Making ‘Energy Only’ Markets Work

Matt Ayres
Chief Economist
Making markets work or letting markets work?

- Energy Only Markets
- Reserve Margin
- No Missing Money?
- Effective Competition
- Distribution of Prices
- Prices, Scarcity and Market Power
- Is the Alberta market different?
- Some questions to think about
Energy-only markets

- Where you have a capital intensive industry markets need to allow for fixed costs to be recovered in order to attract new investment.
- Energy-only electricity markets recovery of costs comes from energy (and operating reserves) and not capacity.
- Electricity market design can be thought of as solving the problem of how to ensure fixed costs can be recovered while maximizing the efficiency gains over time.
- Many economists would agree competition is the best way of doing that unless there’s a market failure.
- Competition can only work if you let it.
Does the Alberta design work?: Reserve Margin
Does the Alberta design work?: No missing money

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<tbody>
<tr>
<td>Average hourly pool price</td>
<td>$62.99</td>
<td>$54.59</td>
<td>$70.36</td>
<td>$80.79</td>
<td>$66.95</td>
<td>$89.95</td>
<td>$47.81</td>
<td>$50.88</td>
<td>$76.22</td>
<td>$64.32</td>
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<td>Average daily gas price</td>
<td>$6.30</td>
<td>$6.19</td>
<td>$8.27</td>
<td>$6.17</td>
<td>$6.10</td>
<td>$7.73</td>
<td>$3.76</td>
<td>$3.79</td>
<td>$3.44</td>
<td>$2.27</td>
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Conclusion of the MSA’s *State of the Market Report 2012* found the wholesale market to be characterized by effective competition.

- Static efficiency losses were small (including those from economic withholding), dynamic efficiency gains likely much greater.
- Prices not higher than the long run marginal cost over the medium term.
Does the Alberta design work?: Distribution of Prices

Price Duration Curves (2011)

- ERCOT
- AESO

Annual Average:
ERCOT: $42.44
AESO: $76.22
Does the Alberta design work?: Prices, Scarcity and Market Power
Is the Alberta market different?

1. Small
2. Growing
3. Cogeneration
4. High load factor
5. Weak interconnections
6. Transmission policy
7. Economic withholding
8. Power Purchase Arrangements
9. Lower price cap
10. Policy stability

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*Oil sands projects build generators for steam and sell power to the grid (cogen)*
Some questions to think about…

1. Will the market in Alberta drive further consolidation or are there forces at work to reduce market power?
2. Will resource adequacy continue to be non-issue in the Alberta market?
3. A price cap at VOLL in an energy-only market is seen as one way of ensuring correct scarcity pricing signals to incent new generation. Where should the price cap be set if you have market power?
4. Without the automatic offer price mitigation imposed in many other electricity markets, are electricity markets exposed to the potential for coordinated or consciously parallel conduct?
5. In most sectors we rely upon profit maximising competitors to determine what and how much to invest in and to compete prices down to the benefit of consumers. Have other electricity markets missed out on using competition to the fullest extent?
Finding out more about Alberta

- Market Surveillance Administrator
  - Alberta Wholesale Market
  - State of the Market Report 2012
  - Offer Behaviour Enforcement Guidelines

- Alberta Electric System Operator
  - AESO Long term transmission plan (June 2012)
    - [http://www.aeso.ca/downloads/AESO_2012_LTP_Sections_1.0_to_5.0.pdf](http://www.aeso.ca/downloads/AESO_2012_LTP_Sections_1.0_to_5.0.pdf)