



The Market Monitor

WATCHING THE MARKET : your fact source

WEEK OF November 23, 2003

MARKET SURVEILLANCE ADMINISTRATOR

The Market Monitor is published on the Market Surveillance Administrator's web site (www.albertamsa.ca) every Tuesday reporting on key market indicators and weekly trends in Alberta's evolving electricity market.

Alberta's Market Surveillance Administrator (MSA) is in place to monitor Alberta's electricity market for fairness and balance in the public interest. Market Surveillance keeps a close watch on the overall performance of Alberta's electricity market - checking that it operates fairly, efficiently and in an openly competitive manner.

The Market Surveillance Administrator monitors market activity, investigates complaints and makes recommendations for changes, including changes to rules and procedures. The goal is to assess which aspects of the market are working well and determine where changes are needed - to address issues before they reach the formal complaint stage. That involves keeping an eye on the behaviour of all market participants to make sure rules are followed and actions are competitive and above board.

All electricity prices are quoted in Canadian dollars per megawatt hour (MWh)

WEEKLY HIGHLIGHTS

- The week of November 23 saw decreased Pool price volatility as the standard deviation of pool price moved below the four-week moving average value.
- Pool price reached a high of \$294.88 in hour ending (HE) 17 on November 26. The weekly high in the previous week was \$624.04.
- Pool price remained at or below \$70 approximately 95 percent of the time last week (See weekly price duration curve, page 2).
- The average Pool price for the week of November 23 decreased by \$9.00 to \$45.58 from last week's average of \$54.58.
- The year-to-date (YTD) average Pool price was \$64.75 as of the end of November 29.
- On-peak prices averaged \$53.24 last week, decreasing from the previous week's average of \$61.25. Average off-peak prices decreased to \$35.36 compared to \$45.67 for the prior week.
- Loads last week were 0.5 percent higher than the week before as the total volume of energy traded last week was 1,271,389 MWh compared to 1,265,502 MWh a week earlier.
- The maximum hourly load last week was 8,576 MW in HE 18 on November 24 with a price of \$63.27. The previous week's highest hourly load was 8,578 MW on November 20 at a price of \$160.56. The minimum hourly load last week was 6,673 MW in HE 04 on November 24 at a price of \$10.37.

WESTERN MARKET SNAPSHOT

- Average on-peak prices for other market areas were higher compared to the previous week. Electricity prices are quoted in \$CDN/MWh at an exchange rate of \$1.3002. Mid-Columbia (Mid-C) averaged \$49.45 compared to \$47.74 for the previous week. California/Oregon Border (COB) averaged \$52.80 compared to \$50.75 for the previous week, while Palo Verde (PV) averaged \$50.45 compared to \$49.52 for the week before. Mid-Continent Area Power Pool (MAPP North) averaged \$44.95 compared to \$43.25 for the previous week. At North Path 15 in California (NP 15) prices averaged \$56.27 compared to \$54.65 for the week before. (See weekly market hub graph page 5)

NATURAL GAS MARKET SNAPSHOT

- The Alberta natural gas closing price recorded on Friday, November 28 was \$5.01 per gigajoule (GJ), increasing from the previous Friday's closing price of \$4.85/GJ.
- Spark spreads were mostly positive on-peak and mostly negative off-peak last week. (See spark spreads chart, page 4).

