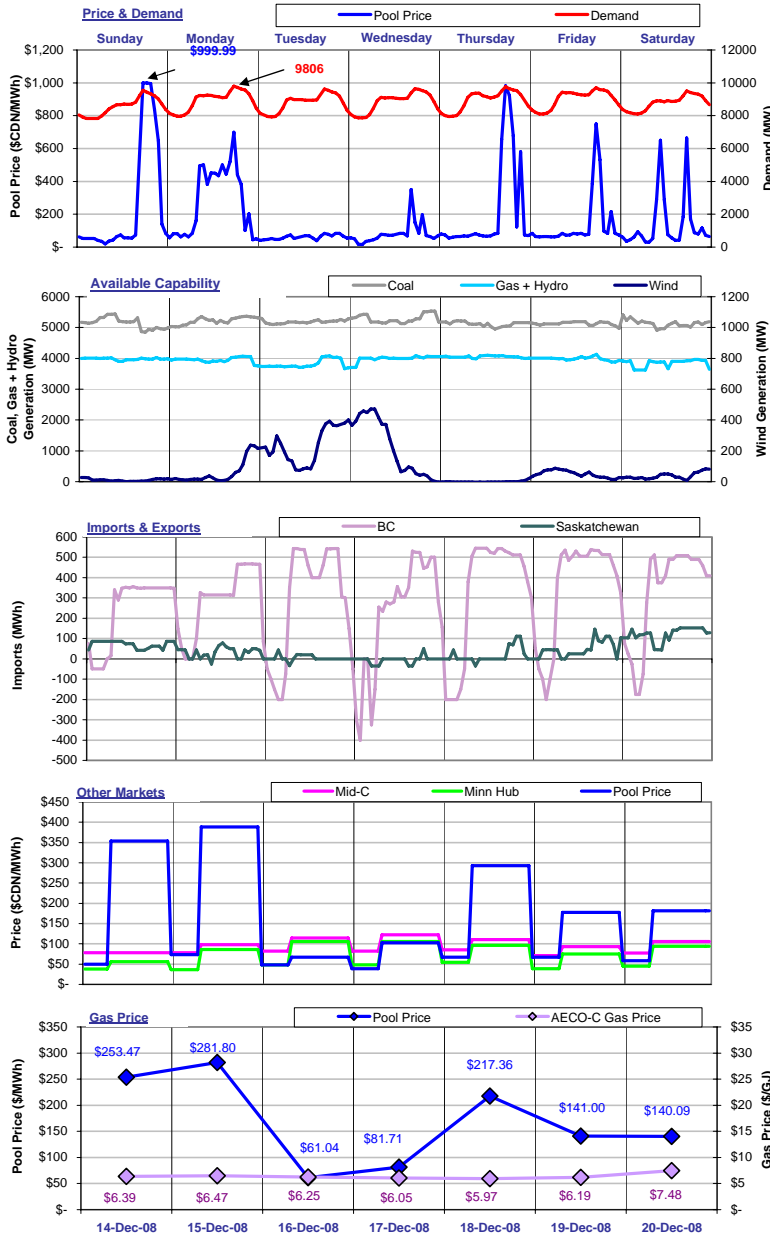


# The Market Monitor

WATCHING THE MARKET : your fact source

Week Ending December 20, 2008

## Weekly Highlights



For the week ending December 20, 2008, **Pool Price** averaged \$168.07/MWh and ranged from a minimum of \$14.90/MWh in HE04 on Wednesday to a maximum of \$999.99/MWh in HE18 on Sunday. **Demand** reached a high of 9806 MW in HE18 on Monday and a low of 7829 MW in HE05 on Sunday. Average demand for the week was 8837 MW. **Pool Price** and **Demand** were positively correlated last week with an R-squared value of 0.24.

**Coal Unit Availability** averaged 5175MW last week. This is an equivalent availability of 86%. **Gas, Hydro and Other Unit Availability** averaged 3947 MW last week, which is an equivalent of 77%. **Wind Generation** averaged 88 MW last week. This is an equivalent availability of 18%. Availability numbers are based on MW offered into the energy merit order.

Alberta was a net importer from BC last week with total imports equal to 19,015 MWh. Alberta was a net importer from Saskatchewan last week with total imports equal to 15,307 MWh. Overall, Alberta imported 34,322 MWh of electricity last week.

