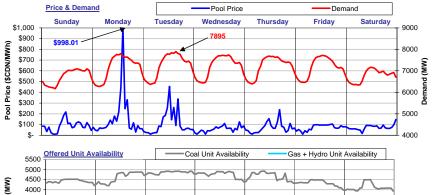
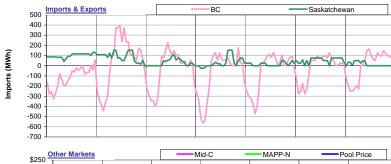
The Market Monitor WATCHING THE MARKET: your fact source

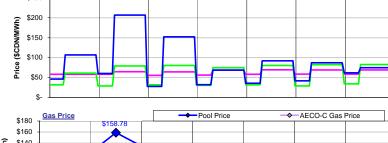
Week Ending May 22, 2004

Weekly Highlights



3500 3000 2500 2000 1500 1000 500







For the week ending May 22, 2004, Pool Price averaged \$90.28/MWh and ranged from a minimum of \$10.04/MWh in HE04 on Thursday to a maximum of \$998.01/MWh in HE15 on Monday.

Demand reached a high of 7895 MW in HE16 on Tuesday and a low of 6172 MW in HE07 on Sunday Average demand for the week was 7073MW.

Pool Price and Demand were positively correlated last week with an R-squared value of 0.18.

Coal Unit Availability averaged 4538 MW last week. This is an equivalent availability of 82% (based on MCR). averaged 2370 MW last week, which is an equivalent of 42% (based on MCR).

Availability numbers are based on MW offered into the energy merit order.

Alberta was a net exporter to BC last week with total exports equal to 6,871 MWh.

Alberta was a net importer from Saskatchewan last week with total imports equal to 7,998MWh.

Overall, Alberta imported 1,127 MWh of electricity last

Pool Prices were generally higher than prices in Mid-C and higher than prices in MAPP-N last week.

prices averaged \$67.74/MWh on-peak and \$57.67/MWh off-peak.

MAPP-N prices averaged \$80.08/MWh on-peak and \$31.22/MWh off-peak.

Prices in \$CDN at an exchange rate of 1.3876.

The average AECO-C Gas Price last week was \$6.93GJ and ranged from a minimum of \$6.75/GJ to \$7.07/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 8.47GJ/MWh to a high of 22.59GJ/MWh The average market heat rate for the week was 13.01GJ/MWh

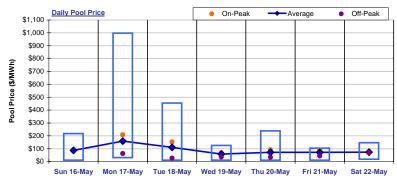
Market Surveillance

Alberta's Market Surveillance Administrator is in place to monitor the fair, efficient and openly competitive operation of all electricity markets within the province. The Market Monitor is a weekly publication by the MSA intended to educate industry participants and the public on market activities for the previous week. Any questions regarding the material in this publication should be directed to MSA staff. Our contact information is available on the MSA website: www.albertamsa.ca

Gas Price

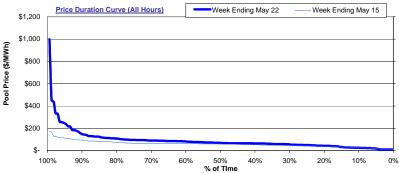
Wholesale Market

Weekly Marke	t Sta	tistics																			
		Sunday	Monday		Tuesday		Wednesday		Thursday		Friday		Saturday		Average		Last		% Change	YTD	
	16-May		17-May		18-May		19-May		20-May		21-May		22-May		Average		Week		% Change	110	
Pool Price																					
Average	\$	86.56	\$	158.78	\$	110.49	\$	57.90	\$	72.36	\$	72.62	\$	73.25	\$	90.28	\$	58.70	53.8%	\$	52.62
On-Peak		NA	\$	207.09	\$	152.39	\$	68.78	\$	91.99	\$	87.11	\$	74.87	\$	113.70	\$	67.84	67.6%	\$	60.93
Off-Peak	\$	86.56	\$	62.17	\$	26.68	\$	36.16	\$	33.10	\$	43.63	\$	70.01	\$	59.05	\$	46.50	27.0%	\$	37.42
COV		0.59		1.29		1.03		0.49		0.71		0.37		0.33		0.69		0.44	56.8%		
Demand																					
Average		6,731		7,166		7,257		7,213		7,208		7,161		6,776		7,073		7,067	0.1%		7,408
Minimum		6,172		6,271		6,372		6,440		6,394		6,468		6,339		6,351		6,395	-0.7%		6,094
Maximum		7,090		7,800		7,895		7,741		7,692		7,715		7,165		7,585		7,496	1.2%		8,967
Coal Unit Ava	ilabili	ity																			
Average		4,421		4,610		4,858		4,759		4,668		4,329		4,123		4,538		4,629			5,089
Utilization		80%		84%		88%		86%		85%		78%		75%		82%		84%	-1.7%		92%
Gas and Hydr	o Uni	t Availabil	ity																		
Average		2,087		2,212		2,139		2,250		2,365		2,778		2,758		2,370		2,276			2,208
Utilization		44%		46%		45%		47%		50%		58%		58%		42%		40%	1.7%		39%