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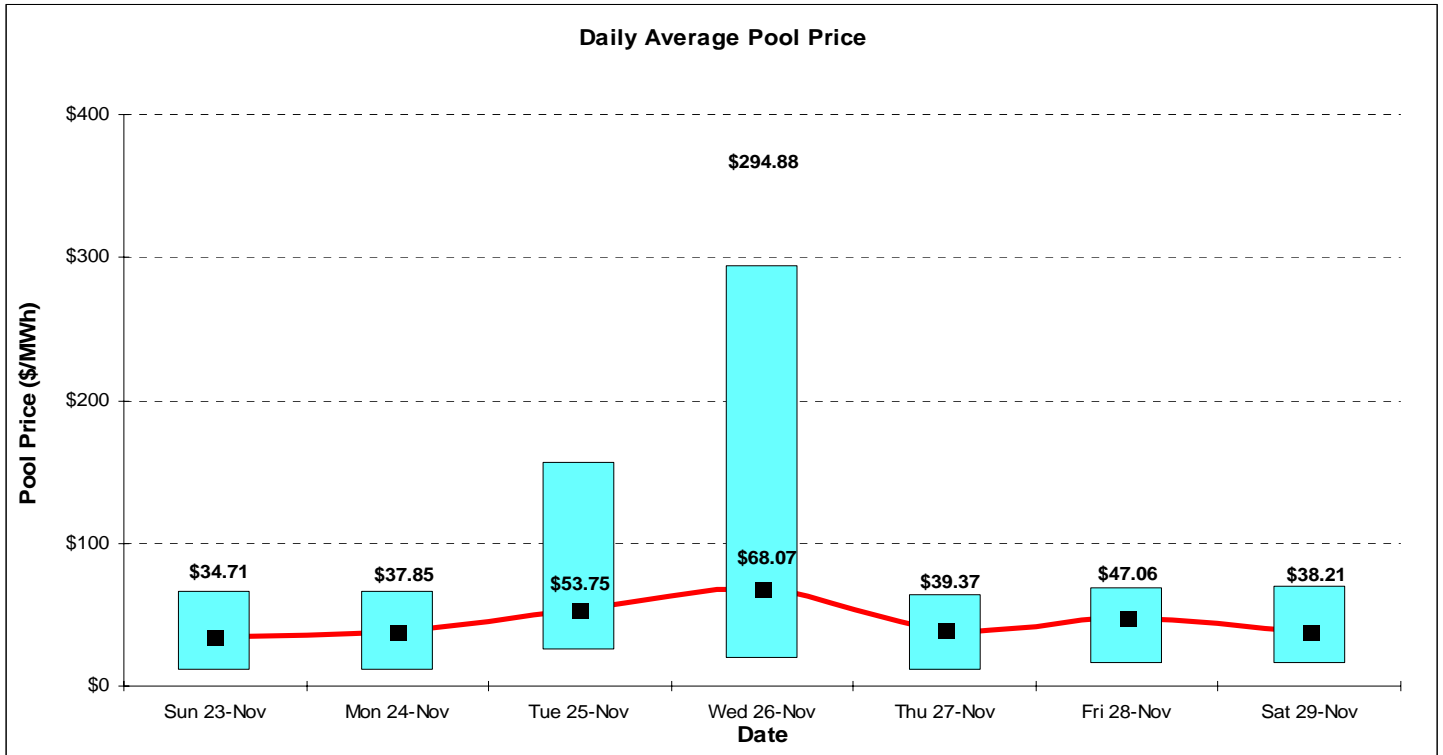
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