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Mr Michael Rawstron
General Manager
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Australian Competition and Consumer Commission
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Dear Mr Rawstron

RE: DRAFT DETERMINATION – BIDDING AND REBIDDING CODE CHANGES

NRG Flinders appreciated the opportunity to make a presentation at the pre-determination conference held in relation to the above on 13 August 2002, on the topic of price signals for new investment.

This submission reaffirms that presentation and provides additional information and supporting argument to amplify and reinforce the points made at the forum, addressing the following essential criteria:

- What factors influence investment decisions in generation?
- Are current spot prices adequate to promote generation investment?
- Is there a problem?

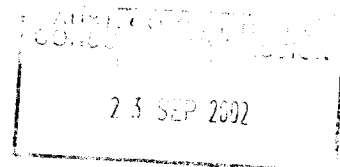
In order to address each of these questions, we have attempted to provide market data as evidence as well as commentary from independent consultants to draw suitable conclusions.

1. *What factors influence investment decisions in generation?*

When considering whether to invest in generation assets an investor will generally have regard to what is considered to be the new entrant price for the type of generation plant that is to be invested in. The forecast of spot prices is also assessed to establish whether a suitable return will be provided for the investment.

An investor would also consider committed projects in the region and make an assessment as to how these projects will influence the demand/supply balance. It would generally be expected that the more investment in generation assets within a region, the greater the competition in that sector and subsequently the more competitive the spot price would be.

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New Entrant Pricing

In its report to the ACCC, the IES report adopts a benchmark new entrant cost of \$40/MWh for base load plant. This is broadly consistent with internal advice recently provided elsewhere by IES estimating new entrant costs at around \$41/MWh for combined cycle gas plant, and around \$50/MWh for open cycle gas plant.

For its part, MMA estimates 'first year' new entry costs at around \$39/MWh in SA and 'levelised' new entry costs at around \$42/MWh in SA in its report to the ACCC.

These benchmarks accord with typical industry estimates, reinforcing the view that an average return of at least \$40/MWh would be required to support the entry of a base load generator, with slightly higher returns required to support combined cycle gas plant, and significantly greater returns required to sustain a new open cycle gas plant.

To date, the discussion of short term pricing outcomes and volatility in the spot market has failed to link average spot price outcomes to the actual costs of generation. As noted by IES, all regions are presently at or below base load new entrant pricing levels.

This stands in contrast to early experience in the NEM, in which higher spot price levels have driven substantial capacity investment where required, as outlined in the table below. Investment in South Australia and Victoria has occurred largely as a result of expected shortfalls in reserve and an average spot price that was boosted during the summer of 2000/01.

Generation Investment

Significant investment in generation capacity has occurred since the commencement of the NEM:

Region	<i>Generation Capacity Investment</i>
South Australia	1130MW since 2000
Victoria	856MW since July 2001
Queensland	2496MW since 2000
New South Wales	220MW since 2000

This new plant has been committed on the basis of a lightly regulated wholesale market in which unfettered pricing signals have triggered efficient and timely new investment to meet emerging requirements.

Any unwarranted interference in the pricing signals generated by the market threatens the prospects for further investment. The risk of unwarranted regulatory intervention is significant at a time when there is a need for additional capacity to meet minimum reserve requirements in South Australia and Victoria by 2003/04, and for additional capacity in New South Wales and Queensland by 2006/7 and 2007/8 respectively, as outlined in NEMMCO's 2002 Statement of Opportunities.

In aggregate, the ESAA has projected a requirement for up to \$48 billion of investment across the industry by 2020 in order to meet projected demand levels, of which \$20 billion is required before 2010.

Clearly it is essential to ensure that incentives for market driven investment remain undisturbed to ensure timely and uninterrupted delivery of new generation capacity. Ultimately what the market does not want to see is investment in generation driven by blackouts and VoLL pricing or the reserve trader intervention.

2. Are current pool prices adequate to promote generation investment?

Pricing Signals

The following tables summarise spot price outcomes (on both a time and volume weighted basis) across the NEM regions over the 18 months to 1 July 2002.

These figures indicate that spot prices of over \$500/MWh constitute a relatively small proportion of observed prices and a small fraction of bids. However, without the contribution of prices above \$500/MWh, average spot prices would be uneconomic for many generators, and therefore unsustainable in the medium to longer term.

Even when the impact of spot prices above this level are included, the data still indicates that prices are well below the level required to produce a sustainable, commercial return, and remain below new entrant pricing levels. (Note that the volume-weighted contributions have been provided for comparison only, and can not be individually summed to derive a simple total).

