we saw some of these false allegations and faulty recommendations start to appear in the Hansard debates in the provincial legislature and in some other public meetings.

Those speakers either quoted or said their comments were based on two documents published last year. They were *Liquid Gold* and *Lost in Transmission*.

- *Liquid Gold* was written by John Calvert, a Public Policy professor at Simon Fraser University.
- *Lost in Transmission* written by Marvin Shaffer another professor at SFU.

Both documents were very critical of the provincial governments Energy Plan and the role of IPPs in producing green electricity to meet B.C.'s growing needs.

The IPPBC found those 2 documents contained dozens of false allegations and several dangerous recommendations.

We refuted these falsehoods in our own letters to the editor, submissions to regulatory hearings and public presentation. Nonetheless excerpts started to appear in anti-IPP pamphlets, news articles, letters to the editor, and on call-in shows.

It became clear that these two documents were being used by political organizations and special interest groups in an attempt to justify their opposition to the government's Energy Plan and to have only government organizations build all the new power plants in B.C.

Unfortunately their fictional negative allegations were getting more media attention than our factual rebuttals.

To correct them and to get the facts out we engaged Canada's top electricity policy expert; Dr. Mark Jaccard.

Dr. Jaccard is a recognized leader in electricity regulation and economics.

He is also recognized around the world as a leading expert on the environmental impacts of energy sector, especially climate change and GHGs.

- He is an award winning author, sought after public speaker, and a top international consultant.
- Dr. Jaccard is a Professor at the School of Resource and Environmental Management, Simon Fraser University.
- He is a Panel Member of the National Roundtable on the Environment and Economy and the Special Advisor to the BC Climate Action Team.
- Also, he is uniquely qualified to comment on BC electricity policy since he was Chair of BCUC for 6 years in the early 1990's and Chair of the BC Task Force on Electricity Market Reform in the late 1990s.
- He received the Nobel Peace Prize in 2007 as a contributing author to the Intergovernmental Panel on Climate Change.

Earlier this summer the IPPBC asked Dr. Jaccard to review those two documents.

Dr. Jaccard agreed to review them on the contractual understanding that his results were to be released publicly even if his findings were counter to the interests of the IPPBC. Additionally, the Association was not entitled to review and comment on any drafts in advance of public release.

This "no review, no comment" limitation clause was to ensure that his review was independent.

On October 1, 2008 he published his review; ***Assessing BC Electricity Policy: Peer Review of two controversial 2007 documents.***

On *Liquid Gold*, in general, Dr. Jaccard states:

“In this peer review, I provide extensive quotes from Calvert and then contrast these with real-world evidence and analysis to show that Calvert’s book is best read as a political propaganda tract rather than as an independent, unbiased analysis. The author is uninterested in presenting a balanced weighing of the evidence. Indeed, facts are wrong and evidence is distorted in a manner that consistently supports a sinister conspiracy theory. This is why I would not recommend publication if this were a peer review for an academic publisher.”

He countered a dozen false allegations but I will mention only three in this paper.

Calvert claims the BC government Energy Plan will result in privatizing BC’s electricity system. Dr. Jaccard states:

“In fact, even under a scenario of rapid system expansion over the next 20 years, the share of private ownership in all facets of the BC electricity system (all assets including distribution, transmission, generation and administration) might rise from its current level of 10% to about 15%, and certainly not more than 20% under the most extreme scenario. At these levels, the BC electricity system would still have one of the highest shares of public ownership among OECD jurisdictions.”

Calvert states the government’s energy policies will result in higher than necessary rates for BC residential customers because public electricity investments through BC Hydro are cheaper. Dr. Jaccard states:

“If there were no risk, the monopoly utility might very well lead to the lowest rates for ratepayers. But if there is risk and the potential for competition in generation, then the competitive model is likely to lead to lower rates in the long run. Calvert will not acknowledge this. But that is understandable given that he never talks about investment risk in electricity and how jurisdictions are dealing with it around the world – invariably by a significant increase in the role of IPP investment.”

Calvert states the government has “sold” the most valuable and suitable sites for small hydro and wind projects that generate a “hugely profitable revenue stream.” Dr. Jaccard states:

“In fact, the government has not ‘sold’ these sites. And except in a few exceptional circumstances that predate this government, IPP entitlements to

the water resources and land are not ‘permanent.’ Today IPP investors can acquire water licences and land tenures for a maximum of 40 years. . . . It is hard to reconcile the high costs of these smaller-scale ‘renewables’ projects with Calvert’s claims for how profitable they are. If they are so lucrative, one has to wonder why so many projects never get completed, as Calvert himself notes on page 199.”