The Daily Pool Price graph plots the daily range in hourly Pool price (defined by the blue box) along with the daily average and daily on and off-peak prices. The on-peak Pool price for the week was \$113.70/MWh while the off-peak Pool price for the week was \$59.05/MWh.

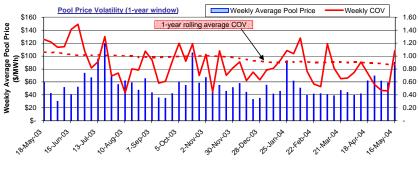
Note: Sundays and most statutory holidays are defined as off-peak.



The price duration curves show the % of time that prices were at or below a certain value during the week.

For the week ending May 22, prices were at or below:

\$20/MWh 5% of the time \$50/MWh 26% of the time \$100/MWh 77% of the time \$250/MWh 95% of the time \$500/MWh 99% of the time



The chart plots average weekly **Pool Price** and the **Coefficient of Variation** (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.

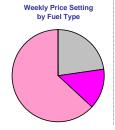
Pool price volatility increased for the week ending May 22 from the previous week.

Pool price volatility also moved **above** the 1-year rolling average COV value.

Market Share Statistics By Fuel Type:

□Coal □Gas - Cogen □Gas - Other □Hydro □Other

Weekly Generation by Fuel Type



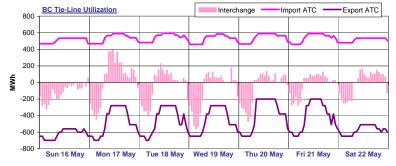
By Submitting Customer:



Last week, coal units were responsible for 79.1% of the generation in the province and set price 22.7% of the time. Gas-cogen units accounted for 12.4% of the generation and set price 14.1% of the time last week while other gas units made up 4.3% of generation and set price 63.1% of the time

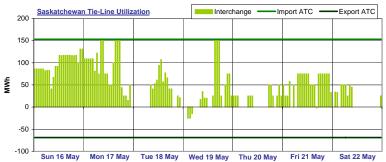
A total of 12 market participants set price last week. One market participant set price more than 20% of the time last week. The top price setter set price 40.8% of the time and the top five price setters set price a total of 76.9% of the time.

Interties



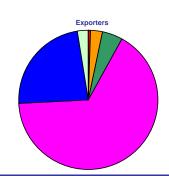
BC import capacity was 9% utilized last week while BC export capacity was 14% utilized. Energy was being imported into Alberta over the BC tie-line 59% of the time and exported out of Alberta over the BC tie-line 40% of the time last week. There was no activity on the BC tie-line 1% of the time last week.

Note: External reserve contract volumes have been subtracted from the BC import ATC as this capacity is not available to import energy into Alberta.



Saskatchewan import capacity was 31% utilized last week while Saskatchewan export capacity was 1% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 68% of the time and exported out of Alberta over the Saskatchewan tie-line 2% of the time last week. There was no activity on the Saskatchewan tie-line 29% of the time last week.

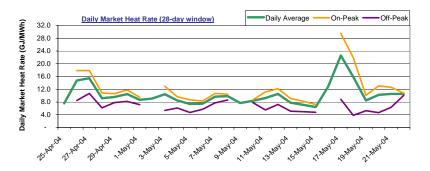




Last week, there were a total of 7 importers. The most active importer had a market share of 31.7% while the second most active importer had a market share of 23.4%. There were a total of 7 exporters last week. The most active exporter had a market share of 66.2% while the next largest exporter had a market share of 23.3%.

Note: Market shares are based on the combined activity on both interties.

Market Heat Rates



Over the past 28 days, the daily Market Heat Rate averaged 10.2 GJ/Mwh and ranged from a low of 6.4 GJ/MWh to a high of 22.6 GJ/MWh.

The daily On-Peak Market Heat Rate for the last 28 days averaged 12.2 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 6.7 GJ/MWh.

