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Review of NCP Reforms
Productivity Commission
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Dear Sirs

REVIEW OF NATIONAL COMPETITION REFORMS

The National Generators Forum (NGF) appreciates the opportunity to comment on the Productivity Commission's draft review of *National Competition Policy Reforms*, October 2004.

The NGF does not support the suggestion in the Commission's draft report that the Ministerial Council on Energy (MCE) should initiate a review of generator market power in the National Electricity Market (NEM). The report does not detail any evidence to support the contention that generator market power is a problem. It would seem that the suggestion is simply giving credence to the entrenched position of market critics that is not supported by any credible evidence.

In recent times there has been the enquiry by NECA into generator rebidding, a subsequent enquiry by the ACCC into the broader issue of market power and an independent assessment by the Federal Court (AGL vs ACCC). None of these enquiries established the existence of any systemic market power in the generation sector. In the NGF's view, it is pointless to engage in yet another review on the same issue.

It also seems inconceivable that market power could be an issue at the current time when most jurisdictions are seriously concerned about whether or not future generation investment will occur in a timely manner. This could hardly be an endorsement of the existence of generator market power. History has shown that the market has delivered new generation as soon as prices move towards new entrant levels, which certainly does not confer pricing power as new investment should not occur until prices actually have been at new entrant levels for some time to indicate that new plant is required.

The establishment of the NEM is probably the single most significant and complex reform undertaken as part of the national competition policy agreements. The NEM is also one of the competition policy success stories, delivering ongoing benefits to customers and the national economy and providing vastly improved signals for new investment in generation and transmission assets.

The NGF argues in this letter that the NEM has operated as expected of an energy-only spot market and that electricity customers have enjoyed competitive prices in recent years. The recent Federal Court decision (AGL vs ACCC) provides independent support for this position.

By commissioning a review of market power issues, the MCE could actually create a regulatory environment that deters the new investment that is needed to maintain a well functioning market.

NEM market design

The NEM is an energy-only spot market where supply and demand must always be in balance and price is reset every five minutes. Spot price volatility should not be seen as a weakness of the market design. Volatility is necessary to elicit short term supply and demand responses and as a longer term signal for generation investment including the type, timing and location of new facilities.

The transparency of the spot market can often lead market observers to draw inaccurate conclusions about the performance of the total electricity market. Outcomes in the spot market not only relate to the dynamics of supply and demand, but also the effects of hedging positions held by the various participants. Whilst these are not as obvious to observers and market participants, the hedging market complements the operation of the spot market and provides the financial tools for participants and electricity consumers to manage the various price and volume risks. Generator incentives to influence spot market outcomes are diminished once they have hedged their expected output. To undertake an assessment of the NEM on the basis of spot price outcomes ignores the real economic outcomes and focuses only on the residual energy not traded in the hedge market.

The NGF engaged the Network Economics Consulting Group (NECG) in 2002 to review the evidence of generator market power as part of NECA's review of rebidding rules under the National Electricity Code.[1] NECG was also asked to critique a number of papers commissioned by the ACCC on bidding and rebidding behaviour in the NEM.

NECG found that the NEM has functioned in a way that is consistent with the energy-only market design:

- Volatility in spot prices is not a sign of inefficiency *per se*. Rather, it is the means by which the risk inherent in the supply/demand balance is signalled to market participants, allowing them to respond to that risk in the most appropriate way.

- The structure of that volatility then signals the type of capacity that has the greatest value at the margin and hence triggers and guides investment choices.

- It would be a concern if the market design were allowing participants to engage in strategic behaviour that enhanced and perpetuated market power because this might distort productive efficiency in the short term and entry, exit and expansion in the long term.

- Empirical analysis suggests that the behaviour of prices in the spot market, including in terms of the dynamics of price formation, is consistent with the efficient signalling role rather than necessarily reflecting the exercise of market power.

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[1] NECG, "Has the NEM failed?; a critique of papers commissioned by the ACCC", prepared on behalf of the National Generators' Forum, April, 2002.

NECG concluded that the fundamental issue that must be addressed is whether it is market participants that will make investment decisions in the future or whether investment in generation will be centrally planned and funded. "If it is the latter, then it may be that proposals that weaken the role of prices can be accepted. But if the core feature of the NEM is to remain in place – namely, its reliance on market processes to determine investment and resource allocation – then price signals are of vital importance and a very demanding standard should be set for proposals that will weaken these."

The NGF supports this conclusion and considers that it remains relevant.

New entrant costs

It is natural for policy makers to be concerned about whether market outcomes are being distorted by market power. However, it is simply incorrect to test for this by comparing prices to short run marginal costs. At some point, generators must be able to recover some of the fixed costs associated with owning capital intensive generation assets.

The NGF believes that any analysis of market power should start with an examination of longer term cost and price trends rather than focus on price outcomes in particular trading intervals. It is reasonable to assume that if there is a degree of power in a market, prices will on average be above efficient costs.

The following chart compares monthly spot price since 2001 for each region with estimates of the long run marginal cost of generation for various load shapes. The long run marginal cost is the cost of establishing generating capability including a component for the capital cost of the new plant.

