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Bruce Smith
Electricity Authority
2 Hunter Street
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By email:

Dear Bruce and Ramu,

# High prices were the market operating as expected

Thank you for the opportunity to comment on the Authority's draft market performance review "Increased electricity wholesale spot and hedge prices – February 2013 to March 2013" dated 19 March 2013 ("the draft review).

As stated previously,[1] Genesis Energy considers that the higher February-March 2013 prices were evidence of the market operating normally, and prudently, to signal hydrological risk and a potential scarcity issue. Therefore, we agree with the Authority that:

> … the prices and market response was as would be expected from the market. Prices appear to have signalled the value of resources, and the market responded accordingly to reallocate those resources. The energy-only market design allows prices to rise to reflect the value of resources, given the conditions and uncertainties of place and time. These price signals provide the incentives for a variety of market responses, which in this instance removed the transient price increase and reallocated the hydro and thermal resources.[2]

However, we are concerned that, despite acknowledging the prices were "as would be expected", the draft review states that any increased ability of a generator to influence price is a "potential issue".[3] We agree that an increase in

[1] Genesis Energy response to market information request dated 9 April 2013

[2] Page 2, Draft Review
[3] Ibid

unilateral ability of any generator to influence the price could be a potential issue. However, given the context for this statement, we strongly disagree with the implication that an increase in price should be seen as an increase in the unilateral ability to influence price. In fact, despite its sensible conclusion, much of the analysis presented in the paper conveys the sentiment that the observed outcomes were associated with increased influence.

We believe this sentiment should be dispelled for three key reasons:

- **High prices at times of drought or generation scarcity do not necessarily reflect increased unilateral influence.** Of course, bids by the marginal peaking or firming generator will set the price. However, this simple fact of how the pricing algorithm works should not be confused with unilateral ability to influence price.

- **The paper does not understand the incentives for generators and retailers in periods of scarcity.** In particular, the paper doesn't grasp that pricing outcomes may have been significantly higher without Genesis Energy offering in Unit 1 at Huntly.

- **The IRDE analysis is not compelling.** The inverse residual demand elasticity (IRDE) analysis undertaken by the Authority is not a reliable indicator of "ability to influence price".

We expand on our comments below.

### High prices should not be confused with market power

The Authority states that "the energy-only market design allows prices to rise to reflect the value of resources, given the conditions and uncertainties of place and time." We agree. But we go further and say that, to function properly, an energy-only market *requires* prices to reflect the value of resources. This requirement will become increasingly difficult to fulfil if signals of value of resources continue to be confused with unilateral market power.

As was seen, national hydrology meant that hydro-generators were more conservative with their hydro generation. This was signalled into the market via higher offers. Higher prices are very important for the economic viability of the thermal plant that can provide generation in times of water scarcity. Thermal generators take the investment risk of not operating for large portions of time, with the upside being that they have opportunities when the market is in drought conditions and prices are high. If the market is prevented from providing these high price periods, then some thermal plant may become uneconomic and removed from the market. Removing thermal units from the market will, in our view, ultimately lead to higher prices if we encounter similar conditions in the future.

In the longer term, high price periods are also an important market mechanism for attracting new entrant generation. The existence of higher pricing periods, such as those observed in February-March 2013 (although those prices were still relatively low), signals potential opportunity for more technically or cost effective thermal peaking or firming generation to enter the market. Just the suggestion of intervention, especially given that the actual prices were relatively low, may be perceived by some as an indication by the Authority that the market is not working. It may also chill future investment in assets that depend on higher price signals.

### Incentives for generators and retailers are not understood

The draft review's assumptions about market offers are reflected in the analysis used to define the ability to influence wholesale price (IRDE – discussed below). In our view, these assumptions do not recognise the incentives that drive generators and retailers in water scarcity situations.

In particular, the draft review assumes that other generators would not change their bids if 50MW of Huntly was absent from the market. This is, in our view, not a reasonable assumption. Although offers *may* have stayed the same, it is equally likely that other generators would have put in high bids, knowing that Huntly had enough capacity and was not expecting to dispatch.

Maximising the revenue from our portfolio is a legitimate driver – certainly under the current market approach. But we also have other incentives:

- As New Zealand's largest retailer, we are very exposed to cost if hydro lake storage levels fall into the emergency zone. This was not outside the realm of possibilities during the period of the review.

- Our capacity to generate is limited. During the period of the review, generation at Huntly was at maximum capacity because of river temperature limits, and technical issues with some of our plant.

Therefore, Genesis Energy was incentivised to ensure that hydro storage was maximised and that other thermal generation was available.

## The IRDE analysis is not compelling

The draft review suggests that the periods of high IRDE coincides with high offer prices from Huntly.[4] We do not see any compelling evidence in the draft review to support this suggestion. In fact, our reading of Figures 18 and 19 is that the noticeable IRDE 'spikes' do not correspond with particularly high offer prices from Huntly:

| Date | Maximum IRDE (Figure 19) | % of $500+ offers at Huntly (Figure 18) |
|---|---|---|
| 26 February | 15 | 0% |
| 27 February | 12.5 | 0.46% |
| 12 March | 15 | 10.03% |
| 01 April | 15 | 4.90% |

The draft review hypothesis is that Genesis Energy had a substantially increased ability to affect spot price in these periods. However, as shown above, this did not result in a substantial increase in offer prices. We also find it interesting that there are almost no days when IRDE is less than 1%. Following the draft review's logic, this means that on every day it would have been profitable to withhold and set higher prices. Clearly, this is not the result the market produced.

Our observations, at the very least, highlight that the information provided in the draft review is not easy to interpret. For example, a scatter graph of prices and IRDEs for each period would be a better way of presenting this information. However, more fundamentally, the use of the IRDE measure in this context does not in any way contribute to the understanding of the price events, but inculcates with paper with a sentiment of concern over unilateral pricing power.

If you would like to discuss any of these matters further, please contact me on 04 495 3340.

Yours sincerely

Jeremy Stevenson-Wright
Regulatory Affairs Manager

[4] Paragraph 5.23 Draft Review