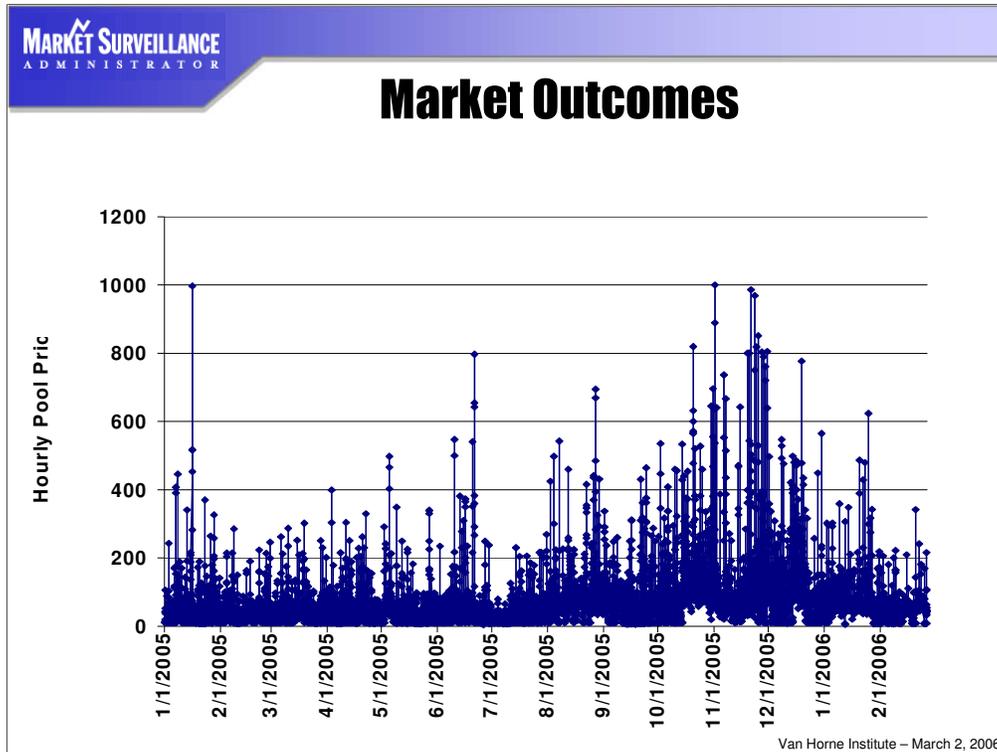


# **Competition in Alberta's Wholesale Electricity Market**

**Martin Merritt**



Van Horne Institute – March 2, 2006

Good afternoon and thanks to the Van Horne Institute and Enmax for inviting me to speak.

We are very fortunate here in Alberta to have a competitive electricity market. We are not, at least right now, acutely worried about reliability, stranded assets or whether the lights will stay on this summer. We have seen efficiency gains in every year since restructuring began and had substantial investment in new capacity. To have had all of this while enjoying the fastest growing economy in the country...an economy being driven by the rising value of what is for the power industry a primary fuel is all the more fantastic. As the graph on this slide shows, competition can be a chaotic thing but clearly it has produced an embarrassment of riches, and for that I think we have competition to thank.

The second point I'd like to open with is that the MSA is not focused on or fussed about whether pool price is \$5, \$45 or \$245. We are keenly interested however in the quality of the contest that produces the price and the quality (fidelity not magnitude) of the price signal that the contest produces. These two things, the quality of the contest and the quality of the signal are fundamental to the viability and sustainability of a competitive power market in Alberta, they are fundamental to FEOC and consequently they are fundamental to the role of the MSA.

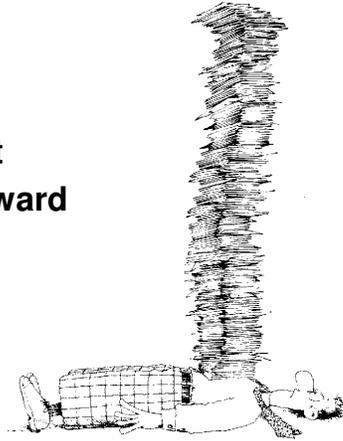
For example, we spent a great deal of effort over the past year working on the "uneconomic imports" issue...dumping, not because it was lowering prices but because there were/are very limited competitive responses possible to this strategy and because it was artificially widening the basis to our adjacent market.