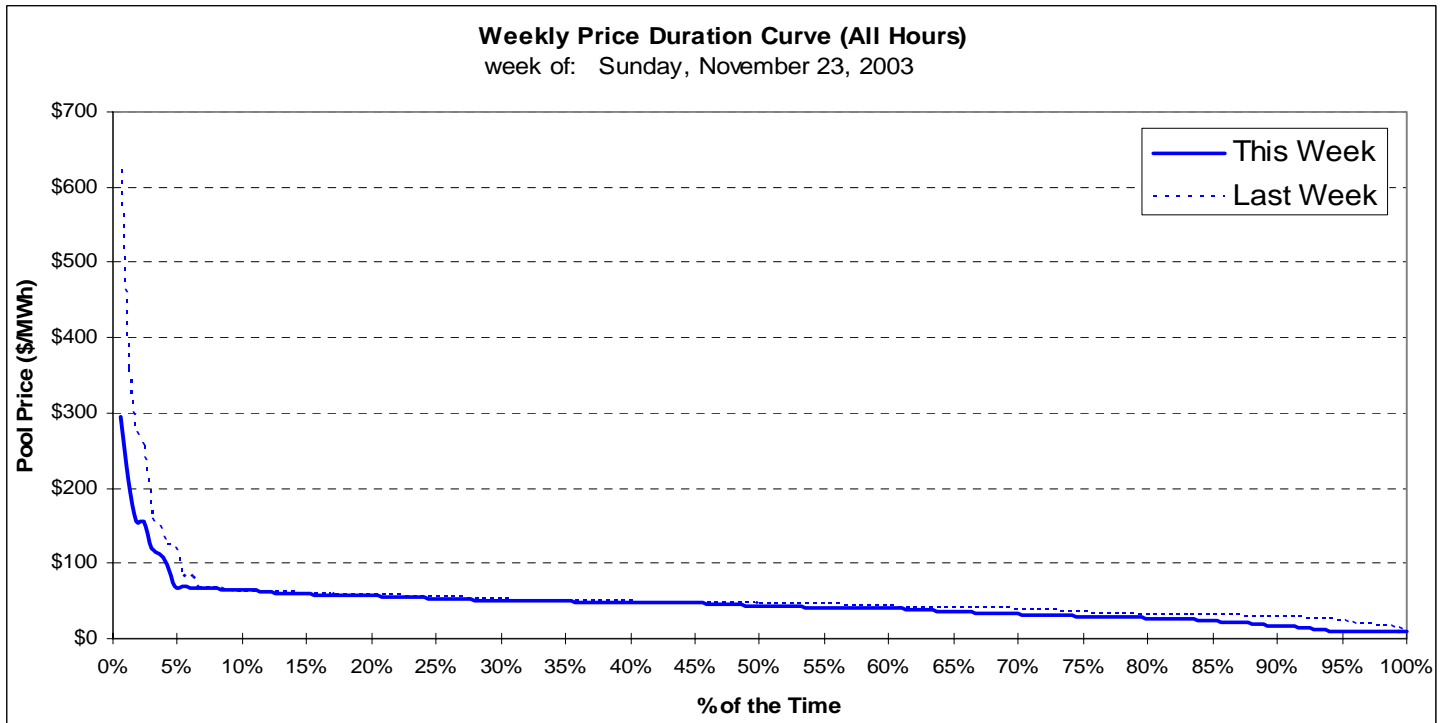
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KEY WEEKLY MARKET STATISTICS

