Info Session Date and Location
February 17, 2005
Coast Discovery Inn and Marina
975 Shoppers Row, Campbell River, B.C.

Attendees

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation/Interest/Organization</th>
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<tr>
<td>Bruce Lloyd</td>
<td>Village of Port Alice</td>
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<td>Joanne Banks</td>
<td>Interested Party</td>
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<td>Rich Hazen</td>
<td>Interested Party</td>
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<td>Frank White</td>
<td>Village of Tahsis</td>
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<td>Michael Mascall</td>
<td>Sierra Club</td>
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<td>David Peters</td>
<td>Blue Energy</td>
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<td>Lorraine Flynn</td>
<td>Interested Party</td>
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<td>Carol Dwyer</td>
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<td>Don McIver</td>
<td>Interested Party</td>
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<tr>
<td>Rina Berkshire</td>
<td>Concerned Citizen Coalition</td>
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<td>Lance Klassen</td>
<td>CRTV (Campbell River Television)</td>
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BC Hydro/IEP Representatives

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<tr>
<th>Name</th>
<th>Organization &amp; Department</th>
<th>Role</th>
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<tr>
<td>Stephen Watson</td>
<td>BC Hydro, Community Relations Vancouver Island</td>
<td>Host/Facilitator/CR</td>
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<tr>
<td>Mary Hemmingsen</td>
<td>BC Hydro, Power Planning and Management</td>
<td>IEP Presenter</td>
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<tr>
<td>Rohan Soulsby</td>
<td>BC Hydro, Power Planning and Management</td>
<td>IEP Presenter</td>
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<td>Jane Newlands</td>
<td>BCTC External Consultant</td>
<td>Technical Resource</td>
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<tr>
<td>Victoria Grant-Smith</td>
<td>External consultant</td>
<td>Greeter / Note Taker</td>
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<tr>
<td>Anne Cochran</td>
<td>External consultant</td>
<td>Workshop Facilitator for next day</td>
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Discussion Highlights
- Request for continued promotion of Power Smart initiative, education awareness, time of use metering, and other programs.
- Focus on reliability of supply and local generation.
• Fully explore development (IPP development, as any new development will be IPP) within existing transmission corridors.
• Support new technology and invest in research and development (R&D).
• Focus on renewable energy and consider it occupying a greater proportion of the preferred portfolio (some participants also wanted a balanced portfolio of all resource options).
• Promote full-cost accounting.
• Strong support for public ownership of BC Hydro; scepticism that policy of purchasing from IPPs will keep rates low and maintain reliability.
• Support for performance audits of IPPs and BC Hydro.
• Ensure risk is appropriately shared between public and private parties.
• Keep electricity out of NAFTA.

1. Welcome and Introductions
Stephen Watson, Community Relations Coordinator, Vancouver Island region, welcomed participants to the information session. He introduced the BC Hydro project team and representatives from the BC Transmission Corporation (BCTC). He provided a brief outline of the evening’s agenda, and gave the floor to Rohan Soulsby to provide a presentation on the Integrated Electricity Plan (IEP).

2. IEP Presentation
Rohan Soulsby welcomed everybody to the Campbell River IEP information session and encouraged participation throughout the 2005 integrated electricity plan development period. He gave a presentation on the IEP process, providing a brief overview of the purpose, lessons learned from 2004 IEP process, and the development and implementation of 2005 IEP process.

The outcome of the 2005 IEP process was identified as a preferred portfolio (a mix of resource options), which would best meet the energy needs of B.C. The plan will set direction for short and medium term planning and is a complex process involving trade-offs. The stakeholder engagement process is designed to assist BC Hydro in identifying factors, which are important to consumers in choosing energy options (e.g., cost, environmental impact, regionally specific issues). The 2005 IEP builds on the 2004 IEP process and will inform the 2007 IEP process. Input from the public is welcomed and can be provided through the information sessions or online through the BC Hydro website.

2.1 Questions and Discussion
• Is the BC Utilities Commission (BCUC) responsible for permitting BC Hydro? BC Hydro is engaged in different types of permitting, however it has primary responsibility to the BCUC, which regulates BC Hydro.
• Does the Burrard Thermal run on natural gas? Yes.

• Does ‘no net incremental environmental impacts’ include Kyoto? Yes.

• Are you looking at a North American grid as opposed to a Canadian grid? No, however, BC Hydro does want to maintain its competitive edge by being able to buy and sell electricity on the open market.

• What about the problems relating to Powerex, Enron and California? Media coverage from last week’s proceedings in Washington State made allegations about Powerex activities in Alberta. BC Hydro has been exonerated in previous legal processes and is confident that these trade allegations are unfounded.