**Pool Prices** were generally higher than prices in **Mid-C** and higher than prices in **Minn Hub** last week. **Mid-C** prices averaged \$107.39/MWh on-peak and \$79.09/MWh off-peak. **Minn Hub** prices averaged \$93.86/MWh on-peak and \$44.10/MWh off-peak.

Prices in \$CDN at an exchange rate of 1.2473

The average **AECO-C Gas Price** last week was \$640/GJ and ranged from a minimum of \$5.97/GJ to \$7.48/GJ. Prevailing gas prices resulted in market heat rates ranging from a low of 9.77GJ/MWh to a high of 43.57 GJ/MWh. The average market heat rate for the week was 26.35GJ/MWh.

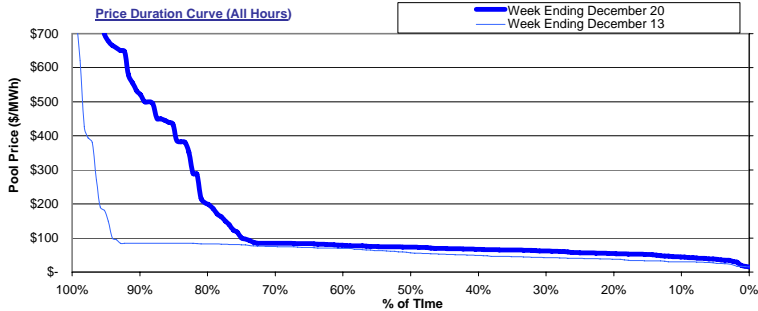


Alberta's Market Surveillance Administrator is in place to monitor the fair, efficient and openly competitive operation of all electricity markets within the province. The Market Monitor is a weekly publication by the MSA intended to educate industry participants and the public on market activities for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

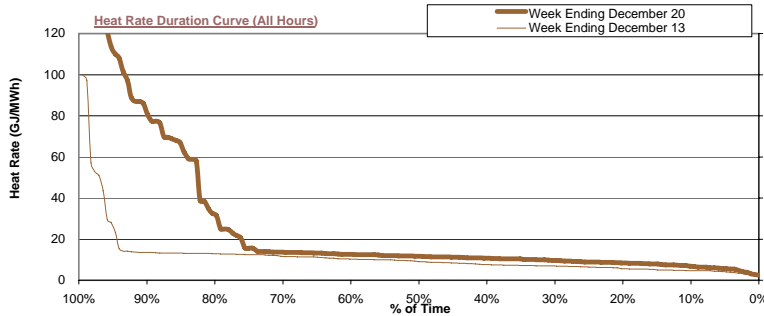
	Sunday 14-Dec	Monday 15-Dec	Tuesday 16-Dec	Wednesday 17-Dec	Thursday 18-Dec	Friday 19-Dec	Saturday 20-Dec	Average	Last Week	% Change	YTD
<b>Pool Price</b>											
Average	\$ 253.47	\$ 281.80	\$ 61.04	\$ 81.71	\$ 217.36	\$ 141.00	\$ 140.09	\$ 168.07	\$ 73.37	129.1%	\$ 90.89
On-Peak	NA	\$ 388.03	\$ 67.29	\$ 102.30	\$ 292.50	\$ 177.85	\$ 181.51	\$ 201.58	\$ 84.66	138.1%	\$ 118.88
Off-Peak	\$ 253.47	\$ 69.32	\$ 48.54	\$ 40.55	\$ 67.07	\$ 67.28	\$ 57.25	\$ 123.38	\$ 58.31	111.6%	\$ 48.17
COV	1.41	0.74	0.23	0.84	1.36	1.22	1.25	1.01	0.73	37.9%	
<b>Heat Rate</b>											
Average	39.68	43.57	9.77	13.50	36.41	22.77	18.73	26.35	12.09	118.0%	11.69
On-Peak	NA	59.99	10.77	16.90	49.00	28.72	24.27	31.61	13.84	128.4%	15.29
Off-Peak	39.68	10.72	7.77	6.70	11.23	10.87	7.65	19.33	9.75	98.3%	6.19
<b>Demand</b>											
Average	8,563	8,937	8,790	8,824	8,944	9,020	8,779	8,837	8,486	4.1%	7,948
Minimum	7,829	7,961	7,933	7,865	7,953	8,109	8,104	7,965	7,511	6.0%	6,411
Maximum	9,544	9,806	9,620	9,652	9,751	9,707	9,516	9,657	9,436	2.3%	9,806
<b>Coal Unit Availability</b>											
Average	5,147	5,224	5,184	5,288	5,118	5,131	5,136	5,175	5,213	-0.6%	5,065
AC/MC	86%	87%	86%	88%	85%	85%	85%	86%	87%	-0.6%	84%
<b>Gas, Hydro and Other Unit Availability</b>											
Average	3,981	3,951	3,817	3,992	4,052	3,991	3,843	3,947	3,989	-0.4%	3,476
AC/MC	78%	78%	75%	78%	80%	78%	75%	78%	78%	-0.4%	69%



