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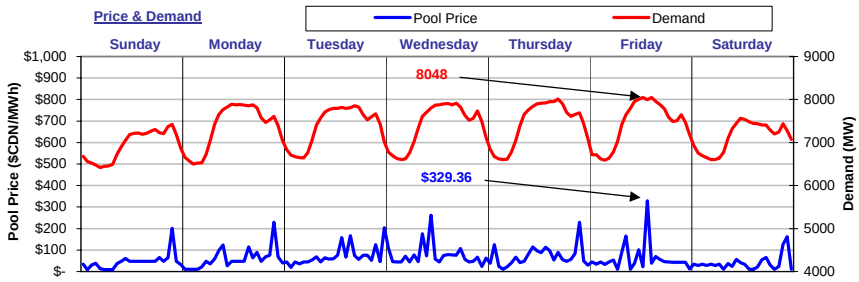
The Market Monitor

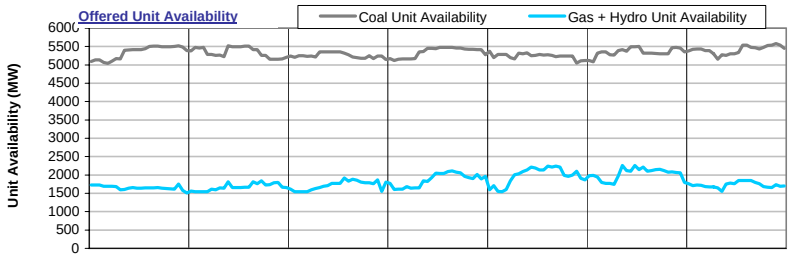
WATCHING THE MARKET : your fact source

Week Ending April 23, 2005

Weekly Highlights

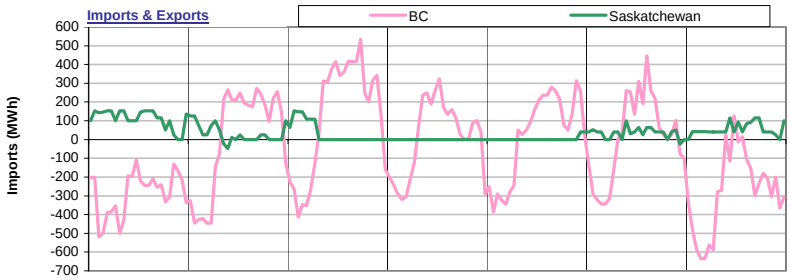


For the week ending April 23, 2005, Pool Price averaged $60.86/MWh and ranged from a minimum of $8.92/MWh in HE08 on Sunday to a maximum of $329.36/MWh in HE14 on Friday.
Demand reached a high of 8048 MW in HE13 on Friday and a low of 6417 MW in HE035 on Sunday. Average demand for the week was 7304MW.
Pool Price and Demand were positively correlated last week with an R-squared value of 0.17.

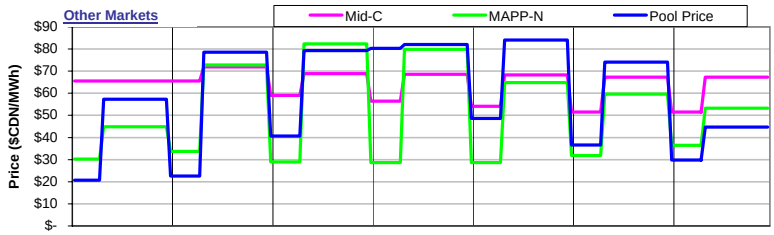


Coal Unit Availability averaged 5329 MW last week. This is an equivalent availability of 91% (based on MCR).
Gas and Hydro Unit Availability averaged 1808MW last week, which is an equivalent of 32% (based on MCR).

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

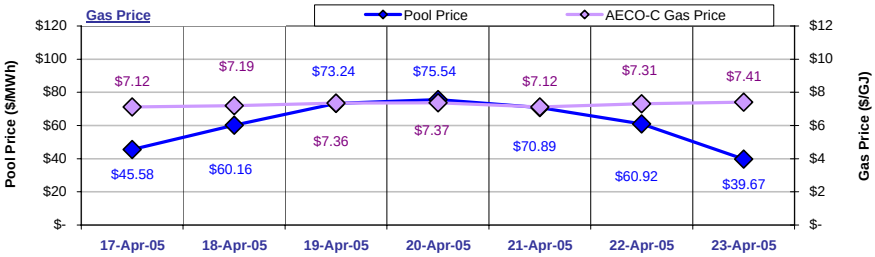


Alberta was a net exporter to BC last week with total net exports equal to 9,319MWh.
Alberta was a net importer from Saskatchewan last week with total net imports equal to 6,472MWh.
Overall, Alberta net exported 2,847MWh of electricity last week.