Ruining the contest and polluting the price signal...these are things that get our attention no matter whether the impact on price is up or down.

My remarks today will focus on the quality of our contest, the fidelity of the signal it produces and preserving the integrity of both. I should add by way of footnote to this slide that we're talking about the wholesale market today. We have done a lot of work recently with the wires owners on RRO procurement competitiveness, that is an important piece of the total competitive environment but beyond the scope of what I could tackle in the next 20 min.

## Fair, efficient and openly competitive

- High fidelity price signal
- Competitive response
- Information rich environment
- Balance between risk and reward
- Level playing field
- Opportunity to compete



*Principles rather than a 10' thick rulebook*

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Every participant in our market will be aware of the short and sweet S. 6 of the EUA. Conduct ones self in a manner that supports a Fair, Efficient and Openly Competitive market, or “FEOC” as it has been coined, Simple, elegant, without loop holes and many might say sufficiently nebulous as to present real interpretive and compliance challenges to both participants and to the MSA.

In November 2005 we published a paper titled: A Common Understanding: Fair, Efficient and Openly Competitive, in it we advanced these 6 ideas as criteria or principles by which we all might know FEOC when we see it. The principles are derived from the Act, related regs, economic theory and/or common sense. We asked for feedback at the time and probably should have been more aggressive in chasing it (because we got none). A suggestion was also made at the last Electric Utilities Advisory Committee meeting that the key principles underpinning FEOC be the subject of a thorough and transparent consultation. We will have another go at this in '06 with an improved consultation process. I think this is important work, clearly participants and the market monitor should be on the same page at some level in terms of expectations and in terms of prosecution and surveillance strategies.

Pending further input these are what we are working with. Whatever we land on in the end I think it has to be principle based. I firmly believe that the quest for an ultra prescriptive environment is a mug's game. We will get that rule book right about the same time as cold fusion makes its debut in our market.

## Competitive Market Behaviour

- Behaviour in markets is never **unconstrained**
- Market behaviour is constrained by the:
  - response of competitors
  - response of customers
  - **and** absent those responses...
  - response of regulators



*"There, there it is again—the invisible band of the marketplace giving us the finger."*

***...how to know if competitive forces are working or flipping us all the bird?***

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So, in a principle based world where conduct is less than fully prescribed how do we know when, if or under what circumstances intervention by a regulator is ever warranted? To understand that I think we have to acknowledge that market behavior is never **unconstrained**. It is always constrained by the response or potential response of competitors, customers and absent those....regulators.

The presence (or absence) of competitive forces is not always obvious. To give you some idea of what we look at let's take a closer look at a couple of recent months.

## A Closer Look: A Tale of Two Months



	<u>Dec 2005</u>	<u>Jan 2006</u>
<b>Average price</b>	<b>\$103</b>	<b>\$73</b>
<b>Price Volatility</b>	<b>High</b>	<b>Low</b>
<b>% Price setting (weekly max)</b>		
<b>by coal generation</b>	<b>67%</b>	<b>82%</b>
<b>by single participant</b>	<b>45%</b>	<b>73%</b>
<b>Link to fundamentals</b>	<b>Stronger?</b>	<b>Weaker?</b>

***But . . . . Which was the most competitive?***

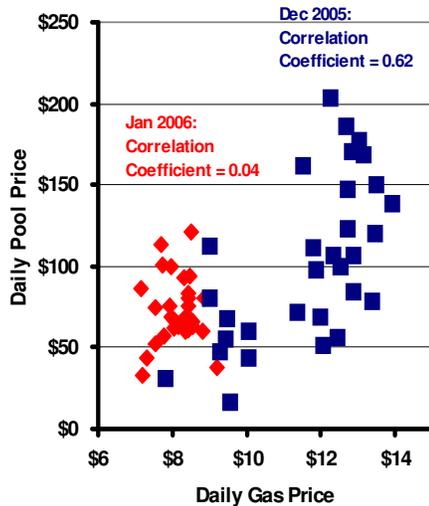
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December 2005 had both higher prices and higher price volatility than January 2005. Some might say that higher price and volatility are sure signs of a less competitive market. I am not one of them.