• Has the money owed by California been repaid? California made allegations that there were improprieties in Powerex’s dealings during the California energy crisis. An investigation found that there was no wrong doing on the part of Powerex and that California was responsible for paying their energy bill. Much of the money has been repaid, however there is still some money owing which Powerex is not expecting to see.

• Does BC Hydro have a policy to increase the rates, and apply to BCUC after the fact to have that rate approved? No, this is not the way the process works. There are two ways in which rates are affected. Either BC Hydro will make an application to the BCUC and a decision will be made as to whether or not the rate change is applicable, or interveners such as rate payers, can go to BCUC and call for an investigation if they perceive rates to be too high or too low.

• Recently there was a rebate as a result of a rate increase and reduction. How long did the process of application and decision by BCUC last? For this particular process, BC Hydro used an interim rate (which began April 1, 2004) while an application was being submitted. The application went through a hearing process to justify the rate increase. The BCUC made the decision that the rate was not warranted which resulted in a rebate with interest.

• Definition of clean energy. The 2002 Provincial Government Energy Plan stated that BC Hydro must obtain 50 per cent of energy resources from B.C. clean energy sources. Can this energy still be fossil fuel based? Yes, but only for cogeneration sources.

• Coal is not included in the presentation options. Does this mean it is not going to be considered for energy production? No, this list is for illustrative purposes only. Coal is a resource that the Provincial IEP Committee (PIEPC) choose to explore in a portfolio.

• What is biomass? Burning of a waste residue, such as woodwaste or municipal solid waste, as fuel for steam generators. Infrastructure costs tend to be low as facilities are often built on existing industrial sites. Fuel supply can be a challenge. Biomass facilities are thought of as useful replacements for beehive burners. What about CO2 omissions? Biomass would have the same CO2 omissions as beehive burners.
• Is there a reason why some projects are listed as an Independent Power Producer (IPP) and not a Resource Smart project? A Resource Smart project can only be done at BC Hydro facilities, where we have an ability to extract energy capacity from existing hydroelectric facilities. Some IPPs may target some aspects of the same river system to generate power, such as micro hydro.

• If the government decided in 2002 that additional energy should be obtained from IPPs, could this change in the future? Yes, governments change and develop new regulations and legislation. This decision could be reversed.

• Are there tidal and wave projects currently producing power? Both tidal and wave projects are considered development technologies. There are no projects in place in B.C., although there are demonstration projects in other parts of the world. The technology is not considered commercially viable at present.

• What percentage of total energy consumption on Vancouver Island is domestic? For the province the split between sectors is 1/3 residential, 1/3 commercial and 1/3 large commercial. Vancouver Island has a greater proportion of residential load than the rest of the province.

• How many people are on the PIEPC? There are 17 people on the committee.

• Where does large-scale industry fit into the stakeholder process? Large industry is represented at the PIEPC, but representatives can also sit in on other stakeholders’ sessions, as they are open to anyone interested.

• Media request. A request was made by the media to arrange workshops to be filmed. Not all participants were comfortable with that and the decision was made to allow a microphone to be passed from person to person.

• Tide and wave resource options. Three years ago BC Hydro said they selected some companies for prototypes off-Island. Where are these projects now? BC Hydro initiated the Vancouver Island Green Energy Demonstration Project of wind, micro hydro and wave. These projects were cancelled as all new projects are to be built by IPPs according to the November 2002 Provincial Energy Plan. Data collected is available for review. The most recent decision from the BCUC turned down BC Hydro’s request to spend funds on research and development (R&D).

• Resources Chart: Conservation is missing from the resource chart. It should be considered the most important resource. Conservation should be a choice of cost. BC Hydro agrees conservation is one of the best resource options with programs like Power Smart and load curtailment.

• Concern that tenders were released before deciding what was required. BC Hydro’s response was that tendering is a competitive process and therefore the lowest bid will be
carefully considered. BC Hydro does, however, have the ability to guide calls as a result of the requirement to obtain 50% clean energy.

- **Life cycle costing.** BC Hydro is looking at this on an incremental basis. Is there a policy in BC Hydro ensuring that the same requirements are applied to IPPs? Yes, each project would be looked at on the same basis. Life cycle costing is a complex and data intensive process so it will take some time before the results are integrated with the IEP process (most likely in a couple of years).

- **Will BC Hydro develop its own projects?** The 2002 Provincial Energy Plan identified that BC Hydro could only undertake Resource Smart projects.

