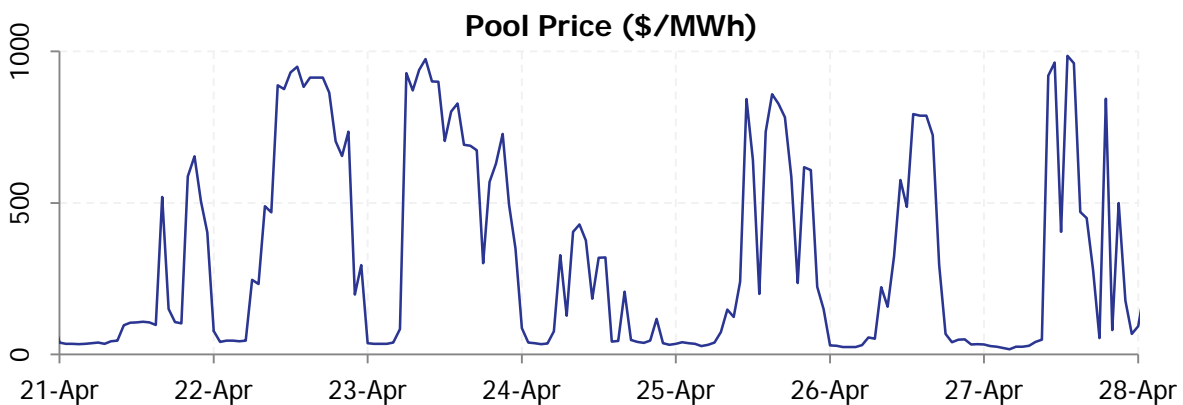




Why were Alberta's wholesale electricity prices so high the week of April 21 through April 27?

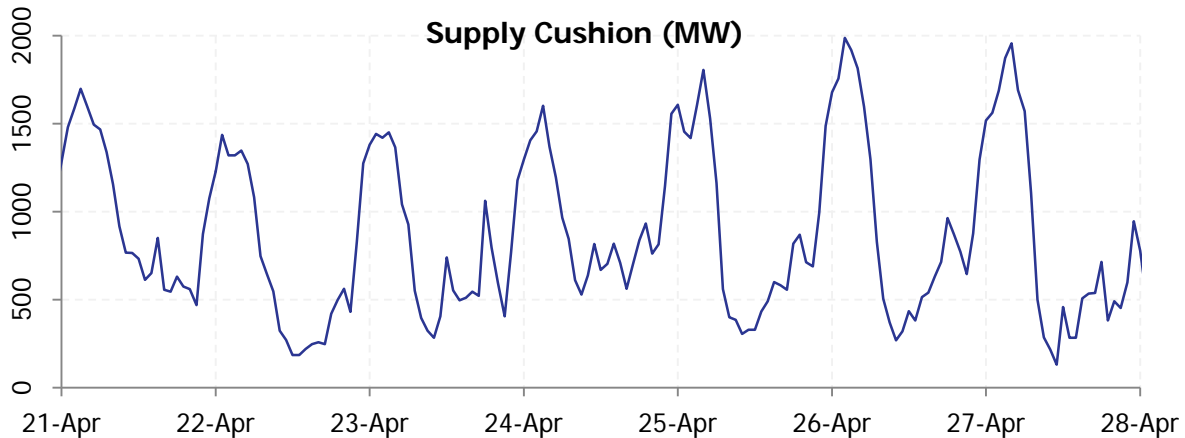
Prices

For the week of Sunday April 21, 2013 to Saturday April 27, 2013 Alberta's wholesale price for electricity, known as the pool price, averaged \$323.94/MWh (dollars per megawatt hour, in residential terms equivalent to 32¢ per kilowatt hour), while the previous week pool prices averaged \$76.69. This last week's average was the highest since October of 2000, and the second most expensive week on record. In contrast to these high prices the February 2013 average pool price of \$28.71 was a historic low.