If we look at the % of time that typically base-loaded generation spent on the margin, the high frequency that price was set by a single participant and the weak linkage between price and the usual fundamental drivers I think there is a case to be made that competitiveness waned in January – notwithstanding what some might feel is a more acceptable outcome.

Let me drill down a little farther.

## Price Fidelity: to what is pool price related?



### Independent variables

- Load?
- Weather?
- Fuel cost?
- Adjacent markets?
- Competitor strategies?
- Outages?
  
- Offer strategy

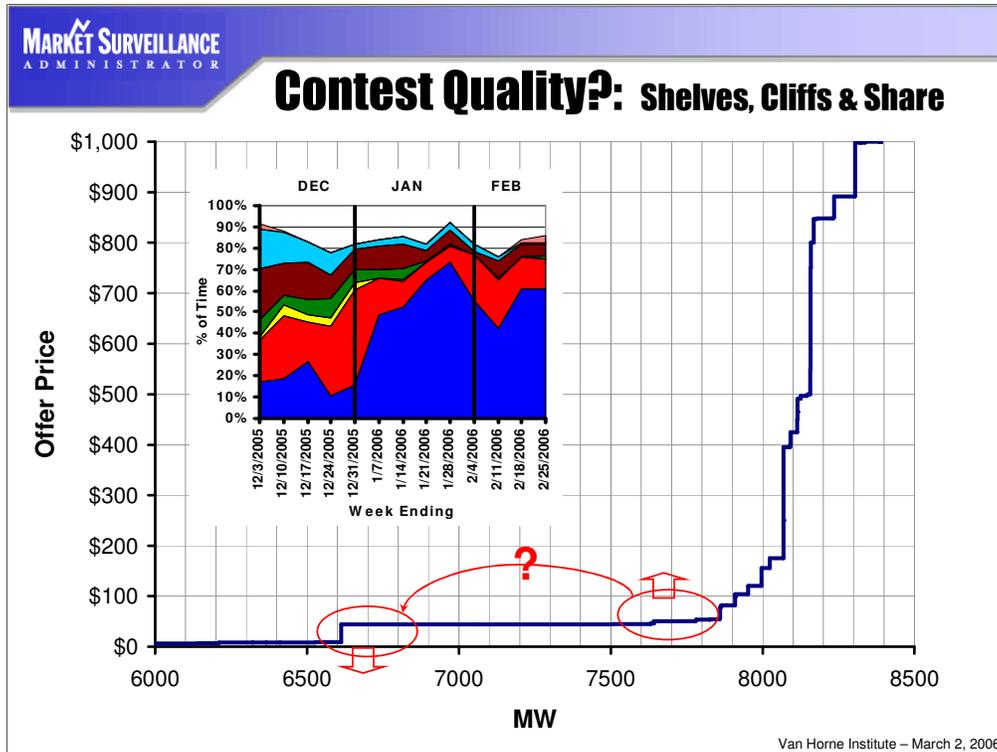
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Price as we all know swings on many factors and I've listed a few of the more significant ones. In theory these relationships are dynamic, the materiality of each factor ebbs and flows in a complicated, day to day, seasonal and impossible to predict commercial environment where many things are connected.

In a competitive market we expect the offer strategy of any single participant to be driven by their expectations of variables that are independent of them. A high fidelity and competitive price signal then emerges from the actual values of the independent variables interacting with the complete set of all participant strategies.

If we ever get the point where pool price has only a weak connection to the independent drivers and a strong connection to offer strategies or worst yet to a single participant's **offer strategy** then our competitive market will be in trouble. If offer strategy becomes an independent variable itself we will have entered what Kellan Fluckiger calls the paradigm 1 world where all pretense of competition is lost.

Suffice it to say that right now I am concerned, price fidelity appears to be at a low ebb at least insofar as we are unable to correlate recent pool prices with any of the usual drivers.



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So I spoke of price fidelity in the previous slide, let's now look at the quality of the contest that is producing our prices..

You are looking at a recent supply curve from early one morning. You will note a large shelf that pretty much ordains a price for that hour without even knowing where the demand curve will intersect it. The inset shows how the share of price setting has evolved since last fall from 7 players with not one dominant to 4 players with one rather dominant.