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

For the week ending December 20, prices were at or below:

- \$20/MWh 1% of the time
- \$50/MWh 14% of the time
- \$100/MWh 74% of the time
- \$250/MWh 81% of the time
- \$500/MWh 89% 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 December 20 implied market heat rates were at or below:

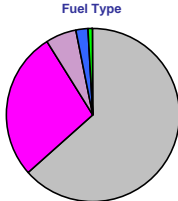
- 5.0 GJ/MWh 4% of the time
- 10.0 GJ/MWh 33% of the time
- 15.0 GJ/MWh 74% of the time
- 20.0 GJ/MWh 76% of the time

### Market Share Statistics

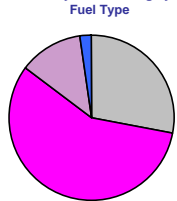
By Fuel Type:

■ Coal ■ Gas - Cogen ■ Gas - Other ■ Hydro ■ Other

Weekly Generation by Fuel Type

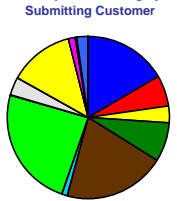


Weekly Price Setting by Fuel Type



By Submitting Customer:

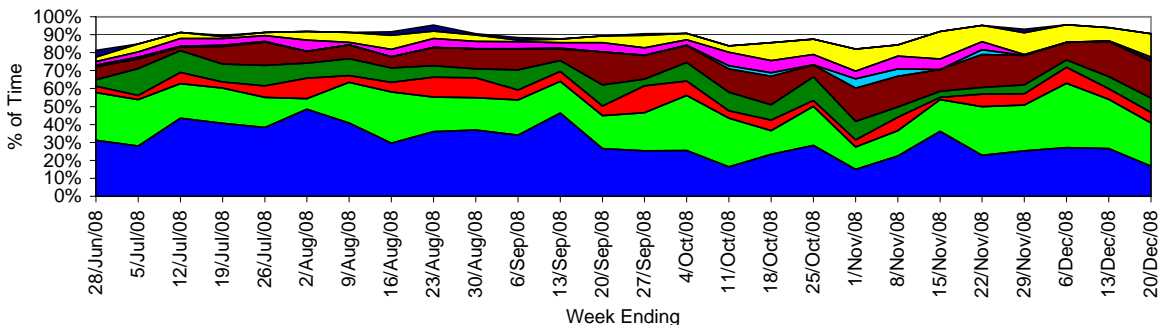
Weekly Price Setting by Submitting Customer



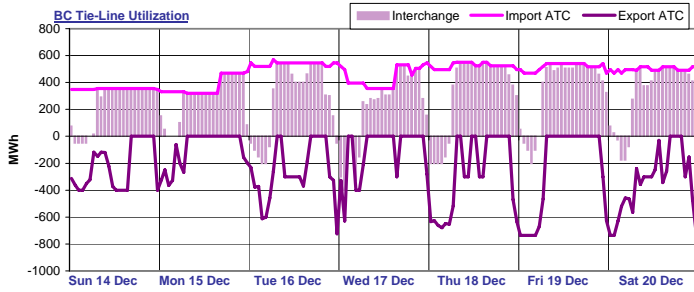
Last week, coal units were responsible for 63.4% of the generation in the province and set price 28.0% of the time. Gas-cogen units accounted for 27.9% of the generation and set price 57.2% of the time last week while other gas units made up 5.6% of generation and set price 12.6% of the time.

A total of 12 market participants set price last week. Two market participants set price more than 20% of the time last week. The top price setter set price 24.0% of the time and the top five price setters set price a total of 82.0% of the time.