A number of organisations have published NEM new entrant costs in recent years:

- Sinclair Knight Mertz estimated a new entrant price of $39/MWh for new base load generation in a report prepared for the NGF;[2]

- Intelligent Energy Systems estimated a range of average long run marginal cost to supply residential customers in New South Wales with a medium cost scenario of about $48/MWh and a high cost scenario of $57/MWh;[3]

- The South Australian Electricity Supply Industry Planning Council estimated the long run marginal cost for a new entrant at $57.60 to supply large load customers and $66.84 to supply small customers.[4] Given that South Australia relies on gas for electricity generation and consequently has higher fuel costs, this LRMC estimate is not shown in the chart below.

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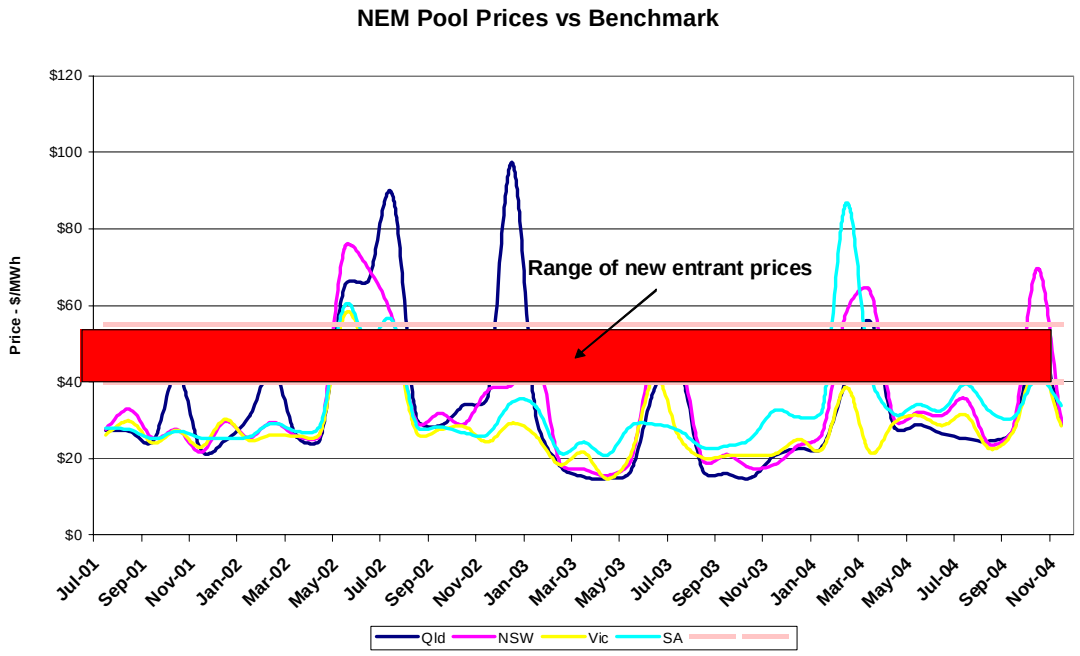
2 SKM, "New entrant cost parameter estimates", October 2001.

3 IES, "The long run marginal cost of electricity generation in New South Wales", A report to the Independent Pricing and Regulatory Tribunal, April 2004.

4 ESIPC, "Estimates of the long run marginal cost of supplying electricity to small customers in 2005", Information paper prepared for Essential Services Commission of SA.

The NGF contends that the analysis of historical prices and new entrant costs provides strong evidence to suggest that incumbent participants are not earning monopoly rents from the NEM through the exercise of market power. The NEM monthly spot prices are generally well below the published estimates of long run marginal cost of incremental generation. There are some periods where average monthly prices exceed new entrant costs, but those are generally short term and cyclical in nature reflecting the effect of high demand seasons.



Market participants are able to enter into hedging contracts with an agreed strike price using a range of contract types. The AFMA forward curves for flat load for calendar years 2005 and 2007 indicate the availability of swap contract prices that are below the estimates of new entrant costs. By entering such contracts, generators and retailers are able to manage their expected financial positions by reducing possible exposures to the vagaries of the spot market.

AFMA price curve *(as at 14 Dec 04)*	***2005***	***2007***
New South Wales	$37.50	$37.25
Victoria	$33.10	$34.55
Queensland	$35.75	$35.70
South Australia	$43.00	$42.25

Any analytical framework of the electricity market must account for the impact of the hedging market in limiting the incentive for generators to bid strategically.

Australian Gas Light Company decision

One of the key issues in the recent AGL vs ACCC Federal Court case over ownership of the Loy Yang A assets involved an assessment of the definition of the relevant market.[5] In making his decision, Justice French relied on extensive commercial-in-confidence data detailing the level of trading in the market, the testimony of key market participants and econometric research carried out by NECG on behalf of AGL.

