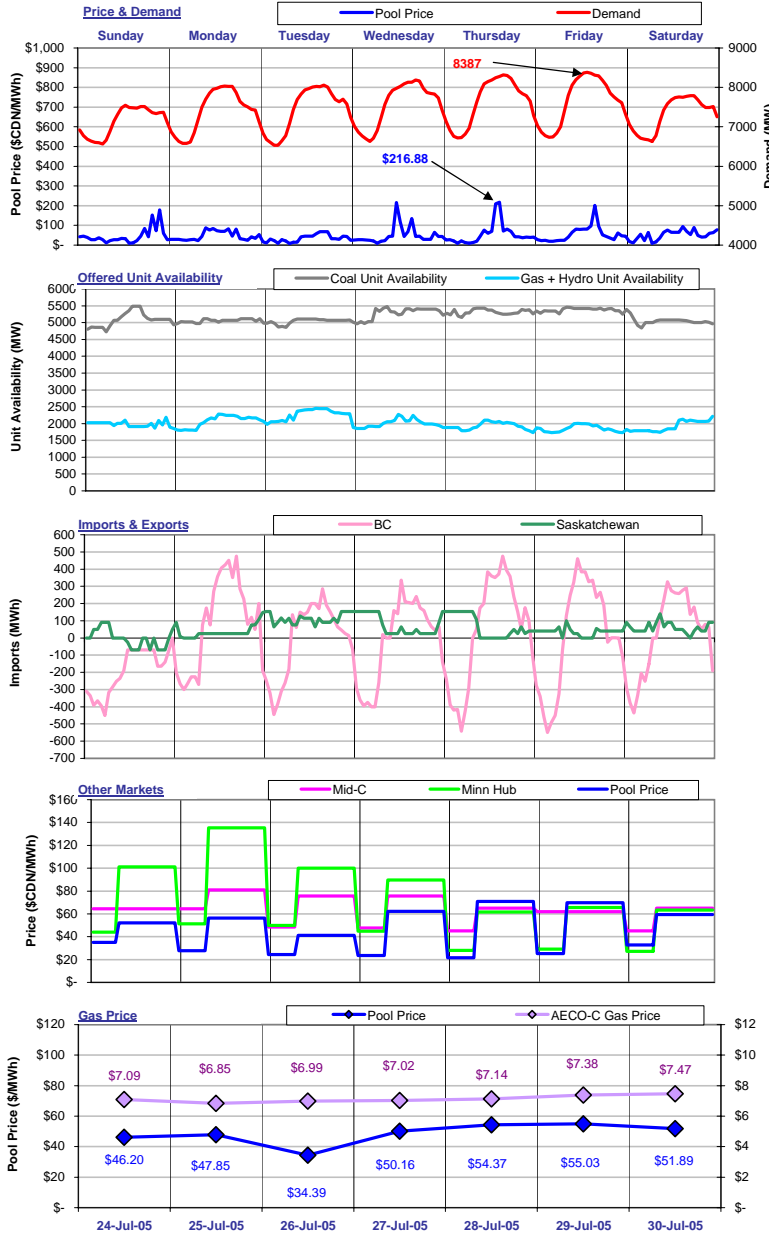


# The Market Monitor

WATCHING THE MARKET : your fact source

Week Ending July 30, 2005

## Weekly Highlights



For the week ending July 30, 2005, **Pool Price** averaged \$48.56/MWh and ranged from a minimum of \$8.87/MWh in HE08 on Tuesday to a maximum of \$216.88/MWh in HE15 on Thursday. **Demand** reached a high of 8387 MW in HE14 on Friday and a low of 6532 MW in HE05 on Tuesday. Average demand for the week was 7450MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.30.

**Coal Unit Availability** averaged 5174 MW last week. This is an equivalent availability of 89% (based on MCR). **Gas and Hydro Unit Availability** averaged 2003MW last week, which is an equivalent of 35% (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 1,575MWh. Alberta was a net importer from **Saskatchewan** last week with total imports equal to 9,143MWh. Overall, Alberta imported 7,567MWh of electricity last week.

**Pool Prices** were generally lower than prices in **Mid-C** and lower than prices in **Minn Hub** last week. **Mid-C** prices averaged \$70.72/MWh on-peak and \$53.83/MWh off-peak. **Minn Hub** prices averaged \$85.93/MWh on-peak and \$39.20/MWh off-peak.

Prices in \$CDN at an exchange rate of 1.219¢.

The average **AECO-C Gas Price** last week was \$7.13/GJ and ranged from a minimum of \$6.85/GJ to \$7.47/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 4.92GJ/MWh to a high of 7.62GJ/MWh. The average market heat rate for the week was 6.80GJ/MWh.