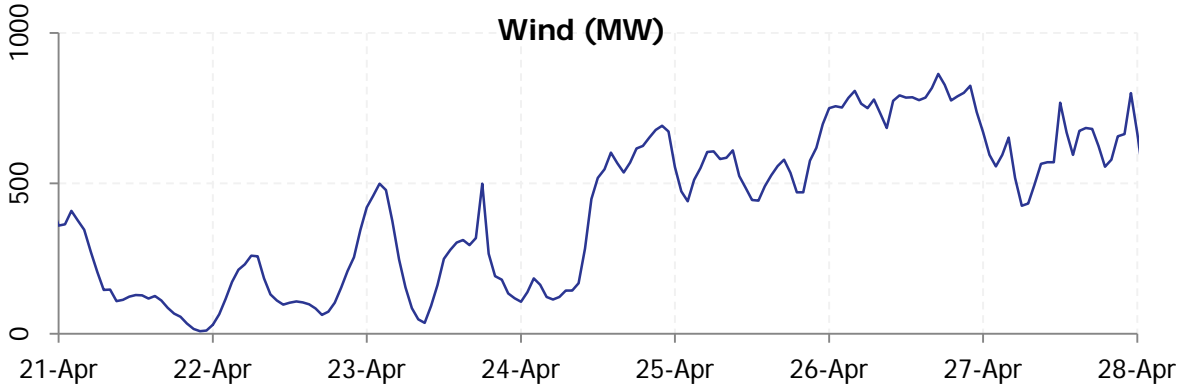
Factors

The MSA has found that a significant factor in the determination of the pool price is the 'supply cushion' – a measure of the tightness of the market or how much energy is available to satisfy demand in each hour. The MSA has calculated the supply cushion fell as low as 131 MW in one hour just before noon on April 27. The supply cushion averaged 585 MW for the week versus 923 MW for the previous week during those hours when most electricity is consumed - 8:00 am – 11:00 pm.



The supply cushion is simply the total amount of energy that is offered by market participants but not called upon by Alberta's electricity system operator. It is a function of:

- Market demand
- Planned and forced generator outages,
- Imports / exports
- Wind generation output which varies enormously depending on weather patterns where the generators are located
- Internal transmission congestion



Significant Number of Generator Outages Reduced Supply Cushion

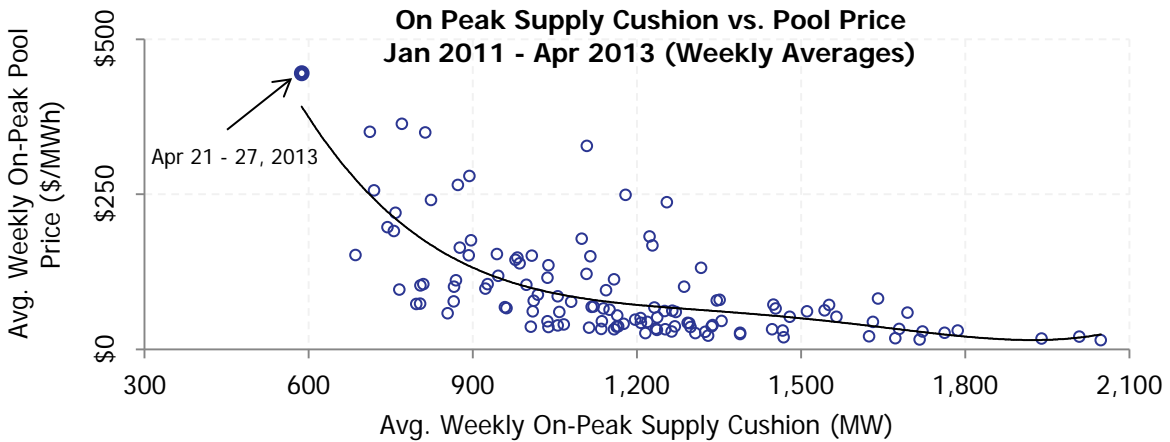
Generation plant outages – withdrawals from service for maintenance or repair of equipment – are a standard feature of the electricity sector. Planned outages are usually not taken in the winter months because of the risk of severe weather and the need to satisfy the associated elevated demand for electricity. Typically come April with warmer weather and lower demand generators begin their planned outages.