Pool Prices were generally lower than prices in Mid-C and higher than prices in MAPP-N last week.
Mid-C prices averaged $68.70/MWh on-peak and $57.70/MWh off-peak.
MAPP-N prices averaged $68.76/MWh on-peak and $31.22/MWh off-peak.

Prices in $CDN at an exchange rate of 1.247.



The average AECO-C Gas Price last week was $7.27/GJ and ranged from a minimum of $7.12/GJ to $7.41/GJ.
Prevailing gas prices resulted in market heat rates ranging from a low of 5.35GJ/MWh to a high of 10.25GJ/MWh
The average market heat rate for the week was 8.37GJ/MWh.

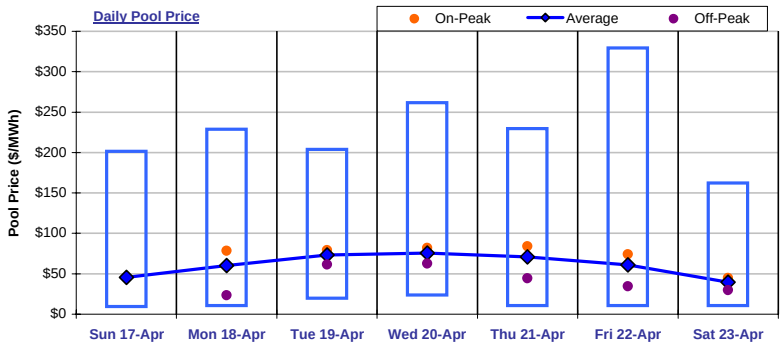
MARKET SURVEILLANCE ADMINISTRATOR

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

Wholesale Market

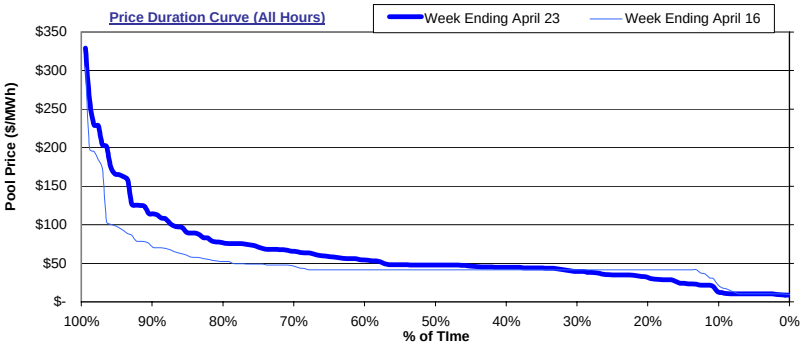
Weekly Market Statistics

	Sunday 17-Apr	Monday 18-Apr	Tuesday 19-Apr	Wednesday 20-Apr	Thursday 21-Apr	Friday 22-Apr	Saturday 23-Apr	Average	Last Week	% Change	YTD
Pool Price											
Average	$ 45.58	$ 60.16	$ 73.24	$ 75.54	$ 70.89	$ 60.92	$ 39.67	$ 60.86	$ 49.22	23.6%	$ 47.73
On-Peak	NA	$ 78.54	$ 79.25	$ 82.02	$ 84.12	$ 74.11	$ 44.73	$ 73.80	$ 55.62	32.7%	$ 53.11
Off-Peak	$ 45.58	$ 23.39	$ 61.21	$ 62.57	$ 44.45	$ 34.54	$ 29.54	$ 43.61	$ 40.68	7.2%	$ 37.86
COV	0.82	0.79	0.61	0.66	0.65	1.08	0.90	0.79	0.33	136.7%	
Demand											
Average	6,942	7,371	7,389	7,407	7,440	7,437	7,138	7,304	7,187	1.6%	7,489
Minimum	6,417	6,503	6,645	6,602	6,606	6,586	6,601	6,566	6,478	1.3%	6,017
Maximum	7,419	7,891	7,856	7,912	8,013	8,048	7,562	7,814	7,646	2.2%	9,236
Coal Unit Availability											
Average	5,346	5,347	5,256	5,349	5,242	5,348	5,415	5,329	4,946		5,352
Utilization	92%	92%	90%	92%	90%	92%	93%	91%	85%	6.6%	92%
Gas and Hydro Unit Availability											
Average	1,653	1,672	1,718	1,872	1,979	2,033	1,732	1,808	1,926		2,254
Utilization	35%	35%	36%	39%	42%	43%	36%	32%	34%	-2.1%	40%