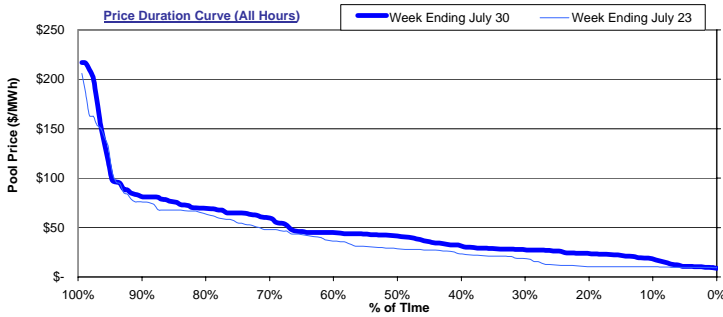


Alberta's Market Surveillance Administrator is in place to monitor the fair, efficient and openly competitive operation of all electricity markets within the province. The Market Monitor is a weekly publication by the MSA intended to educate industry participants and the public on market activities for 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](http://www.albertamsa.ca)

# Wholesale Market

## Weekly Market Statistics

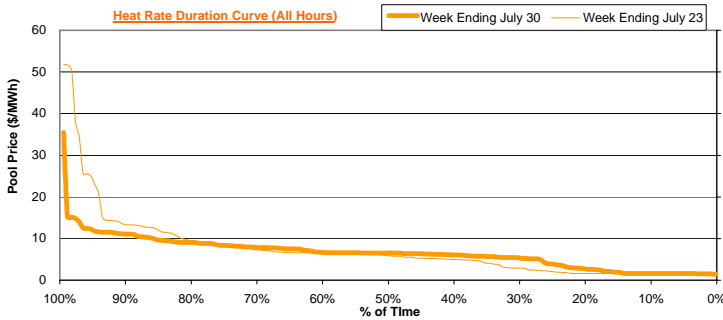
	Sunday 24-Jul	Monday 25-Jul	Tuesday 26-Jul	Wednesday 27-Jul	Thursday 28-Jul	Friday 29-Jul	Saturday 30-Jul	Average	Last Week	% Change	YTD
<b>Pool Price</b>											
Average	\$ 46.20	\$ 47.85	\$ 34.39	\$ 50.16	\$ 54.37	\$ 55.03	\$ 51.89	\$ 48.56	\$ 39.99	21.4%	\$ 47.04
On-Peak	NA	\$ 56.24	\$ 41.27	\$ 62.25	\$ 71.01	\$ 69.66	\$ 59.41	\$ 59.97	\$ 47.75	25.6%	\$ 55.65
Off-Peak	\$ 46.20	\$ 31.07	\$ 20.64	\$ 25.99	\$ 21.10	\$ 25.78	\$ 36.84	\$ 33.33	\$ 29.63	12.5%	\$ 33.04
COV	0.89	0.49	0.54	0.91	0.99	0.73	0.46	0.72	0.86	-16.8%	
<b>Heat Rate</b>											
Average	6.52	6.99	4.92	7.15	7.62	7.46	6.95	6.80	5.61	21.2%	6.90
On-Peak	NA	8.21	5.91	8.87	9.95	9.44	7.95	8.39	6.67	25.7%	8.21
Off-Peak	6.52	4.54	2.95	3.70	2.96	3.49	4.93	4.68	4.15	12.7%	5.22
<b>Demand</b>											
Average	7,137	7,404	7,432	7,563	7,633	7,663	7,319	7,450	7,469	-0.3%	7,461
Minimum	6,567	6,580	6,532	6,630	6,717	6,736	6,630	6,627	6,641	-0.2%	6,017
Maximum	7,551	8,031	8,058	8,190	8,316	8,387	7,789	8,046	8,062	-0.2%	9,236
<b>Coal Unit Availability</b>											
Average	5,086	5,055	5,041	5,291	5,316	5,379	5,051	5,174	5,308		5,239
Utilization	87%	87%	86%	91%	91%	92%	86%	89%	91%	-2.3%	90%
<b>Gas and Hydro Unit Availability</b>											
Average	1,981	2,073	2,258	2,010	1,927	1,853	1,921	2,003	2,023		2,133
Utilization	42%	44%	47%	42%	40%	39%	40%	35%	36%	-0.4%	38%



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

For the week ending July 30, prices were at or below:

- \$20/MWh 13% of the time
- \$50/MWh 67% of the time
- \$100/MWh 95% of the time
- \$250/MWh 100% of the time
- \$500/MWh 100% of the time



The heat rate duration curves show the % of time that the implied market heat rate was at or below a certain value during the week. For the week ending July 30, implied market heat rates were at or below:

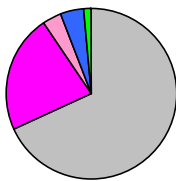
- 5.0 GJ/MWh 27% of the time
- 10.0 GJ/MWh 86% of the time
- 15.0 GJ/MWh 98% of the time
- 20.0 GJ/MWh 99% of the time