NSW pool price distribution 1 January 2001 to 1 July 2002

Price range (\$/MWh)	Hours in band	% time in band	Time weighted (\$/MWh)		Volume weighted (\$/MWh)	
			Average price	Contribution to average price	Average price	Contribution to average price
Under \$50	12,373.5	94.43	27.02	25.52	27.86	26.30
\$50-\$100	590	4.5	65.26	2.94	65.46	2.95
\$100-\$150	103	0.79	189.15	1.49	191.29	1.50
\$500-\$1,000	13	0.1	731.42	0.73	729.12	0.72
\$1,000-\$5,000	22	0.17	2,592.21	4.35	2,580.32	4.33
\$5,000-\$10,000	2.5	0.02	6,256.67	1.19	6,276.71	1.20
Total	13,104	100%		36.21		

Victoria pool price distribution 1 January 2001 to 1 July 2002

Price range (\$/MWh)	Hours in band	% time in band	Time weighted (\$/MWh)		Volume weighted (\$/MWh)	
			Average price	Contribution to average price	Average price	Contribution to average price
Under \$50	12,392	94.56	26.00	24.59	26.73	25.27
\$50-\$100	568.5	4.34	65.66	2.85	65.75	2.85
\$100-\$150	96	0.73	191.32	1.40	192.49	1.41
\$500-\$1,000	17	0.13	729.02	0.95	731.99	0.95
\$1,000-\$5,000	30.5	0.23	2,569.86	5.98	2,608.80	6.07
\$5,000-\$10,000	0	0	0	0	0	0
Total	13,104	100%		35.76		

SA pool price distribution 1 January 2001 to 1 July 2002

Price range (\$/MWh)	Hours in band	% time in band	Time weighted (\$/MWh)		Volume weighted (\$/MWh)	
			Average price	Contribution to average price	Average price	Contribution to average price
Under \$50	12,248.5	93.47	27.86	26.04	28.82	26.94
\$50-\$100	670.5	5.12	64.58	3.30	65.19	3.34
\$100-\$150	120.5	0.92	179.13	1.65	183.33	1.69
\$500-\$1,000	24	0.18	769.88	1.41	771.82	1.41
\$1,000-\$5,000	40.5	0.31	2,593.19	8.01	2600.97	8.04
\$5,000-\$10,000	0	0	0	0	0	0
Total	13,104	100		40.42		

Qld pool price distribution 1 January 2001 to 1 July 2002

Price range (\$/MWh)	Hours in band	% time in band	Time weighted (\$/MWh)		Volume weighted (\$/MWh)	
			Average price	Contribution to average price	Average price	Contribution to average price
Under \$50	12,101	92.34	26.35	24.33	27.06	24.98
\$50-\$100	696.5	5.32	65.44	3.48	65.50	3.48
\$100-\$150	260	1.98	200.43	3.98	200.96	3.99
\$500-\$1,000	22	0.17	662.55	1.11	660.70	1.11
\$1,000-\$5,000	23	0.18	2,227.57	3.91	2,225.44	3.91
\$5,000-\$10,000	1.5	0.01	6,358.26	0.73	6,373.80	0.73
Total	13,104	100		37.54		

The picture is similar across NSW, Victoria, Queensland and South Australia, with average pool prices remaining below new entrant levels for most generation types in the majority of regions. Historically, South Australia and to some extent Queensland, have experienced higher prices, particularly during times of tight demand/supply balance, which has provided the essential driver for much needed generation investment.

The evidence therefore indicates that when considering wholesale pool prices over a reasonable time period, the generation sector cannot afford any risk that the wholesale pool price will be artificially restricted through the bidding and rebidding process. This will create an untenable investment and operational risk for the supply side of the electricity market.

Role of Price Spikes

In its analysis undertaken for the ACCC, IES concluded that bidding and rebidding contributed between \$3/MWh and \$11/MWh to the average annual pool price. However, IES believes that the increased level of prices could be considered beneficial in that it has encouraged much needed investment in the relevant regions without being prompted by high prices resulting from blackouts.