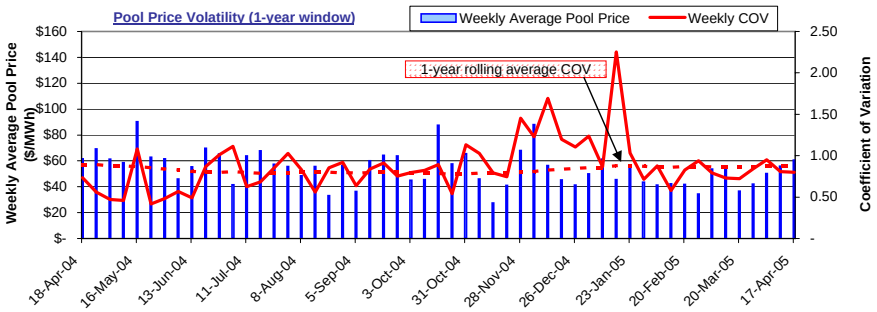
The Daily Pool Price graph plots the daily range in hourly Pool price (defined by the blue box) along with the daily average and daily on and off-peak prices. The on-peak Pool price for the week was $73.80/MWh while the off-peak Pool price for the week was $43.61/MWh.

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 April 23, prices were at or below:

$20/MWh	11% of the time
$50/MWh	57% of the time
$100/MWh	87% of the time
$250/MWh	98% of the time
$500/MWh	100% of the time



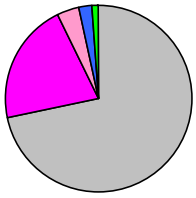
The chart plots average weekly Pool Price and the Coefficient of Variation (COV) of hourly Pool prices for the week. The COV is a standard statistical measure of volatility.
Pool price volatility decreased for the week ending April 23 from the previous week.
Pool price volatility also moved below the 1-year rolling average COV value.

Market Share Statistics

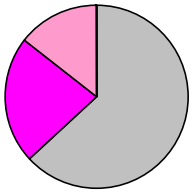
By Fuel Type:

Coal | Gas - Cogen | Gas - Other | Hydro | Other

Weekly Generation by Fuel Type

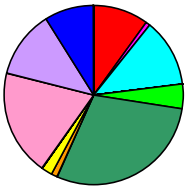


Weekly Price Setting by Fuel Type



By Submitting Customer:

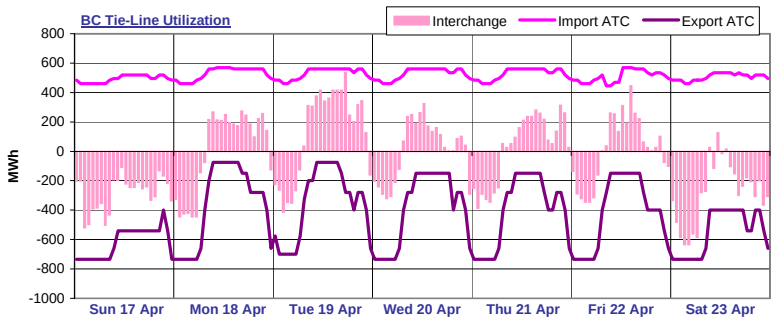
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for 71.5% of the generation in the province and set price 63.1% of the time. Gas-cogen units accounted for 21.1% of the generation and set price 22.4% of the time last week while other gas units made up 3.9% of generation and set price 14.4% of the time.

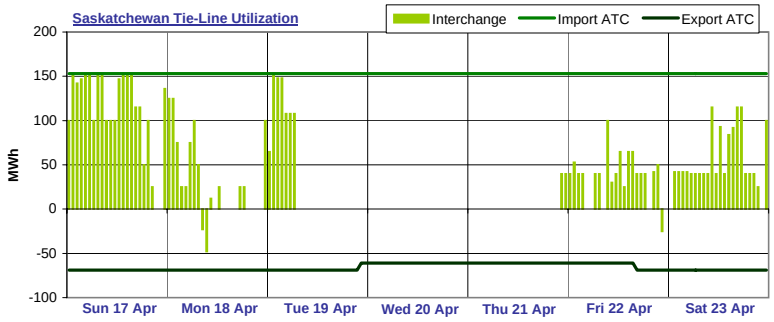
A total of 10 market participants set price last week. One market participants set price more than 20% of the time last week. The top price setter set price 29.2% of the time and the top five price setters set price a total of 83.0% of the time.