### Weekly Price Setting by Submitting Customer

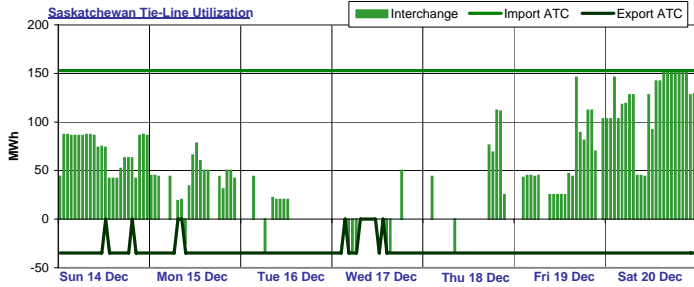


# Interties

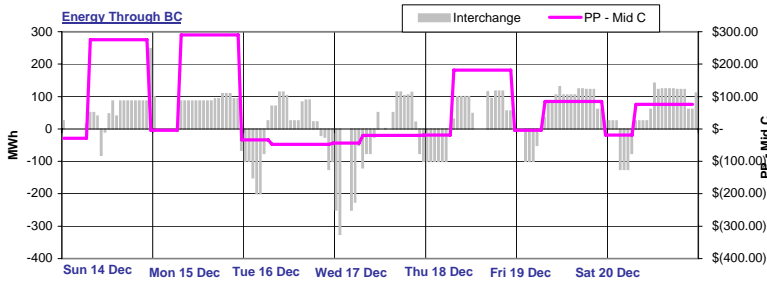


BC import capacity was 70% utilized last week while BC export capacity was 13% utilized. Energy was being imported into Alberta over the BC tie-line 79% of the time and exported out of Alberta over the BC tie-line 17% of the time last week. There was no activity on the BC tie-line 4% of the time last 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.



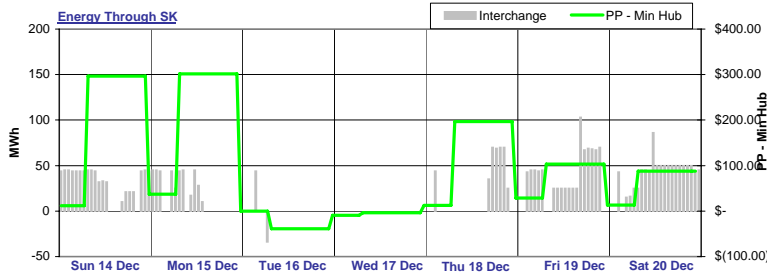
Saskatchewan import capacity was 29% utilized last week while Saskatchewan export capacity was 9% utilized. Energy was being imported into Alberta over the Saskatchewan tie-line 58% of the time and exported out of Alberta over the Saskatchewan tie-line 5% of the time last week. There was no activity on the Saskatchewan tie-line 38% of the time last week.



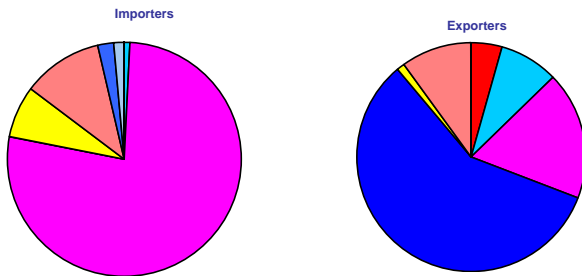
Last week, Alberta spot prices were mostly higher relative to prices in the Pacific Northwest as represented by Mid-C index prices, supporting import activity across the Alberta - BC interconnection.

Alberta prices were generally higher than prices in MAPP as represented by spot prices at the Minnesota Hub, which generally supports import activity across the Alberta - Saskatchewan interconnection.

Note: Platt's day-ahead strip prices used in energy through BC and SK graphs.



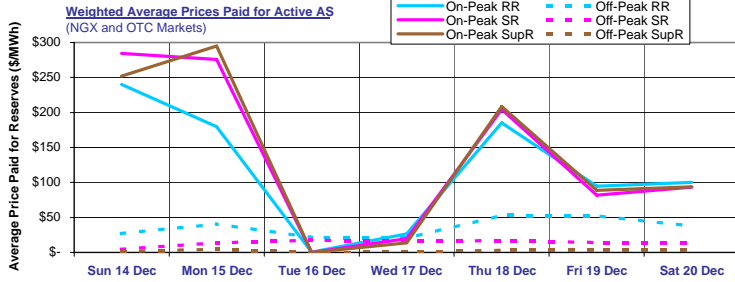
Tie-Line Market Shares



Last week, there were a total of 7 importers. The most active importer had a market share of 77.2% while the second most active importer had a market share of 11.1%. There were a total of 6 exporters last week. The most active exporter had a market share of 58.1% while the next largest exporter had a market share of 17.9%.