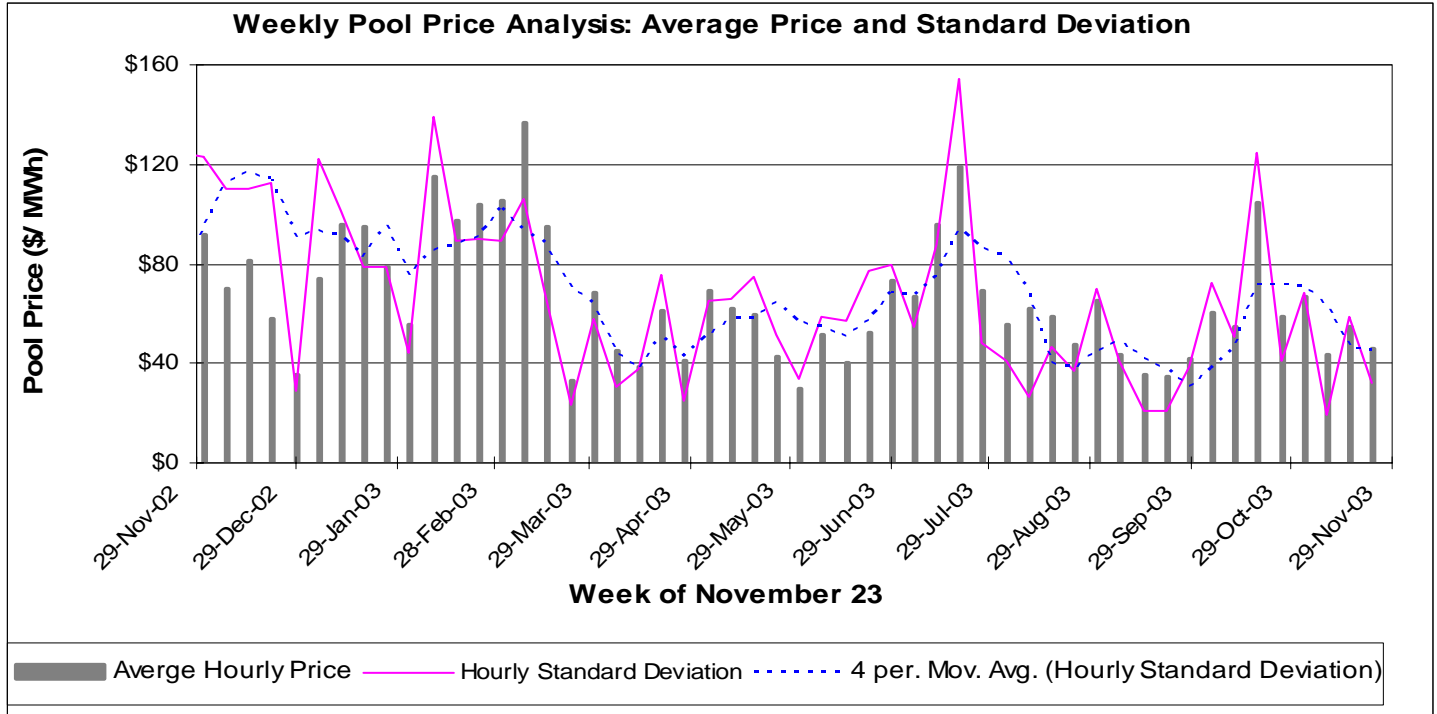


The solid bars illustrate the range from minimum to maximum price.

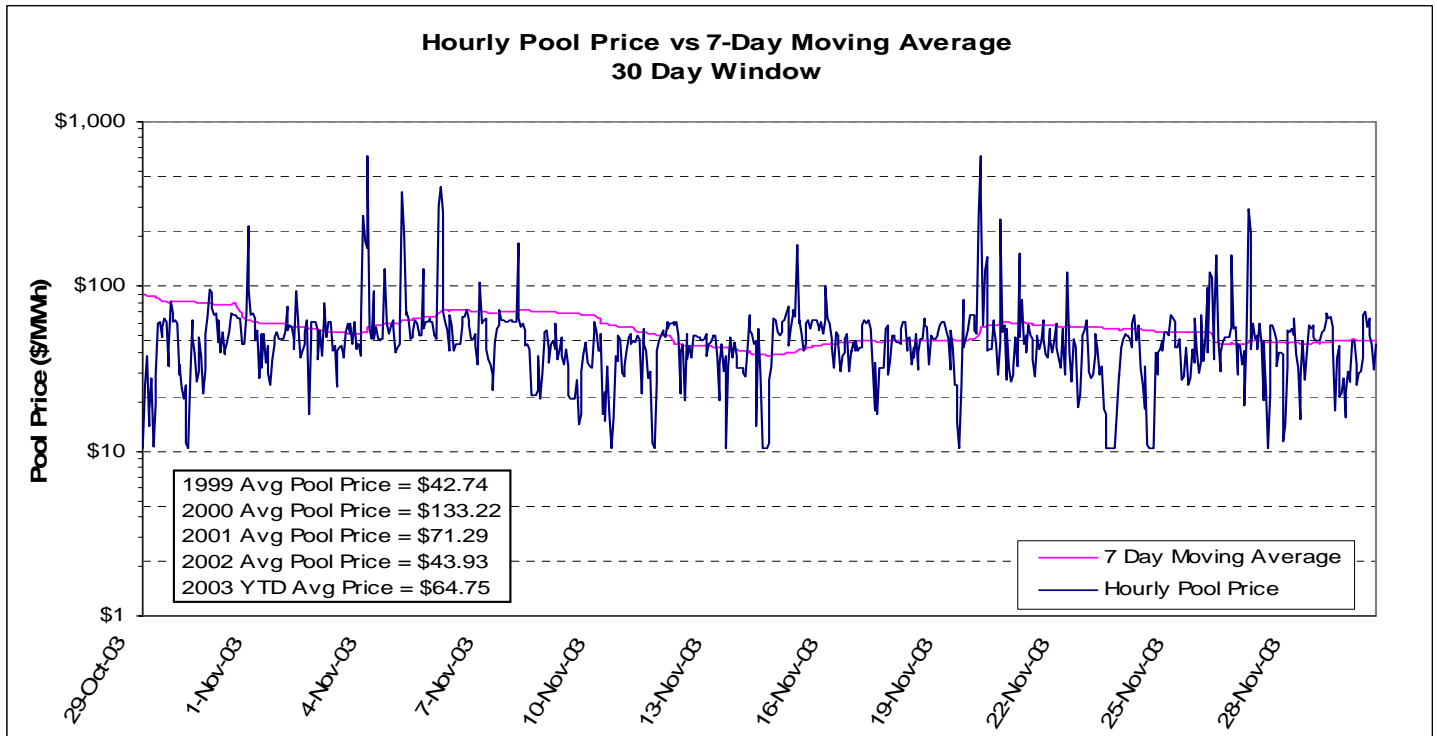
This weekly price duration curve illustrates the percentage of time that prices were at, or above, a given value. For a selected price (vertical axis), the curve yields the percentage of time that the price was equaled or exceeded (horizontal axis).