In the week we are looking at, April 21-27, there were a large number of generator outages. These included some unanticipated (referred to as 'forced') outages. The AESO's daily outage

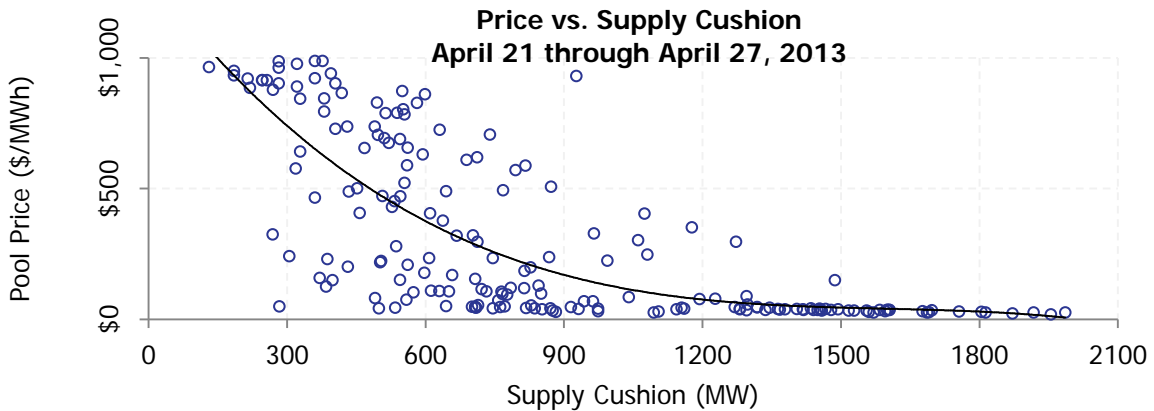
report stated approximately 4000 MW as on outage around this period. In recognition of the significant number of outages and that a supply shortfall could be an issue in April, the system operator, on March 8, 2013 over 6 weeks earlier, had cancelled a planned outage of the BC - Alberta transmission line that had been scheduled for the last two weeks of April. This action restored import supply by close to 600 MW, a positive measure to help address the anticipated tightness in the market.

Price as a Function of Supply Cushion

In previous reports the MSA has noted that at supply cushions typically lower than 800 MW there is a tendency for price to become volatile week of April 21 through 27 was no different. The peak hours (8:00 am to 11:00 pm) supply cushion for the week, 587 MW, was the lowest in the last 123 weeks (since January 2011).



Looking within the week itself the most significant high prices can be seen to have occurred with supply cushions less than 600 MW.



What does this mean for Consumers?

A principal responsibility of the Market Surveillance Administrator is to understand why pool prices move, sometimes dramatically, and to ensure that it is not because of a lack of competition or flaws in the design of our wholesale market. We have no indication that the recent price increases are caused by anything other than the tight market conditions precipitated by mechanical outages outlined in this Fast Facts note. If that view changes the MSA can take action to address concerns; we have the resources and the necessary powers under the Alberta legislation.

Most consumers do not pay the wholesale price. Almost 40 percent of residential consumers have now chosen a retail contract that meets their needs. The remainder are on the default supply arrangement that is called the Regulated Rate Option (even though it is not regulated in the traditional sense of the term) which is set at about 8¢ per kilowatt hour in April 2013 and 7¢ in May, not the 32¢ pool price referred to earlier. Most business consumers have in place their own hedging strategies, be it suspending operations during high price periods, self-supply or financial contracts.

As described in detail in the comprehensive study of the market released by the MSA in December 2012, price volatility is an inherent feature of the Alberta wholesale market. It helps drive efficiency and spurs private sector investment in the sector. Faced with this reality now and in the future, consumers of all shapes and sizes who haven't entered into contracts or other arrangements to smooth the electricity prices they pay should consider the options available to them.