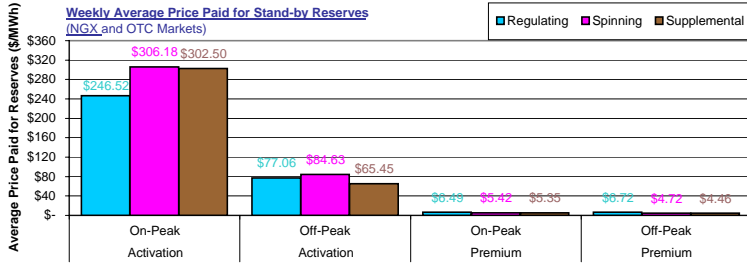
Note: Market shares are based on the combined activity on both interties.

# Ancillary Services Market



Average on-peak prices paid for active ancillary services last week were \$117.48/MWh, \$137.39/MWh and \$136.45/MWh respectively for active regulating, spinning and supplemental reserves.

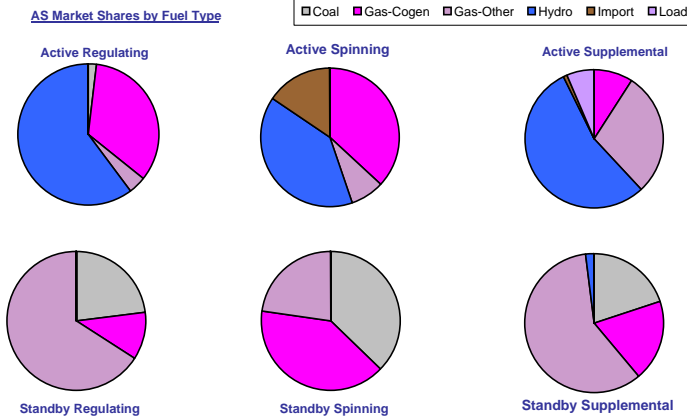
Active average off-peak prices were lower and averaged \$36.26/MWh, \$13.84/MWh and \$2.36/MWh for active regulating, spinning and supplemental reserves respectively.



Weekly average activation prices for stand-by reserves ranged from \$65.45/MWh for off-peak supplemental reserves to \$306.18/MWh for on-peak spinning reserves.

Weekly average premium prices ranged from \$4.46/MWh for off-peak supplemental reserves up to \$6.72/MWh for on-peak spinning reserves.

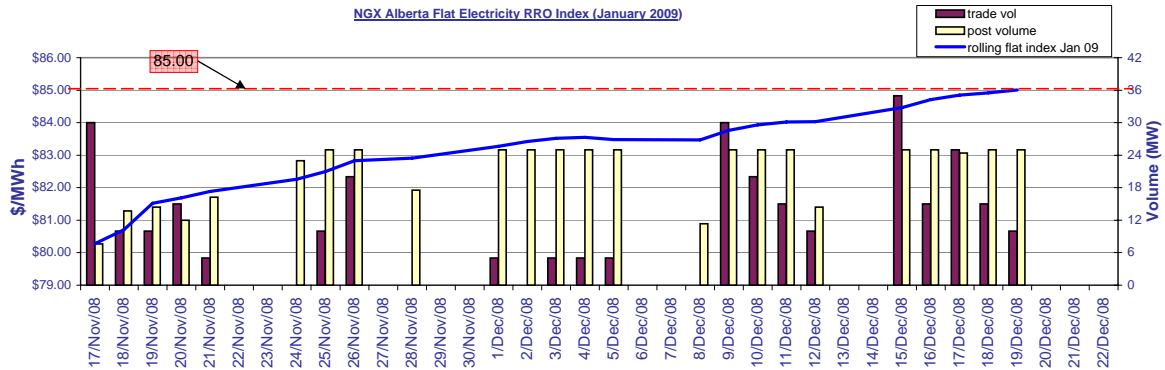
AS Market Shares by Fuel Type



Last week hydro units had the largest market share in the active regulating reserve market with 60.3%. In the active spinning reserve market, hydro units had the leading market share with 39.8% while in the active supplemental reserve market, hydro units dominated with a 54.6% market share.

Coal units dominated the standby regulating reserve market with a 65.7% market share. Leading market share in the standby spinning market was held by gas-cogen units with a 40.1% market share. In the standby supplemental reserve market, coal units had the leading market share with 59.2%.

# RRO Procurement



# Glossary

- 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 (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)
- ATC**  
 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.
- Sparksread**  
 Sparksreads 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.