On *Lost in Transmission*:

Shaffer claims the BC Energy Plan requirement for energy self-sufficiency and the acquisition of additional ‘insurance’ power will lead to higher than necessary costs and rates to BC Hydro and its customers, and an inflated demand for domestic IPP production. Dr. Jaccard states:

“The evidence suggests, however, that one can only reach this conclusion by ignoring the clear and substantial risk of sustained high prices for electricity from fossil fuel combustion over the coming decades for reasons of scarcity and climate concern. . . . I agree with Shaffer that more risk analysis of this issue is desirable. With proper assessment of risks - the electricity self-sufficiency requirements of the Energy Plan and insurance may well be the optimal approach from an economic, environmental and risk preference perspective.”

Shaffer claims it would cost BC Hydro \$280 million more to purchase 6,000 gigawatt hours of power from BC renewable power sources than it would cost for the same amount of imported power. Dr. Jaccard states:

“The evidence suggests, however, that one can only reach this conclusion by ignoring the clear and substantial risk of sustained high prices for electricity from fossil fuel combustion over the coming decades for reasons of scarcity and climate concern. . . . Instead of being \$280 million cheaper, this import scenario could well be almost \$8 billion more expensive than the self-sufficiency scenario.”

The attacks on the IPP industry are coming from groups that are ideologically opposed to the private sector. They present no plausible alternatives to meet B.C.’s growing electricity needs. They are simply opposed to private sector. They would rather B.C. be dependent on importing energy than have the private sector build any new projects here. They would even rather have B.C. import, and hence encourage, brown power than allow the private sector to build green projects here.

They say do only public power. They say BC Hydro should do it all. BC Hydro is good, but trying to get them to do it all is impossible, impractical and a downright bad deal for BC Hydro ratepayers and B.C. taxpayers.

Why is it impossible? There is simply too much to do. Especially in the next several years, when it is urgently needed. BC Hydro is already planning to spend \$5.3 billion in next 5 years – just to keep its own facilities functioning well. BC Hydro plans to also spending another \$5.1 billion through BC Transmission Corporation’s 10 year Capital Plan. That is several times the level that BC Hydro has spent over the last decade.

In addition to significantly increasing public sector debt this pace of new work triggers hiring problems. BC Hydro has a huge number of people retiring in next few years. In addition to having to replace all those people BC Hydro’s recent BCUC filing shows that between 2004 and 2010 they are adding 2,058 new Full Time Equivalent positions – a 51% increase in manpower, just to keep their own facilities and programs functioning according to plan.

So now is not the time for BC Hydro to have to find and hire even more people to launch and run new departments to develop and build brand new generation facilities.

Why is it impractical? Why do something you have never done before when you can get others that have already done it to compete like mad and also get them to take all the major controllable risks?

BC Hydro has never built a wind power or biomass, or geothermal power plant. IPPs have built dozens of each.

What about run of river hydro projects? BC Hydro has not built a new hydro project since 1984. Any senior project manager that worked on that project, the Revelstoke Dam, has long since retired.

Plus BC Hydro is not well suited to develop small projects. BC Hydro has built several world class big dams. But those projects are typically well over 200 MW while the typical size of a run of river project is only 10 MW.

BC Hydro is an excellent operator of BC’s overall electricity system. And their PowerSmart program is applauded around the world. Not only should they not be distracted from doing those good things well, but also the skills required for developing a small, remote, highly tailored and finicky run of river project are very different. Just as General Motors could, but doesn’t build scooters, it is impractical for BC Hydro to develop small run of river projects.

Why is it a bad deal for BC Hydro ratepayers and BC taxpayers to stop private sector from building new power plants? Two reasons: risk and competition.

On risk: for IPP projects, any construction over-run costs fall on the shoulders of private shareholders, not BC Hydro ratepayers or BC taxpayers.

For IPP projects, if a fatal flaw is found in the development phase, like the belated identification of an endangered species, or lower than expected hydrology data, or a surprise cost escalation, such that the project suddenly becomes unfeasible, then all the costs to date are absorbed by the private shareholders, not BC Hydro ratepayers or BC taxpayers.

On competition: a few statistics will show how sharp an IPP bidder's pencil has to be to win a contract from BC Hydro. In the most recent BC Hydro Call for Tenders, in 2006, the ratio of total energy from all the IPPs that registered to bid was five times the target amount that BC Hydro announced that they would buy.

On the current BC Hydro Call for Power, the ratio of the total energy from all the IPPs that registered to bid on August 12 is over 8 times the target that BC Hydro announced that they would buy.