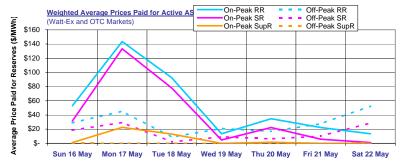
	Spa	arkspreads									_						
	AECO-C Daily Avera			ily Average	on-Peak						Off-Peak						
	Gas Price		Pool Price		Sparkspread (\$/MWh)			ool Price	Sparkspread (\$/MWh)			ool Price	Sparkspread (\$/MWh)				
Date	(\$/GJ)		(\$/MWh)		HR=7.5	HR=10.0	(\$/MWh)		HR=7.5	HR=7.5 HR=10.0		(\$/MWh)	HR=7.5	HR=10.0			
Sun 16 May	\$	6.75	\$	86.56	35.94	19.07		NA	NA	NA	\$	86.56	35.94	19.07			
Mon 17 May	\$	7.03	\$	158.78	106.08	88.51	\$	207.09	154.39	136.82	\$	62.17	9.46	(8.11)			
Tue 18 May	\$	6.97	\$	110.49	58.18	40.75	\$	152.39	100.09	82.65	\$	26.68	(25.63)	(43.06)			
Wed 19 May	\$	6.83	\$	57.90	6.65	(10.44)	\$	68.78	17.52	0.43	\$	36.16	(15.09)	(32.18)			
Thu 20 May	\$	7.07	\$	72.36	19.37	1.71	\$	91.99	39.00	21.33	\$	33.10	(19.89)	(37.55)			
Fri 21 May	\$	6.88	\$	72.62	21.01	3.81	\$	87.11	35.50	18.30	\$	43.63	(7.97)	(25.18)			
Sat 22 May	\$	6.96	\$	73.25	21.06	3.67	\$	74.87	22.68	5.29	\$	70.01	17.83	0.43			

Daily average sparkspreads last week were all positive for a heat rate of 7.5 GJ/MWh and mostly positive for a heat rate of 10.0 GJ/MWh.

On-peak sparkspreads last week were all positive for a heat rate of 7.5 GJ/MWh and all positive for a heat rate of 10.0 GJ/MWh.

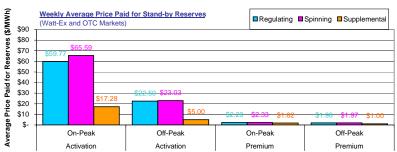
Off-peak sparkspreads last week were mostly negative for a heat rate of 7.5 GJ/MWh and mostly negative for a heat rate of 10.0 GJ/MWh.

Ancillary Services Market

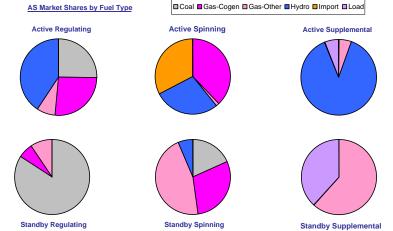


Average on-peak prices paid for active ancillary services last week were \$53.17/MWh, \$39.79/MWh and \$5.56/MWh respectively for active regulating, spinning and supplemental reserves.

Active average off-peak prices were somewhat lower and averaged \$28.66/MWh, \$14.51/MWh and \$0.24/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$5.00/MWh for off-peak supplemental reserves to \$65.59/MWh for on-peak spinning reserves. Weekly average premium prices ranged from \$1.00/MWh for off-peak supplemental reserves up to \$2.33/MWh for on-peak spinning reserves.



Last week hydro units had the largest market share in the active regulating reserve market with 40.8%. In the active spinning reserve market, gas-cogen units had the leading market share with 37.9% while in the active supplemental reserve market, hydro units dominated with a 88.3% market share.

Coal units dominated the standby regulating reserve market with a 84.2% market share. Leading market share in the standby spinning market was held by gas-other units with a 46.0% market share. In the standby supplemental reserve market, gas-other units had the leading market share with 61.6%,

Glossary

HE	Hour Ending									
On-Peak Hours	In Alberta: HE08 through HE23, Monday through Saturday (prevailing Mountain time) In MAPP-N: HE08 through HE23, Monday through Saturday (prevailing Pacific time) HE08 through HE23, Monday through Sunday (prevailing Central time)									
Off-Peak Hours	In Alberta: HE01 through HE07 + HE24 (of the same day), Monday through Saturday + HE01 through HE24 Sundays + holidays (prevailing Mountian time) HE24 (of the previous day) through HE07 (of the day in question), Monday through Saturday + HE01 through HE24 Sundays + holidays (prevailing Pacific time) HE24 (of the previous day) through HE07 (of the day in question), Monday through Sunday (prevailing Central time)									
COV	Coefficient of Variation The standard deviation of a series of numbers divided by the mean of the same series of numbers. Used as a measure of volatility.									
ATC	Available Transfer Capacity A measure of the maximum energy flow possible in one direction across an intertie.									
Market Heat Rate	The prevailing Pool price divided by the prevailing gas price.									
Sparkspread	Sparkspreads give an indication of the revenue available to cover costs after fuel costs have been paid. A positive spread indicates it is more economical to buy gas and generate electricity while a negative spread indicates it is more economical to buy electricity from the grid.									