### Market Share Statistics

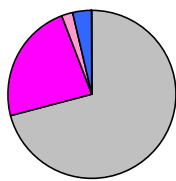
By Fuel Type:



Weekly Generation by Fuel Type

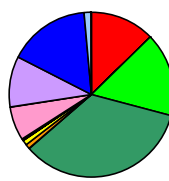


Weekly Price Setting by Fuel Type



By Submitting Customer:

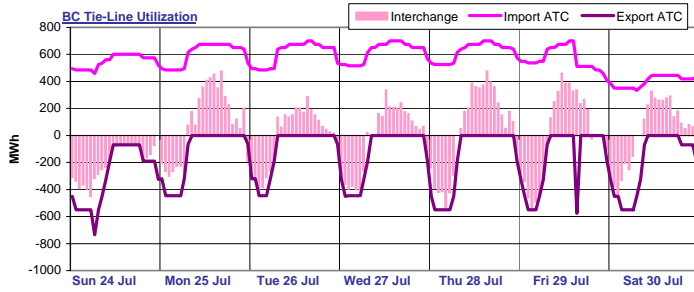
Weekly Price Setting by Submitting Customer



Last week, coal units were responsible for 68.1% of the generation in the province and set price 70.8% of the time. Gas-cogen units accounted for 22.4% of the generation and set price 23.3% of the time last week while other gas units made up 3.7% of generation and set price 2.1% of the time.

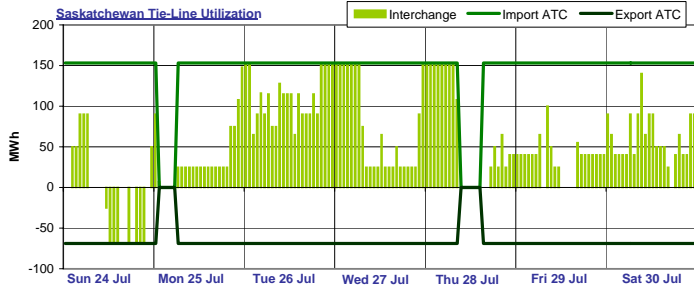
A total of 11 market participants set price last week. One market participants set price more than 20% of the time last week. The top price setter set price 22.5% of the time and the top five price setters set price a total of 79.9% of the time.

# Interties

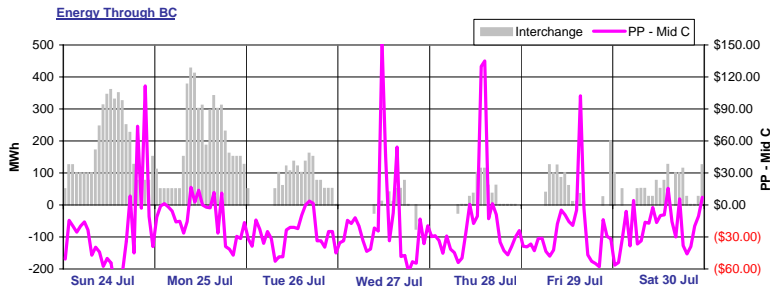


BC import capacity was 17% utilized last week while BC export capacity was 70% utilized. Energy was being imported into Alberta over the BC tie-line 52% of the time and exported out of Alberta over the BC tie-line 44% of the time last week. There was no activity on the BC tie-line 4% of the time last 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.

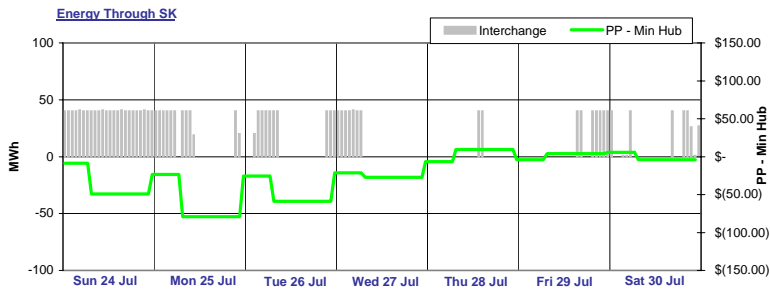


Saskatchewan import capacity was 40% utilized last week while Saskatchewan export capacity was 5% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 79% of the time and exported out of Alberta over the Saskatchewan tie-line 5% of the time last week. There was no activity on the Saskatchewan tie-line 17% of the time last week.