Justice French concluded that while there were occasions of temporary price separation between regions, the NEM, overall, could be regarded as a single market encompassing both the physical operation of the pool and the broader derivative contracts market:

> *In my opinion, however, having regard to the structure of the market and the extent to which its major participants operate across regional boundaries, I am satisfied that there is one NEM-wide geographic market for the supply of electricity, and associated with that, entry into electricity derivative contracts (para 387).*

Justice French made a number of other important observations and findings that are relevant to the question of market power in the NEM:

- In relation to the dynamic characteristics of the market, it is plain that the wholesale market for electricity and derivatives contracts is dynamic. By way of example, there was evidence that market participants negotiating forward contract strike prices will not readily be misled by transient price spikes. They are also showing flexibility in the way in which they deal with spot price volatility, not only by the use of hedge contracts but also by the acquisition or construction of peaking generators. (para 399)

- The question is whether the existence of such opportunities for increasing spot prices and the fact that it responds to them from time to time reflects the existence of market power. There is here a distinction to be drawn between what was referred to as "transient market power" and "persistent but intermittent" market power. (para 456)

- I am prepared to accept that there are periods of high demand where a generator may opportunistically bid to increase the spot price. I do not accept that such inter-temporal market power reflects more than an intermittent phenomenon nor does it reflect a long run phenomenon having regard to the possibilities of new entry through additional generation capacity and the upgrade of interconnectors between regions. It does not amount to an ongoing ability to price without constraint from competition. (para 493)

The NGF believes that the AGL vs ACCC decision provided a timely independent assessment of the performance of the NEM and the soundness of the underlying market design. Justice French found that investment had occurred in the NEM in those regions where it was needed, that prices had converged in response to transmission augmentations and that it was possible for retailers to make investments in peaking plant at relatively short notice in response to spot price signals.

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[5] Federal Court of Australia, Australian Gas Light Company v Australian Competition & Consumer Commission, 19 December 2003.

After reviewing a wide range of public and private trading data, Justice French concluded that the NEM is working as a national market and there is no evidence of market power or barriers to entry that would allow generators to earn above normal profits under the existing wholesale market arrangements and industry structure.

Concerns about spot market manipulation

Some commentators argue that generators may have the ability during short trading intervals to increase spot market prices, for example by withdrawing supply from the market. They consider withdrawal could occur by physically withdrawing plant output or by rebidding output at much higher prices.

This issue was thoroughly examined during the review of rebidding by NECA, and the ACCC's subsequent enquiry into market power. In the event, some minor changes were made to the rebidding rules largely to clarify the existing position, but it was accepted that rebidding is a critical tool for managing dispatch within the market, and that prohibiting rebids could severely impact on generators' ability properly to manage their plant.

It would be wrong to suppose that generators have unfettered powers to withdraw plant or change bids in response to sudden changes in market conditions. The Code contains a number of prescriptive requirements for withdrawal of capacity or rebids, including broad powers for NECA to investigate and substantiate the reasons for such activities. In particular:

- clause 3.8.2 provides that scheduled generators must provide dispatch offers for each scheduled generating unit for each trading interval, including provision of prices and output quantities;

- clause 3.8.4 provides that scheduled generators must notify NEMMCO of a range of matters affecting availability such as available capacity, MW capacity profile, estimated commitment times, and ramp rates (rates at which output may be increased or decreased);

- clause 3.8.19 provides that if units cannot operate in accordance with previously supplied information, due to abnormal conditions, the generator must notify NEMMCO and provide verifiable and specific reasons and must respond to NECA with substantiation and verification of these reasons if requested;

- clause 3.8.22 forbids generators from changing prices within each pricing band for each unit (generators may provide up to 10 prices for each unit, depending on the level of output: clause 3.8.6) but permits changes to available capacity, ramp rates etcetera. However, with such changes, the generator must provide verifiable, specific reasons, the timing of events causing the rebid changes, and must respond to NECA requests to verify and substantiate these reasons;

- clause 3.8.22A provides that generators must make bids and rebids in good faith (that is, with the genuine intention of honouring their bids or rebids). It also provides that adverse conclusions about the good faith nature of bids and rebids may be drawn by inference from market conduct;

– clause 3.8.23 provides significant consequences for generators failing to dispatch as bid when directed to do so by NEMMCO. Plant becomes non-compliant and cannot set spot prices, and NEMMCO can direct that the plant generate according to particular profiles until the non-compliance event is investigated.

These provisions ensure clear regulatory oversight of the market and prevent arbitrary withdrawal or rebidding by generators to take advantage of short duration market conditions.

Summary

The Commission's draft report infers that generator market power is excessive in particular NEM regions. No analysis or data is presented in the report to support this statement. The NGF believes that the Commission must establish a solid case with actual evidence if it is to retain the proposal for a review of market power in its final report. Much is happening with the NEM regulatory structure at present and a further review would only add to the profile of market risks facing new investors.

Policy makers and regulators should not view short-term price volatility in the NEM in isolation, as it is a necessary outcome of a gross pool design. The fact that there is an abundance of spot market data available publicly helps to inform production and investment decisions. However, that spot market data does not reveal the full picture of how participants are managing wholesale risks through a variety of derivatives contracts, diversification strategies and peaking plant investments. The long term interest of customers is best protected by a stable regulatory framework and a market that is capable of providing appropriate returns to investors.

Yours faithfully

Signed: G V Every-Burns

G V EVERY-BURNS
DEPUTY CHAIR