KEY WEEKLY MARKET STATISTICS

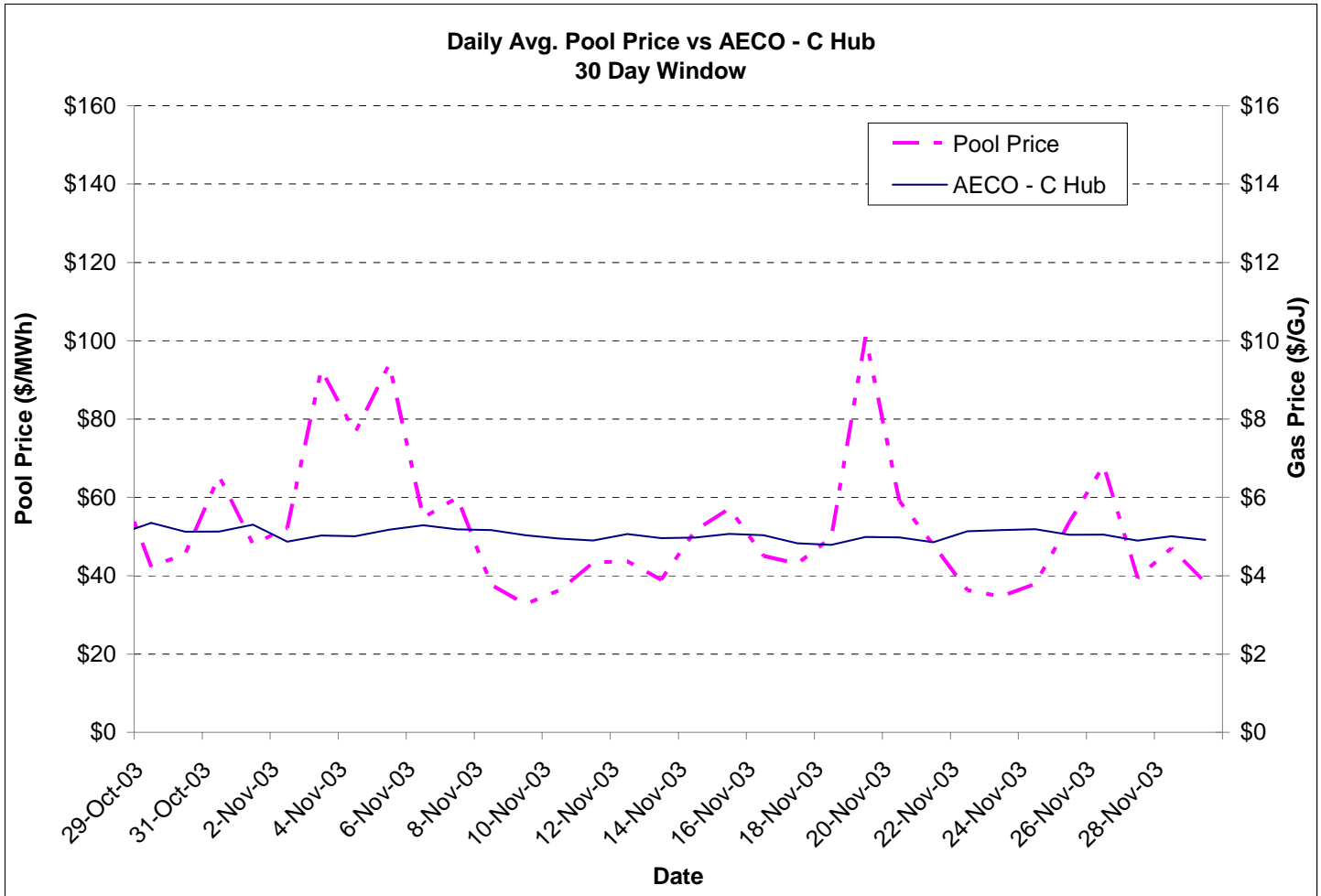


This chart illustrates the average weekly pool prices for the past year, as well as the standard deviation of the hourly pool prices in each week and the four-week moving average standard deviation of pool prices. The standard deviation of pool prices is a measure of the volatility and the four-week moving average is useful in identifying trends in this volatility.



This chart provides a rolling 30-day view of the hourly pool price together with the 7-day moving average. The moving average is useful in identifying trends over the period.