Somebody has to set price! What's wrong with a big fat shelf anyway? Why do anything about it?

Well in the short run I **do** think we watch... a shelf of this size ought to be competitively **unstable**. Those at the high end of the shelf are not being adequately compensated for their dispatch risk and I expect they would find that they could offer those volumes at higher prices with minimal impact on their dispatch rate. Alternatively they might find that they could offer some of the volume at a little lower price in order to upgrade their dispatch probability from somewhere near zero to somewhere near 100%. Either strategy would represent an upgrade to the PxQ for those blocks of energy which is presumably what competition is all about.

If this is what comes to pass I think it will certainly be a sign that independent pursuit of self interest, constrained by the fact or expectation of competition, is occurring and I would expect that price fidelity would improve commensurately.

I am not pulling the fire alarm yet but I am concerned by these two graphs. The number of participants either able or willing to contest the market at the margin has declined precipitously since the beginning of the year and the massive shelf in the supply curve is smothering the fidelity of the price signal. If it turns out that this shelf in our supply curve is competitively **stable** then I think we have a problem because none of the explanations that I can think of for its stability are particularly market healthy.

## Conduct Compliance Plans -1

- **Current view of compliance plans:**
  - a better option to deal with potential market power than holding restrictions
  - MSA has no power to require plans at this time, but has agreed on one with a market participant
  - whether MSA will be granted prerogative to require plans is subject of current debate
  - Are **not** offer caps

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I would like to wrap up with a couple of slides on compliance plans.

Whether Compliance Plans go ahead or not we shall have to see. The DOE's first draft of the new regs is not out yet and of course the consultation process will have run its course and may lead to amendments. As most of you will know the MSA has advocated for them as a more sophisticated replacement for the holding restrictions that were allowed to expire last fall... it's not unreasonable I would say to swap one ex-ante market power mitigation tool for another ex-ante market power mitigation tool.

Compliance plans are intended to deal with specific concerns. Those concerns may be the result of an asset acquisition or the role a particular asset plays in our market. In the absence of holding restrictions compliance plans could address sudden or significant changes in control over generation.

I have been hearing lately a rumour that conduct compliance plans mean "offer caps". From the MSA point of view nothing could be farther from the truth. Let me say this as plainly as I can: The MSA does **not** believe that offer caps are a necessary part of a compliance plan. Period. Ironically enough though we have participants telling us from time to time over the past several years that they do adhere to self imposed caps.

## Conduct Compliance Plans -2

- **Potential Content of compliance plans:**
  - flexible, tailored to specific concerns
  - ex-ante guidance/undertakings **not** ex-ante judgment
  - judgment and imposition penalties would remain the role of the tribunal
  - May initially deal with general ‘size’ issues, but preference is to morph to transparent market wide guidance.

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While we have not and would not seek to impose offer caps we **have** said that we think it unreasonable to expect that our market could respond to, for example: a massive move in offer prices for a massive volume of energy over an extremely short period of time. The definitions of “massive volume”, “massive price change” and “short time period” are clearly up for both analysis and debate. An offer strategy employing the (massive volume + massive change in price + very short time duration) might not violate the letter of today’s rules but it has no redeeming operational purpose that I can think of, it would make a mockery of price fidelity, would be virtually impossible to compete with, is unlike to engender any short run competitive response, and it completely alters the risk/reward relationship for both its perpetrator and nearby competitors.

Suggesting that elephants no longer encumbered by holding restrictions undertake to **not** do a cannon-ball into (or out of) the bath tub is not an offer cap, it’s common sense. That said it does follow that all market participants of elephantine proportion ought to be subject to the same transparent undertakings or prohibitions. In general I think we do this by adding meat to the s. 6 bone together, and codifying to the maximum extent possible the conduct principles in the act, the regs, the AESO rules, the MSA guidelines. As necessary and temporarily if possible in Compliance Plans.

## **Summary**

- **Alberta's competitive power market has been delivering since 2001**
- **MSA focus is:**
  1. Quality of contest
  2. Fidelity of signal... *not price*
- **Presently we have concerns about both**
- **Something has to fill the void left by holding restrictions – MSA proposes compliance plans.**

## **Discussion?**