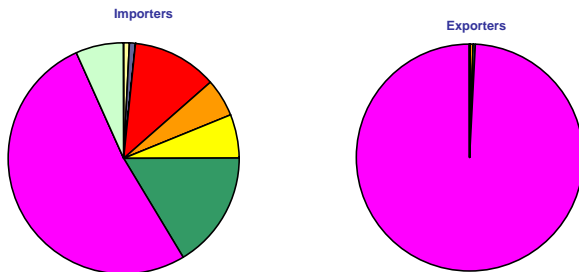
Last week, Alberta spot prices were mostly lower relative to prices in the Pacific Northwest as represented by Mid-C index prices, supporting export activity across the Alberta BC interconnection.

Alberta prices were generally lower than prices in MAPP as represented by spot prices at the Minnesota Hub, which generally supported export activity across the Alberta - Saskatchewan interconnection.



Note: Dow Jones hourly Mid-C index used in energy through BC graph; Platt's day-ahead strip for Min Hub used in energy through SK graph.

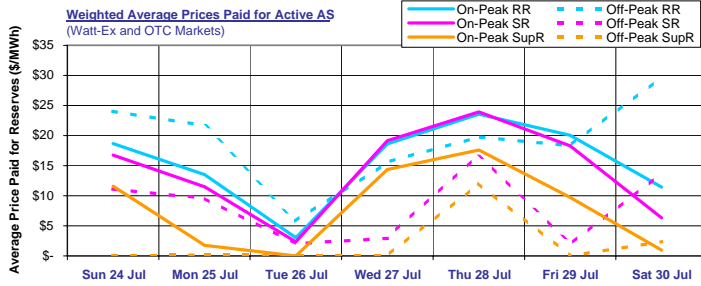
## Tie-Line Market Shares



Last week, there were a total of 8 importers. The most active importer had a market share of 31.4% while the second most active importer had a market share of 30.5%. There were a total of 6 exporters last week. The most active exporter had a market share of 82.0% while the next largest exporter had a market share of 5.9%.

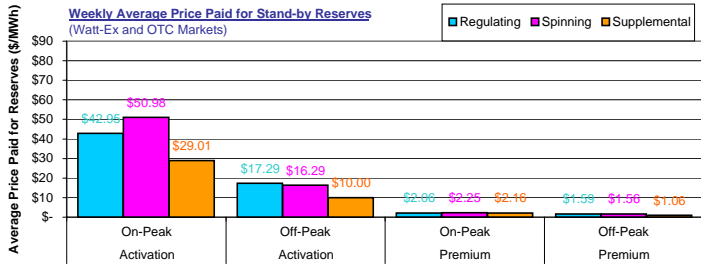
Note: Market shares are based on the combined activity on both interties.

# Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$15.56/MWh, \$14.04/MWh and \$7.97/MWh respectively for active **regulating**, **spinning** and **supplemental** reserves.

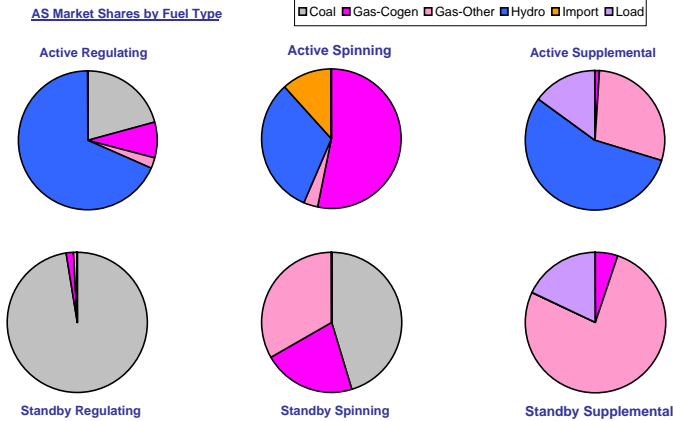
Active average off-peak prices were somewhat lower and averaged \$19.00/MWh, \$6.03/MWh and \$0.36/MWh for active **regulating**, **spinning** and **supplemental** reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$10.00/MWh for **off-peak supplemental** reserves to \$50.98/MWh for **on-peak spinning** reserves.

Weekly average premium prices ranged from \$1.06/MWh for **off-peak supplemental** reserves up to \$2.25/MWh for **on-peak spinning** reserves.

**AS Market Shares by Fuel Type**



Last week **hydro** units had the largest market share in the **active regulating** reserve market with 68.4%. In the **active spinning** reserve market, **hydro** units had the leading market share with 53.0% while in the **active supplemental** reserve market, **hydro** units dominated with a 55.3% market share.

Coal units dominated the **standby regulating** reserve market with a 97.6% market share. Leading market share in the **standby spinning** market was held by **gas** units with a 45.4% market share. In the **standby supplemental** reserve market, **gas** units had the leading market share with 76.6%.

## 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 Minn Hub: 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 Mountain 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 Minn Hub: 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.
- Sparks spread** Sparks spreads 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.