

British Columbia Utilities Commission Information Request No. 1.2.23 Dated: 23 January 2004 British Columbia Hydro & Power Authority Response issued 20 February 2004	Page 1
British Columbia Hydro & Power Authority Revenue Requirements Application 2004/05 and 2005/06	

2.0 Reference: Application, Volume I, Chapter 2, Consolidated Revenue Requirements and Financial Schedules

1.2.23 Page 2-49, Schedule A-9. Line 43: Please provide a market price forecast by month for F2005 and F2006 for both heavy and light load hours. Please provide a market price forecast for F2007 through F2013. From where do these market forecast originate and what evidence is there that provides some confidence that this particular forecast is the appropriate one to use for the purpose of this Rate Application? Please provide an overview of the WECC load/resource balance, including forecast resource additions versus load growth, for the next ten years and provide expectations for the surplus market.

RESPONSE:

Question Part: Page 2-49, Schedule A-9, Line 43: Please provide a market price forecast by month for F2005 and F2006 for both heavy and light load hours. Please provide a market price forecast for F2007 through F2013.

BC Hydro's market price forecast by month for F2005 and F2006 for both heavy and light load hours and the market price forecast for F2007 through F2013 is provided in the table below.

CLEAN ENVIRONMENT COMMISSION
EXHIBIT # CAC/MSOS-1007
WUSKWATIM GENERATION & TRANSMISSION PROJECT

**October 2003 BC Hydro Price Forecast Sumas Gas & MidC Electricity Prices
(Nominal CAD)**

Date	Sumas	MidC	
	Nominal CAD/GJ	(Nominal CAD/MWh)	
		HLH	LLH
Oct-03	5.89	53.9	43.5
Nov-03	6.02	58.7	47.8
Dec-03	6.62	64.2	53.2
Jan-04	6.88	64.5	53.2
Feb-04	6.68	62.1	51.9
Mar-04	6.25	53.9	47.4
Apr-04	5.49	47.4	39.1
May-04	5.27	36.0	29.7
Jun-04	5.25	35.4	27.7
Jul-04	5.27	52.1	37.7
Aug-04	5.32	65.4	52.7
Sep-04	5.30	62.8	52.1
Oct-04	5.29	56.4	45.1
Nov-04	5.71	60.4	49.1
Dec-04	6.15	65.8	54.1
Jan-05	6.31	62.8	51.7
Feb-05	6.10	61.2	50.6
Mar-05	5.67	52.5	47.9
Apr-05	5.09	46.9	42.7
May-05	4.87	37.5	28.5
Jun-05	4.87	35.4	26.4
Jul-05	4.89	54.2	46.4
Aug-05	4.94	65.3	51.5
Sep-05	4.96	61.6	45.1
Oct-05	5.01	59.1	48.9
Nov-05	5.41	59.8	48.6
Dec-05	5.88	65.0	53.4
Jan-06	6.03	62.8	51.8
Feb-06	5.85	61.2	50.6
Mar-06	5.43	52.5	47.9
F2007	4.84	52.6	43.4
F2008	4.34	47.7	42.5
F2009	4.54	50.9	45.3
F2010	4.75	54.2	48.6
F2011	4.96	58.2	51.7
F2012	5.11	62.1	54.4
F2013	5.25	66.8	57.1

Question Part: From where do these market forecast originate and what evidence is there that provides some confidence that this particular forecast is the appropriate one to use for the purpose of this Rate Application?

For F2005 and F2006 BC Hydro's gas and electricity price forecast is based on forward market prices. The information on forward market prices is based on broker quotes, broker information sheets and actual market transactions, all of which are provided by Powerex.

It is appropriate to use forward market prices for the Application because they represent the current market view of prices. In addition, the use of forward prices from actively traded (liquid) markets provides a transparent reference point for the Application.

For F2007 to F2012, BC Hydro's market forecast uses forecasts of gas prices and other factors to model electricity prices. The forecasts of electricity prices are developed using a customized version of the Henwood Energy Services simulation software. This software is an industry-standard model that is maintained by BC Hydro with specific information on WECC generation resources.

For F2013, BC Hydro's electricity price forecast is based on the costs of the resource that is expected to set the marginal price for supply in the future.

BC Hydro considers its medium and long term forecasting methodology to be appropriate for the relevant timeframes on the basis of industry practice. BC Hydro continually reviews its forecast inputs, modelling approach and outputs that derive the electricity forecast in light of third party forecasts, industry trends and standards to ensure that the forecast approach and outputs are appropriately determined.

Question Part: Please provide an overview of the WECC load/resource balance, including forecast resource additions versus load growth, for the next ten years and provide expectations for the surplus market.

An overview of the WECC load/resource balance from a publicly available report is provided in the table below, which has been reproduced from the WECC annual 10-year plan. Licensing restrictions prohibit BC Hydro from providing similar information from Henwood's database. However, BC Hydro information from its Henwood model is directionally consistent with the WECC information. The reserve margins indicate a regional market with capacity surpluses. Beyond 2006, limited generation additions are expected. As load continues to grow through the study period, excess reserves decline.

Table 1
WECC Estimated Peak Demands, Resources, and Reserves: 2003-2012
Summer Peak (Adverse Hydro Conditions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Month	AUG	AUG	AUG	AUG	AUG	AUG	AUG	AUG	AUG	AUG
Loads - Firm	134766	139863	142758	145411	148139	150749	153598	156577	159643	162566
Int. & Load Mgt	1821	1835	1831	1833	1832	1835	1838	1838	1849	1851
Total - MW	136587	141698	144589	147244	149971	152584	155436	158415	161492	164417
Growth from Previous Yr. - %	0.4	3.7	2.0	1.8	1.9	1.7	1.9	1.9	1.9	1.8
Generation ± Transfers - MW	180857	186049	194952	196062	196163	197907	198003	199007	199557	199843
Maint./Inoperable Cap. - MW	3490	3230	3152	3068	2833	2931	2931	2833	2833	2833
Reserve Capability MW	42601	42956	49042	47583	45191	44227	41474	39597	37081	34444
Percent of Firm Peak Demand	31.6	30.7	34.4	32.7	30.5	29.3	27.0	25.3	23.2	21.2

Notes:

1. Reproduced from: Page 28, Table 7, WECC 10-Year Coordinated Plan Summary, December 2003.