KEY WEEKLY MARKET STATISTICS

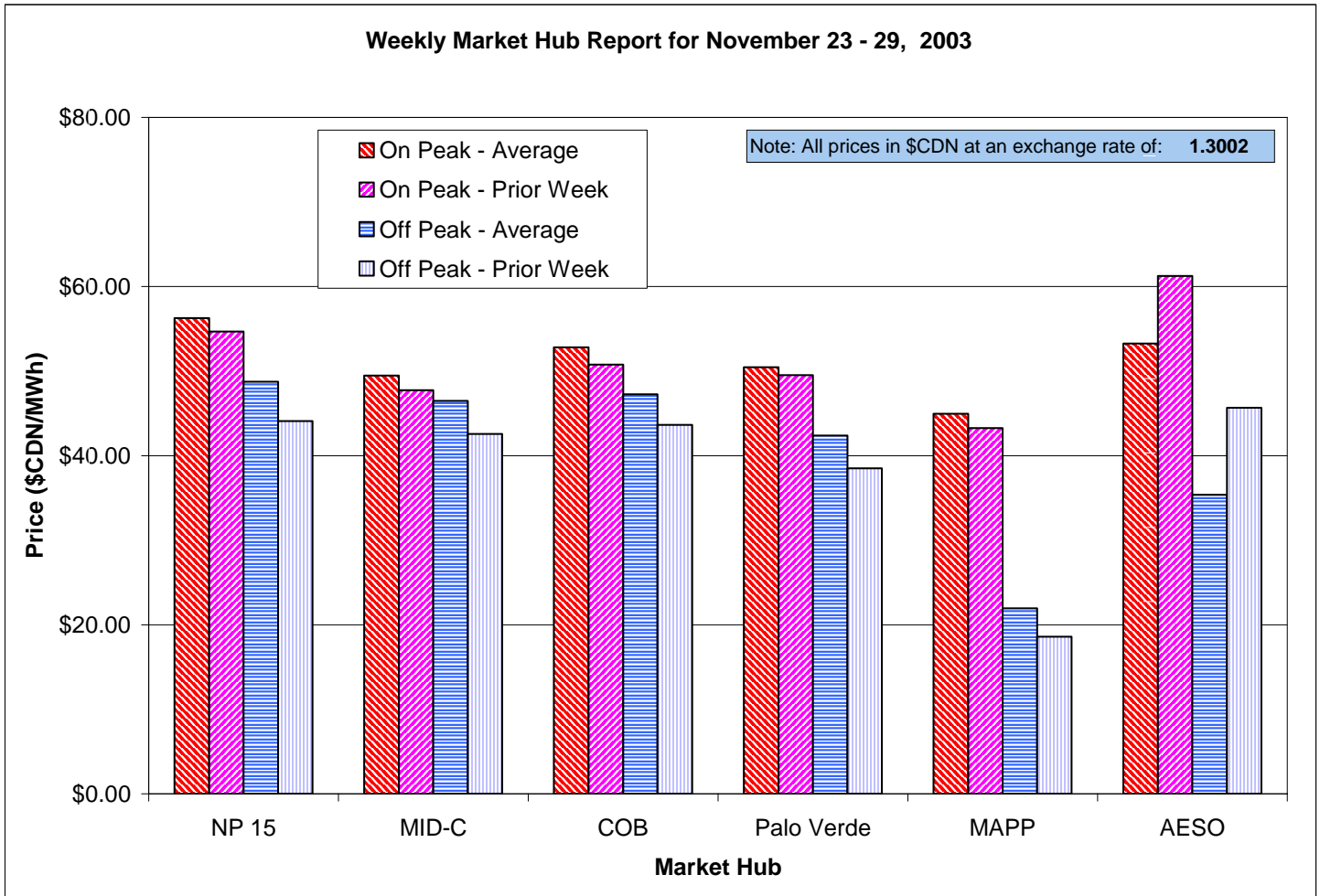


This chart provides a rolling 30-day view of average daily pool prices and intra-Alberta gas prices (AECO-C Hub). It illustrates the correlation between the pool price for electricity and the price of gas.

Daily Spark Spreads

Spark spreads (in \$/MWh) give an indication of the revenue available to cover costs (including O&M, capital costs, depreciation, etc...) after fuel costs have been paid. These spark spreads compare the revenues of two units with different thermal efficiencies: 7.5 GJ/MWh (representing a combined cycle gas turbine) and 10 GJ/MWh (representing a simple cycle gas turbine). For this analysis, Gas Price is the weighted average daily spot gas price at AECO-C (\$/GJ) and electricity price is the AESO daily average Pool price (\$/MWh). A positive spread indicates it is more economical to buy gas and generate power while a negative spread indicates it is more economical to buy power from the grid.

| Date | Gas Price \$/GJ | Price (all hrs) \$/MWh | Heat Rate | | Price (on peak) \$/MWh | Heat Rate | | Price (off peak) \$/MWh | Heat Rate | |
|-----------|--------------------|------------------------------|---------------|--------------|------------------------------|---------------|--------------|-------------------------------|---------------|--------------|
| | | | 7.5 GJ/MWh | 10 GJ/MWh | | 7.5 GJ/MWh | 10 GJ/MWh | | 7.5 GJ/MWh | 10 GJ/MWh |
| 23-Nov-03 | 5.16 | 34.71 | (4.02) | (16.94) | N/A | N/A | N/A | 34.71 | (4.02) | (16.94) |
| 24-Nov-03 | 5.19 | 37.85 | (1.04) | (14.00) | 47.29 | 8.40 | (4.56) | 18.97 | (19.92) | (32.88) |
| 25-Nov-03 | 5.04 | 53.75 | 15.93 | 3.32 | 63.95 | 26.13 | 13.52 | 33.35 | (4.47) | (17.08) |
| 26-Nov-03 | 5.05 | 68.07 | 30.21 | 17.59 | 69.90 | 32.04 | 19.42 | 64.42 | 26.56 | 13.94 |
| 27-Nov-03 | 4.89 | 39.38 | 2.68 | (9.55) | 42.81 | 6.11 | (6.12) | 32.52 | (4.18) | (16.41) |
| 28-Nov-03 | 5.01 | 47.06 | 9.48 | (3.05) | 52.45 | 14.87 | 2.34 | 36.28 | (1.30) | (13.83) |
| 29-Nov-03 | 4.92 | 38.21 | 1.35 | (10.94) | 43.03 | 6.17 | (6.12) | 28.57 | (8.29) | (20.58) |



This chart illustrates a comparison between the current and previous weekly average on-peak, and off-peak prices for the given hubs. Note all prices are quoted in Canadian dollars per megawatt hour (MWh).