In its December Report to the ACCC, IES stated that:

“in an energy only market a certain pattern of high and extreme prices is necessary to support investment in reliability plant. Our assessment is that the level and duration of extreme prices in the NEM has been, and remains, within the scope of reasonable expectations to achieve a reliable system...”¹

Consistent with this IES also indicated that, had prices been driven purely by short run marginal costs:

“it is also unlikely that the new entry that has and will soon occur in the southern regions would have taken place when it did; it would have required the near certainty of blackouts and VoLL pricing, or at least NEMMCO Reserve Trader intervention, to deliver that result. With the current and foreshadowed levels of VoLL and without significant demand side activity, blackouts running to some 20 hours per year would be required to encourage new entry...”²

Clearly, the prospect of load shedding and VoLL pricing is the alternative to market driven investment signals supported by naturally occurring price spikes.

In its Draft Determination, the ACCC acknowledged the need for investment signals and the nature of competitive pricing in a capital intensive industry such as the NEM:

¹ Review of Generators' Bidding and Rebidding: Report to the ACCC, IES, 18 December 2001, p32

² Ibid p32

“The competitive level in the electricity market is not necessarily SRMC as prices that cover marginal costs could lead to under investment because there is limited return to cover fixed costs especially where economies of scale exist.”³

The ACCC also observed that price cycles trigger investment:

“The Commission has taken the longer term view in its analysis of these Code changes and believes that the high priced periods of 2001 that raised initial concerns are largely part of the cycle of development of the NEM”⁴

This is consistent with the underlying rationale for the level of VoLL in the market. In approving the increase in VoLL to its current level, the Commission accepted that the proposed Code changes will increase investment in fast start plant.⁵

It also accepted the advice of the Reliability Panel, noting the importance of unrestrained pricing signals in the NEM:

“The Reliability Panel’s study highlighted...the NEM is the only market where the spot price is intended to be the prime driver for remuneration for energy sold and capacity made available. This also lends support to the view that for reliability concerns, the price cap in the NEM should be higher than in overseas markets.”⁶

It is clear from these statements that both the ACCC and its consultants recognise the inherent dangers in attempting to depress spot prices, and that an energy only market such as the NEM relies on potentially volatile prices as its clearing mechanism, and as a trigger for new investment.

3. Is there a problem?

The evidence indicates that yes, there is a problem. The problem can be broken down as follows:

- That the current volume weighted spot price is well under new entrant prices.
- That the current volume weighted spot prices experienced in the NEM are insufficient to sustain the generation sector in the long term.
- If the generation sector did not receive contributions towards the spot price from bids over \$500/MWh then for most generators the situation would be unsustainable now.
- Is it preferable to have new investment in generation driven via price signals or via blackouts and reserve trader interventions?

³ Changes to Bidding and Rebidding Rules, Draft Determination, 3 July 2002, ACCC, p67

⁴ Ibid p67

⁵ ACCC VoLL Determination, 20 December 2001, p67

⁶ Ibid, p39

We believe that the problem is not in the short-term price volatility in the market, on the contrary, it has been a primary driver of new investment. We believe that without that price volatility the average spot price would not be adequate to sustain the current generation sector let alone drive new investment.

ACCC Deliberations

Section 90(6) of the Trade Practices Act provides that the Commission shall grant authorisation only if it is satisfied in all circumstances that:

- *The benefit would outweigh the detriment to the public constituted by any lessening of competition that would, or would be likely to result from the proposed contract, arrangements or conduct.*

It would appear that the Code change proposal submitted by NECA has the potential to lessen competition by weakening or removing essential pricing signals for new investment in the NEM.

On this basis it would appear that the ACCC does not have adequate grounds to authorise the proposals put forward because it has not been clearly demonstrated (even by the consultants commissioned by the ACCC) that the benefits of the Code change proposal would outweigh the likely detriment.

We therefore urge the ACCC not to authorise the bidding and rebidding code change proposal in its current form.

CONCLUSIONS

In summary:

- Significant new generation capacity investment in the NEM has been triggered by market pricing signals to date;
- Current volume-weighted spot prices are well below new entrant prices, despite the fact that various regions face a need for additional reserve capacity in the near future;
- Current spot prices in the NEM are commercially unsustainable for the generation sector in the long-term. This may also act to discourage long term contracting in the present environment;
- If the generation sector did not receive contributions towards the pool price from price spikes (eg bids over \$500/MWh) then the level of returns would be unsustainable for the majority of generators at present;

- Any dampening of pricing levels would exacerbate this situation further and threaten the prospects for further investment. It is therefore essential to preserve peaky price signals to avoid load shedding as the trigger for new investment.

We trust that the Commission finds this submission useful in its deliberations. If you have any questions please contact either Reza Evans or myself.

Yours sincerely



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