So, if they all bid, then for every 8 bidders, 7 will lose. Only the bidders with the sharpest pencils will win. With that degree of intense competition BC Hydro ratepayers are the big winners. And that's the way it should be. Competition works – especially for customers.

The governments Energy Plan and BC Hydro's Calls for Power give ratepayers and taxpayers the most competitive prices with the least amount of risk without increasing public debt or adding to BC Hydro's already large hiring challenge.

So our **first recommendation** to your panel is that, on energy policy and legislation, the government should stay the course.

BC Hydro recently filed a Long Term Acquisition Plan, or LTAP, which, among other things, indicates the pace of bringing on new generation.

Our **second recommendation is** that the review of the LTAP contain a greater reflection of recent greenhouse gas legislation and costs. Plus a greater reflection of recently announced additional electricity demand from the Oil & Gas sector as well as from new mines. It should also consider the potential significant demand from new electric vehicles and from fuel switching. The Burrard Thermal plant should not be fashioned to provide firm energy. It is old and inefficient and a large

source of greenhouse gasses. It should not return to being a used as a proxy for continued electricity imports.

BC Transmission Corporation should be encouraged to build more wires sooner. There has been a chronic underinvestment in B.C.'s transmission system for the past 15 years.

BC Hydro's recent 20 year Integrated Electricity Plan forecasts that BC's electricity needs will increase up to 45% - after all reasonable conservation efforts are made. That means lots of new generation is needed. And new generation, whether from expanding existing BC Hydro facilities or from new IPPs, means a bigger stronger transmission system is needed.

Since building transmission takes much longer than building new generation, there is a major risk that the wires will not be ready for the new generators to plug in to.

Expanding transmission involves some very difficult trade-offs and decisions. One of the tough ones is how to extend wires to bring remote renewable energy into the grid. But the decisions must be made, and made soon or a significant amount of B.C.'s green energy will not flow into the grid.

For this presentation, we simply recommend that BCTC should be encouraged to use a more proactive approach to transmission expansion, rather than the traditional reactive approach.

For your committee, our **third recommendation** is the government consider these suggestions during the Section 5 Transmission Review planned for early 2009.

Our **fourth and final recommendation** relates to the recent global financial shocks. It is too early to tell how much they will reduce GDP growth. And electricity demand growth generally parallels GDP growth*. So a slowing of one usually means a slowing of the other. So some people may look at the global scene and be tempted to say lets stop building new generation here in BC.

That would be a mistake. Mainly because most of the new generation that is being built in B.C. is not to meet forecast new load growth, but to play catch-up from the past. No large power projects have been built in B.C. for 24 years. One in eight houses is running of imported power. That is not good economic policy and, because most imports are from fossil-fueled plants, it is terrible environmental policy.

** According to BC Hydro; electricity load growth has never turned negative even in past recessions. It may have flattened before resuming its upward march, but it has never sloped down*

Ironically, for those that are forecasting a severe recession, building new power plants (at a prudent pace, of course) is actually good economic policy.

First they typically take several years to plan, permit, and build - so the jobs they create today are paid by revenue that is received years later.

Second they are long term assets that outlast economic cycles.

Third, at least for the green energy projects that IPPs are totally focused on now, they are built at dozens of locations all around rural BC – which is often where recessions hit the hardest.

In summary:

- Today, IPPs are putting hundreds of people to work all across rural BC.
- IPPs are investing billions of dollars which enables government to invest more in things like schools and hospitals.
- Ideological-driven allegations against IPPs have been rigorously analyzed and shown to be false.
- BC Hydro is busy building new generation and, through BCTC building new transmission and also substantially renewing both.
- BC Hydro's capital expenditure growth and hiring plans are huge.
- IPPs bring new capital and additional workers to the electricity industry.
- IPPs have the most experience at building wind, biomass and geothermal power projects.
- IPPs are well suited to developing run of river projects.
- IPPs reduce risks to ratepayers and taxpayers.
- Intense bidding competitions deliver the lowest prices to BC Hydro ratepayers.
- The governments Energy Plan and legislation are good and should continue.
- BC Hydro's Long Term Acquisition Plan should more greatly reflect greenhouse gas laws and costs, new loads and a limited role for Burrard Thermal.
- The upcoming Section 5 Transmission Review is an opportunity to take a fresh look at how to expand the transmission system, which is greatly needed.
- The reaction to global financial shocks should not be to slow new power plant construction - since we are filling a past energy deficit rather than relying on new economic growth and,
- For those concerned about a recession, building new power plants, at an appropriate rate, provides a counter cyclical economic benefit.

Thank you.