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VIA E-MAIL

wjandrews@shaw.ca

January 11, 2005

British Columbia Hydro and Power Authority
Call for Tenders for Capacity on Vancouver Island
Review of Electricity Purchase Agreement

Exhibit No. A-29

Mr. William J. Andrews
Barrister & Solicitor
1958 Parkside Lane
North Vancouver, BC V7G 1X5

Dear Mr. Andrews:

Re: A Filing by British Columbia Hydro and Power Authority ("BC Hydro")
Call for Tenders for Capacity on Vancouver Island ("CFT")
Review of Electricity Purchase Agreement ("EPA")

Enclosed is Commission Information Request No. 1 to the Georgia Straight Crossing Concerned Citizens' Coalition. Please provide the Commission with an electronic and hard copy response no later than Monday, January 17, 2005.

Yours truly,

Original signed by:

Robert J. Pellatt

cms
Enclosure

cc: Mr. Richard Stout
Chief Regulatory Officer
British Columbia Hydro and Power Authority
Registered Intervenors

**British Columbia Hydro and Power Authority (“BC Hydro”)
Call for Tenders for Capacity on Vancouver Island (“CFT”)
Review of Electricity Purchase Agreement (“EPA”) Filing dated November 19, 2004**

1.0 Reference: Steve Miller Associates (“SMA”) Evidence, p.4

At the time of writing Vancouver Island daily peak electricity load is in the range of 1,900 MW. Supply resources (under the assumption of the loss of the single largest supply component) amount to about 2,200 MW.

- 1.1 Please clarify which period this sentence describing demand/supply balance refers to.
- 1.2 Please provide reference or source of the data.

2.0 Reference: Steve Miller Associates (“SMA”) Evidence, p.8

The existence of 220 forecasts that are depicted as merely “reflecting trends” indicates that the resulting regional forecast is discretionary.

- 2.1 Please clarify if the ‘220 forecasts’ being referred to are later aggregated using a bottom-up approach and used to develop the weather-adjusted base year for the 2004 Load Forecasts. If yes, please explain how SMA considers this to be discretionary.

3.0 Reference: Steve Miller Associates (“SMA”) Evidence, p.9

Had the frame been set at 10 years, the average temperature would have been -2.7 degrees Celsius. This could potentially more than double the reduction in the peak load forecast.

- 3.1 Please provide the names of energy utilities in Canada or other utilities in North America with winter peaks that use a 10-year time frame when planning for peak design day.

4.0 Reference: Steve Miller Associates (“SMA”) Evidence, p. 10

Generation of simulated peaks from years with weather profiles much different from that of the subject year is effectively an “extrapolation”, or stretching of the equation beyond its own base in actual fact.

- 4.1 Please explain what is meant by weather profile.
- 4.2 Is it the belief of SMA that because of different “weather profiles”, the forecast of peak demand cannot be based on another year’s peak demand even if those years have identical temperatures? Please explain your answer.

5.0 Reference: Steve Miller Associates (“SMA”) Evidence, p.10

This regression is limited by degrees of freedom, by the potential lack of sufficiently cold observation points, and by the lack of other significant variables in the equation specification.

- 5.1 In SMA's view, what is the minimum required "degrees of freedom" in a simple linear regression?
- 5.2 SMA identified one of the weaknesses is the potential lack of sufficiently cold observation points. Is this criticism still valid in the 2004 Load Forecast? If yes, please explain why the cold days in the first week of January 2004 had not helped in improving the database.
- 5.3 What are the 'other significant variables' that SMA have in mind?

6.0 Reference: Steve Miller Associates ("SMA") Evidence, p.12

Using the add factor introduces part of the random element of the historical series into the forecasts, an undesirable result.

- 6.1 In SMA's view, is it true that based on BC Hydro's methodology, the add factor is not applicable if the historical year used to calibrate the end-use model happens to have design day temperature?
- 6.2 In SMA's view, is it true that this add factor is an attempt to 'true-up' the end-use modeling results to actual demand?

7.0 Reference: Steve Miller Associates ("SMA") Evidence, p.13

The simple trend line indicates an assumed increase of under 7 MW per year.

- 7.1 Please expand the table to show data for the years 1980 to 2004.
- 7.2 For the period between 1990 to 2003, please provide the following relevant data:
- (a) year on year population change on Vancouver Island
 - (b) year on year employment change on Vancouver Island
 - (c) the change in the number of household using electricity as space heating on Vancouver Island

8.0 Reference: Steve Miller Associates ("SMA") Evidence, p.14 A Consistent Pattern of Over Prediction

- 8.1 Please comment if the chart shows a consistent pattern of over prediction by BC Hydro or whether the chart shows the prediction of one year's model's long term forecast results.
- 8.2 Would it be more helpful if the analysis of the chart includes the reasons for over prediction, e.g., whether it is due to changes in underlying assumptions or whether it can be attributed to the modeled coefficients? Please explain your answer.

9.0 Reference: CFT-EPA Filing, Appendix I, pp. 19-20, Alternative Forecasts

- 9.1 Please provide the reasons for not using weather normalized peak load data for the forecasts.
- 9.2 Please replicate the charts with weather normalized data from the same period.

10.0 Reference: Exhibit C20-21

Clearly there will always be uncertainty in load forecasting. Planning decisions must balance the risks of over-estimating future peak demand and under-estimating future peak demand. In addition, the risks of each may be different. For example, the risk arising from under-estimating future peak demand is a higher probability of unserved load, with its associated economic costs. The risk of over-estimating load is higher than required rates associated with surplus capital investment (and any unavoidable operating costs, although some dispatch costs associated with surplus capacity are avoidable in the event of lower load).

BC Hydro has proposed an expected value, accompanied by a range for testing these risks. BC Hydro seems to attach more weight to under-supply than to over-supply. The evidence presented by Steve Miller suggests that BC Hydro's "expected" load forecast is on the high side. Would Mr. Miller also propose using a different range of forecasts? Does Mr. Miller see any difference in the risks to ratepayers associated with over- and under-estimating future load from a capacity perspective?

11.0 Reference: Exhibit C20-20

It could be argued that the stated range of GHG costs would alter the VIGP benchmark costs to BC Hydro. However, under the proposed EPA, the seller seems to assume GHG risk. What are the plausible ways in which GHG regulation may evolve that would make these contract provisions moot with respect to GHG risk, and therefore require the Commission to incorporate GHG risk in its analysis of risks to ratepayers arising from the EPA?

Is GHG regulation not also likely to affect the market value of electricity from this or other plants, either by raising the cost of fossil fuel generation at the margin or by causing a larger portion of generation from higher cost alternatives with lower GHG intensity? Given the expected costs to ratepayers of different alternatives is also a function of the market value of electricity, what is the range of possible changes in the market heat rate (i.e., the difference between gas-fired electricity costs and the market value of electricity given an industry-wide GHG regulation)? Presumably, this assumption would imply a net financial liability somewhere below the \$18 – 29 / MW.h?