- **2002 decision for IPP power:** Sounds like a political decision. In terms of contractual agreements between BC Hydro and IPPs, are IPPs required to sell all of the energy they generate to BC Hydro? By and large most power is sold to BC Hydro but it is dependant on the conditions stipulated in the calls. Some calls allow IPPs to sell their spare capacity to the market. Generally, most energy is sold to BC Hydro purely because it is the most attractive purchaser in the market. However, in terms of market function, IPPs can potentially sell to anyone.

- **Kitimat projects:** Is there controversy about where they are selling their power? BC Hydro was awarded a settlement from Alcan. Alcan has given BC Hydro five years notice that they will be selling much of their self-generation on the open market.

- **Is there another alternative to throwing old light bulbs in the landfill?** Power Smart has looked at trading in bulbs. It has also implemented some limited recycling programs. Is it detrimental to landfill? Yes, but the new bulbs last longer, therefore fewer are going into landfill sites.

3. **Exercise**

Participants agreed to complete the exercise as a single group, and not in breakout groups. Responses to the exercise are as follows:

**Question 1:**
In developing future electricity resources, what are the most important factors to you?

- **Reliability of supply on Vancouver Island.** Is the level correct now or are more resources still needed? Should be incremental generation of energy on the Island using renewable resources such as tidal power, woodwaste opportunities (cogeneration plants), and the Gold River biomass project. Also coal should be considered as a resource option. Although there is a preference for clean energy, new technology makes coal cleaner. BC Hydro should become net exporter of energy rather than importer.

- **With regards to full life cycle costing, what is the full life cycle cost of oil?** There is not a full life cycle costing of oil as the resource needs to be considered in application before
costing can be done. A participant felt that life cycle costing should be the first consideration in developing new resources.

- A participant felt that coal should be taken off the resource options list because of CO2, and particulate matter emissions. There was concern that Canada has just ratified the Kyoto agreement and that this action needs to be taken into account by BC Hydro. It would be irresponsible for BC Hydro to consider the use of coal, coal bed methane and natural gas or any other resource that increases carbon emissions. Large hydro is inappropriate and BC Hydro cannot jeopardize river health any more than it already has, as rivers are important to the local economy. Conservation should be included on equal footing with all other options.

- What initiatives has Power Smart undertaken to promote conservation? Power Smart has a number of different programs including education, incentives, and retrofitting residential homes. Has the program looked at incentives for removing washers and dryers from the market as the old technology is wasting energy? BC Hydro responded that part of the Power Smart education program is about raising awareness. A participant recommended the program encourage the use of clotheslines as an alternative to using dryers.

- Support for use of IPPs. A participant asked that not all people present at the meeting were anti IPPs. He has had positive experiences with IPPs. The local IPP is currently producing power for the grid at a better cost ratio than BC Hydro. The participant also had some concerns about coal and Kyoto; sometimes in our attempt to be green we are counter-productive with respect to the environment. He supported government action with regard to IPPs as progressive and felt there should be a balance of all IPP resources.

- R&D for Wave Technology: A participant was concerned that there is not enough money going into developing wave technology. BC Hydro responded that it is a member of the Ocean Renewable Energy Group, which is working to understand tidal and wind resources. Currently they are looking at five pilot projects and are in the early stages of looking to undertake small private projects. If BC Hydro is limited in R&D funding available to explore new technologies, a participant said this would be one area in which he was willing to pay more for. He pointed out that IPPs tend to generate energy nearer to the load, so there is a reduction in line loss in transporting energy over long distances.

- Options available to customers for conservation: An IEP team member provided a brief explanation of ‘net metering’ and mentioned that two solar applications had been approved in the Victoria area.

- ‘Time of use metering’: A participant raised the concern that the current energy use of IPPs would result in metering becoming a commodity and would drive prices up. It was felt that BC Hydro needs to regulate IPPs and ensure that IPPs cannot simply walk away. Workshop participants agreed that they would be willing to pay more for green power.

- Net Metering program: How much energy do you need to produce before you tap in to the grid? 50 kW. What kind of resources can connect? Any clean power resource, such as
solar panels. **How do you access the program?** Instructions and details for application are on BC Hydro’s website.

- **Do you buy electricity at the same price that you sell it?** Yes.

- **Is there a substantial hook up cost?** $700 for the initial cost.

- **Consider environmental impacts of transmission lines:** How do we balance new technology and the transmission lines with environmental requirements? We should be looking at new technologies and determining how cost balances out with environmental concerns. Concerns were raised about the environmental consequences of using IPPs and cutting new transmission right-of-way corridors.

- **Is there no way to promote solar energy for individuals or large companies?** Can we not use low cost solar panels to be self-sufficient in homes with the option of plugging into the grid when necessary? An IEP team member responded that alternate resource options (wind, solar etc.) are presently available on the market, however, choices are made based on whether the options are cost effective or not.