Interties

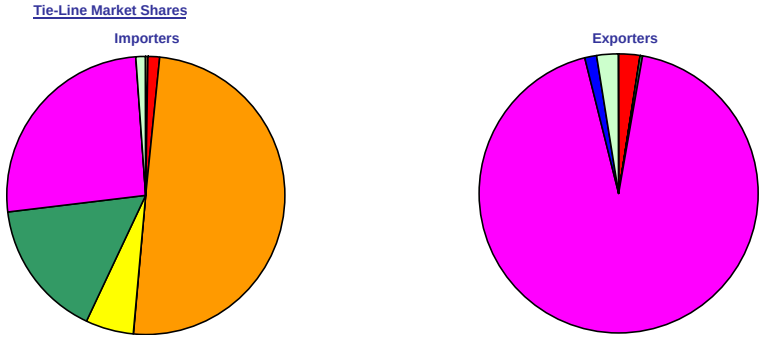


BC import capacity was 17% utilized last week while BC export capacity was 23% utilized. Energy was being imported into Alberta over the BC tie-line 49% of the time and exported out of Alberta over the BC tie-line 51% of the time last week. There was no activity on the BC tie-line 0% of the time last 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.



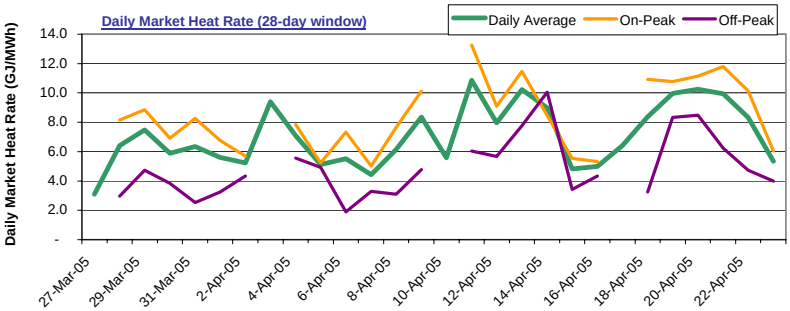
Saskatchewan import capacity was 26% utilized last week while Saskatchewan export capacity was 1% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 50% of the time and exported out of Alberta over the Saskatchewan tie-line 2% of the time last week. There was no activity on the Saskatchewan tie-line 48% of the time last week.



Last week, there were a total of 8 importers. The most active importer had a market share of 49.8% while the second most active importer had a market share of 25.9%. There were a total of 6 exporters last week. The most active exporter had a market share of 93.5% while the next largest exporter had a market share of 2.6%.

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 7.1 GJ/Mwh and ranged from a low of 3.1 GJ/MWh to a high of 10.9 GJ/MWh.
The daily On-Peak Market Heat Rate for the last 28 days averaged 8.4 GJ/MWh while the daily Off-Peak Market Heat Rate averaged 4.9 GJ/MWh.

Sparkspreads

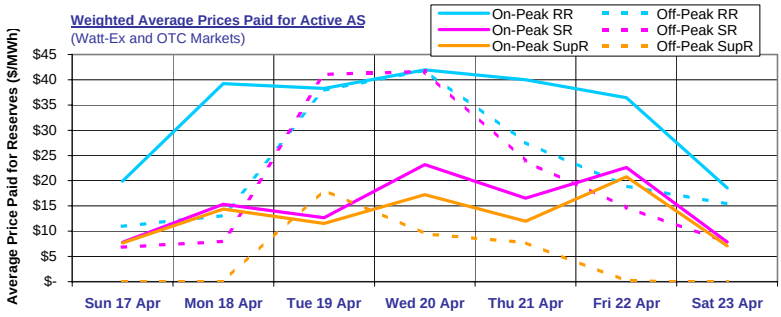
	AECO-C	Daily Average			On-Peak			Off-Peak		
	Gas Price	Pool Price	Sparkspread ($/MWh)		Pool Price	Sparkspread ($/MWh)		Pool Price	Sparkspread ($/MWh)	
Date	($/GJ)	($/MWh)	HR=7.5	HR=10.0	($/MWh)	HR=7.5	HR=10.0	($/MWh)	HR=7.5	HR=10.0
Sun 17 Apr	$ 7.12	$ 45.58	(7.80)	(25.59)	NA	NA	NA	$ 45.58	(7.80)	(25.59)
Mon 18 Apr	$ 7.19	$ 60.16	6.26	(11.71)	$ 78.54	24.64	6.67	$ 23.39	(30.51)	(48.47)
Tue 19 Apr	$ 7.36	$ 73.24	18.07	(0.31)	$ 79.25	24.09	5.70	$ 61.21	6.04	(12.35)
Wed 20 Apr	$ 7.37	$ 75.54	20.29	1.87	$ 82.02	26.77	8.35	$ 62.57	7.32	(11.10)
Thu 21 Apr	$ 7.12	$ 70.89	17.47	(0.34)	$ 84.12	30.69	12.88	$ 44.45	(8.98)	(26.79)
Fri 22 Apr	$ 7.31	$ 60.92	6.06	(12.23)	$ 74.11	19.25	0.96	$ 34.54	(20.33)	(38.61)
Sat 23 Apr	$ 7.41	$ 39.67	(15.91)	(34.44)	$ 44.73	(10.85)	(29.38)	$ 29.54	(26.04)	(44.56)

