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BC Hydro VICFT  
Review of Electricity Purchase  
Agreement  
Information Request No. 1.  
Exhibit No. C23-3

Information Requests from Sea Breeze Pacific – RTS to BC Hydro

1. Given that BC Legislation requires BC Hydro to acquire energy from new resources at least cost, what information is provided in the application released to the interveners that allows them, BCUC or the public to make this determination?
2. Does Duke Point provide contingency for the failure of both 500 kV lines, the 5L29 and the 5L31, for example from avalanche on the Sechelt Peninsula? In other words, if the demand is high, and the Duke Point Plant is operating and both 500 kV lines fail, will Vancouver Island experience a blackout or other consequences?
3. Why is building the Duke Point Plant preferred over upgrading the HVDC link to Vancouver Island, when Duke Point will both create a dependency on supply from off Island to generate power, and will also be more costly than power supplied by transmission of electricity from the mainland? In answering this request we would like you to take into account that ABB has provided a firm bid to SBP-RTS to provide a turnkey 1100 MW HVDC Light installation that would be in service before the end of 2007, thus being able to match up with the date for derating the current HVDC lines. Also, please take into account that HVDC Light does not have the sensitivity to being installed in a liquefaction zone that HVDC Classic shows and therefore could be installed at Arnott Substation.
4. SBP-RTS has approached Hydro about the concept of a P-3 partnership to build such a line. As this would take the capital requirements for such a project away from the rate base, why would not the transmission costs, being the only costs associated with such service, be of less cost to the rate base than energy from Duke Point at extreme commodity risk?
5. How can the public review, envisioned as one of the purposes of the BCUC, be adequately performed by interveners if BC Hydro will not release the actual cost of gas being bought for Duke Point, doesn't know the cost of gas, and/or is unwilling to release the terms of the EPA regarding price of electricity?
6. What is the expected yearly gas consumption of the Duke Point Plant in the VICFT?
7. Will the Duke Point Plant be used as a peaking plant or must run? Will it be run out of merit or as economic dispatch?
8. If the plant is to be used only to supply peak consumption, what compensation is provided to Pristine Power for the stand-by time?

9. How much will this project cost in order to comply with Kyoto requirements – i.e. will BC Hydro have to purchase RECs or ERCs to comply with Kyoto and how much will they cost? Has this cost been factored into the overall energy cost? How does BC Hydro reconcile this with their stated goal of not increasing their emissions signature?
10. What is the expected peak gas consumption of the Duke Point Plant?
11. At what price will the Duke Point Plant buy natural gas?
12. What is the utilization of the Island Cogeneration Plant since it has been able to operate at its full 240 MW rated capacity?
13. At what price is the Island Cogeneration Plant buying its natural gas?
14. What is the heat rate of the Island Cogeneration Plant?
15. What is BCH's expected future price for natural gas over the years 2007 to 2042?
16. How are you determining the expected future price of natural gas over the years 2007 to 2042?
17. What forecasts are you basing your expected future price on? Given the results of independent analysis regarding the difference between using gas forecasts and gas forward prices (see, for example, "Accounting for Fuel Price Risk When Comparing Renewable to Gas-Fired Generation: The Role of Forward Natural Gas Prices," Bolinger, Wisner and Golove, Ernest Orlando Lawrence Berkeley National Laboratory, January, 2004. attached ) why would you use gas forecasts instead of gas forward prices? What is the cost differential of the electricity that could have been produced from Duke Point since the time of Hydro's last forecast given that the forecast and actual prices differed?
18. When you made previous forecasts for future gas prices for the September 8<sup>th</sup> 2003 VIEC VIGP BCUC decision, what was the expected price for 2004?
19. We note that Quebec recently completed a wind RFP that resulted in an electricity price that was 10% lower than the stated cost of electricity published in the VIG hearing, question No. 2.56.6 of \$0.0751/KwHr. Since the price that BC Hydro used for this projection was \$4.42/MMBtu, what would the price now be given the current price of natural gas at U.S. \$7.63 MMBtu (Nymex November '04 close) ?
20. Using known Natural Gas prices, if Duke Point had been put in service in January '04, what would have been the cost of electricity from that facility? On a per Kw basis? How much time would the plant have run? What would the total cost of both electricity and stand-by costs have been?
21. In the gas utilization models that BC Hydro is using, what is the expected heat rate of new Combined Cycle Gas Turbine (CCGT) plants built after 2007?
22. In those models, what is the expected heat rate of new Simple Cycle Gas Turbine (SCGT) plants built after 2007?
23. In those models, what part of new generation built after 2007 is expected to be CCGT and what part is expected to be SCGT?
24. Generally, an increase in demand for a commodity increases its price. How much, if any, will the increase in demand from the Duke Point Plant increase the price of natural gas on Vancouver Island for all customers?
25. How much does the Duke Point Plant reduce the Expected Energy not Served (EENS) on Vancouver Island in 2007?