- **Local power self sufficiency and reliability.** With population increase on Vancouver Island more power will be required. Given the need for more power, conservation is even more important as is self-sufficiency and reliability. Public ownership is also very important. IPPs tend to produce power where it is needed which, in turn, reduces transmission losses.

- **Are all new projects going to be developed by IPPs? Does BC Hydro regulate IPPs?** BC Hydro does not regulate IPPs - they are independent companies that respond to notices of tender. **Does BC Hydro approve these projects? Where do they get their permission to build?** There are lots of permits outside of BC Hydro such as environmental permits and air permits and it is the responsibility of the IPP to get those permits. BC Hydro evaluates bids received and often needs to consider how likely it is an IPP will get the necessary permits. However, regulation is not BC Hydro’s responsibility.

- **Are there conditions in the contract between BC Hydro and IPPs for poor performance or non-performance?** Yes, examples would be failure of delivery or, if the IPP applied on a green label, they would need to maintain certain green standards.

- **What percentage of IPPs existed before 2002?** There were 20 projects that represent 3000 GWh of supply (1/3 of tender requirements). Since 2002, there have been additional projects (approximately 20.) producing about 2000 GWh. This does not include Duke Point.

- **Does BC Hydro retain ability to purchase a project in the long term?** No, but we have step-in clauses, should the business fail, to ensure that BC Hydro can still deliver energy.

- **Does BC Hydro have the ability to regulate the business of IPPs?** Concern was raised that within the new system an IPP could walk away if it was not making sufficient profit.
BC Hydro’s response was that contracts contain conditions for liquidated damages, which would be applied to obtain power. As long as an installation is viable, there will be no loss of power.

- **Are you allowed to buy that project back? Is an IPP considered a new project then?** BC Hydro has no plans to step in and acquire new projects.

- **What happens if IPPs consolidate into one company?** BC Hydro’s contractual agreements are with the individual companies, so while they may consolidate, they are separate entities and will be treated that way.

- **Higher rate for clean power.** Participants stated that they are willing to pay more for clean power (not including natural gas).

- **Concern that the private partner in the Duke Point project is not carrying the risk, but rather BC Hydro is.** BC Hydro responded that it would cost more for the private partner to carry that risk than BC Hydro, therefore the cost to the ratepayer is less if carried by BC Hydro.

**Question 2:**
**Which of these factors would you be willing to pay more for?**

- Participant is not willing to pay more for electricity generated by provincial resources since those resources belong to the people. Participant does not agree with private companies using public resources to make money. Values, reliable low cost power and public ownership.

- Participant values public ownership, irrespective of price, and is willing to pay more as long as it is a true cost and not for somebody else’s profit.

- Participant is willing to pay more for reliability and the ability to produce power locally on Vancouver Island.

- Participant suggested using existing profits to develop new technologies, as he felt he was already paying for new technologies with the recent rate increase. BC Hydro should use money from the increase to develop new technologies rather than letting IPPs do so and charge citizens.

- Participant is willing to pay for small alternative technologies (such as wind and methane) but not for grants to IPPs to build power plants. An IEP team member responded that customer-based generation projects help lower electricity demand, and given lower demand, BC Hydro is able to obtain energy that is not being used at a low price. While viewed as grants, there are a number of benefits to BC Hydro (the load that is taken off the system and the incremental resource that BC Hydro does not have to buy) which render grants very attractive.
• Participant supports creative programs, such as ‘net metering’, which encourage conservation and allow people to be creative in their conservation practices. BC Hydro should focus on promoting Power Smart and solar heaters at both the domestic and commercial level. Renewable resources (for which people would be willing to pay more if necessary) should meet any incremental growth on Vancouver Island. Full cost accounting must apply to IPPs, which would make fossil fuel generated electricity (oil) more expensive and other options (wind) more competitive.

• Participant raised concern that not everybody would be able to pay more. Should consider other options, like tax exemptions. Will accept some expensive options (e.g., wind), however, there should be a basket of options.

• Concern that there may not be enough firm power. Need to have a mixed portfolio so we have a dependable load resource.

• Concern that private companies are making profits on price increases.

• Wants to make sure B.C. power does not become part of NAFTA and that it remains protected.

• Concern that decisions in selecting energy options are made by politicians who are guided by natural gas producers and oil producers.

4. Closing
Rohan Soulsby thanked participants for their input. Information relating to the IEP process is available on BC Hydro’s website. A second round of regional sessions will be held in the fall with feedback from the PIEPC.

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