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

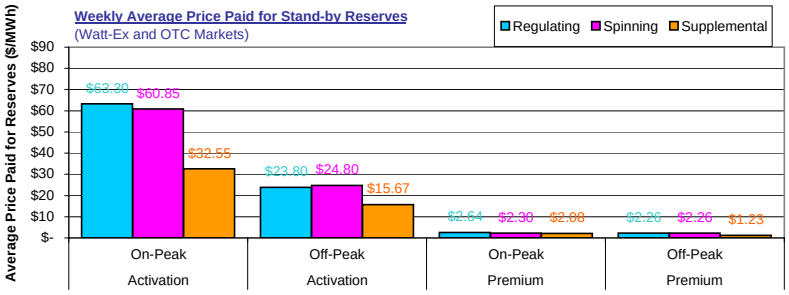
On-peak sparkspreads last week were mostly positive for a heat rate of 7.5 GJ/MWh and mostly positive for a heat rate of 10.0 GJ/MWh.

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

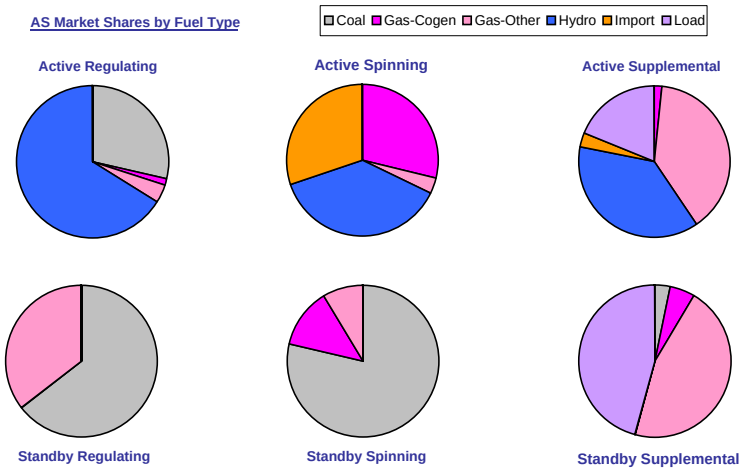
Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were $33.47/MWh, $15.28/MWh and $13.07/MWh respectively for active regulating, spinning and supplemental reserves.
Active average off-peak prices were somewhat lower and averaged $23.65/MWh, $20.58/MWh and $5.07/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from $15.67/MWh for off-peak supplemental reserves to $63.30/MWh for on-peak regulating reserves.
Weekly average premium prices ranged from $1.23/MWh for off-peak supplemental reserves up to $2.64/MWh for on-peak regulating reserves.



Last week hydro units had the largest market share in the active regulating reserve market with 66.1%. In the active spinning reserve market, hydro units had the leading market share with 37.6% while in the active supplemental reserve market, gas units dominated with a 38.7% market share.

Coal units dominated the standby regulating reserve market with a 64.5% market share. Leading market share in the standby spinning market was held by Coal units with a 78.7% market share. In the standby supplemental reserve market, load had the leading market share with 45.7%.

Glossary

HE	Hour Ending
On-Peak Hours	In Alberta: HE08 through HE23, Monday through Saturday (prevailing Mountain time) In Mid-C: HE07 through HE22, Monday through Saturday (prevailing Pacific time) In MAPP-N: 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) In Mid-C: HE24 (of the previous day) through HE07 (of the day in question), Monday through Saturday + HE01 through HE24 Sundays + holidays (prevailing Pacific time) In MAPP-N: 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.

MARKET SURVEILLANCE ADMINISTRATOR

For helpful suggestions on how to interpret information in the Market Monitor, please refer to: www.albertamsa.ca/files/MMhelp.pdf