



20 July 2012

Mr John Pierce
Chairman
Australian Energy Market Commission
PO Box A2449
SYDNEY SOUTH NSW 1235

Reference: ERC0123

Dear Mr Pierce

Draft Rule Determination: Potential Generator Market Power in the NEM

The National Generators Forum supports the AEMC's assessment and conclusions in its *Draft Rule Determination, Potential Generator Market Power in the NEM, 7 June 2012*.

The NGF has participated in and followed the course of this Rule change with great interest, like all participants in the NEM. We thank the AEMC for conducting an independent, transparent and thorough review of issue of central importance to our sector. Following an 18 month process of developing an assessment framework and conducting a detailed conceptual and quantitative analysis, the AEMC found no material evidence of any substantial problem with the current NEM gross pool design. We strongly agree that a short period of spot market volatility does not justify the imposition of arbitrary price caps on generator bids across the NEM.

In one sense the Major Energy Users Rule change proposal has enabled a public debate and investigation of the robustness of the current wholesale electricity market. Following more than ten years of operation, the NGF sees the AEMC draft determination in response to the MEU allegations as offering validation that the current market design is workably competitive. The draft determination provides strong grounds for the generation sector to challenge negative claims about pricing outcomes in the NEM and better inform policy makers and interest groups about the role of the wholesale market in delivering competitive prices and a reliable supply of electricity to customers over the longer term.

Key findings of the AEMC's draft determination

After strong initial reservations about the appropriateness of proceeding with this Rule change, the NGF considers that the AEMC has made some important judgements about the approach for considering the efficiency of the current NEM design and settings.

- *Definition of substantial market power.* The NGF agrees with the AEMC that the starting point for considering a market power concern must be based on “substantial” prices that are held at a level above what would prevail in a workably competitive market for a sustained period of time.
- *Transient market power.* Similarly, a transient period of prices above long run marginal cost is not sufficient evidence of a problem with generator market power. Investors will only commit to large scale capital projects if they are confident of making a return on their up-front investment through time. The NEM was deliberately designed to elicit periods of price volatility to provide a signal of tightening supply-demand conditions.
- *Market power is only likely to be sustained if there are inefficient barriers to entry.* The NGF agrees that any assessment of market power concerns needs to be supplemented by an analysis of market features which may raise the costs of new entrants. We agree that such an analysis should focus on socially inefficient impediments to new entry and strategic barriers potentially created by the actions of incumbent players.

The NGF strongly supports the AEMC's key conclusion that the MEU proposal is likely to reduce the long-term reliability of supply to consumers:

The MEU's proposed rule would pose unacceptable limitations on the ability of NEM generators to recover their efficient costs. In the long-term, a generator must have an expectation that it will likely be able to recover its efficient costs, both for that generator to remain solvent and to encourage further investment and injections of capital to the NEM. A market design that does not provide a generator with a reasonable opportunity to recover its efficient costs will fail in attracting the necessary investment to maintain supply availability in line with the growth in demand.¹

Using long run marginal cost as a benchmark

In the earlier stages of this Rule change review, the NGF cautioned the AEMC about the limits of relying on a simple ‘yes or no’ test when comparing average wholesale prices with one measure of long run marginal cost. While the underlying reasons for this concern remain, the NGF recognises the following aspects of the modelling work:

- NERA applied two methodologies for calculating LRMC and applied a low and high estimate for one of those measures. Reporting a band of LRMC estimates reduces the risk of false precision. Any measure of LRMC is dependent on the underlying assumptions, which are open to the discretion of the modeller to set. Using a range of reasonable assumptions, in this case investor risk premiums, provides a better indication of cost uncertainty.

¹ AEMC, Draft Rule Determination, Potential Generator Market Power in the NEM, June 2012, p.49.

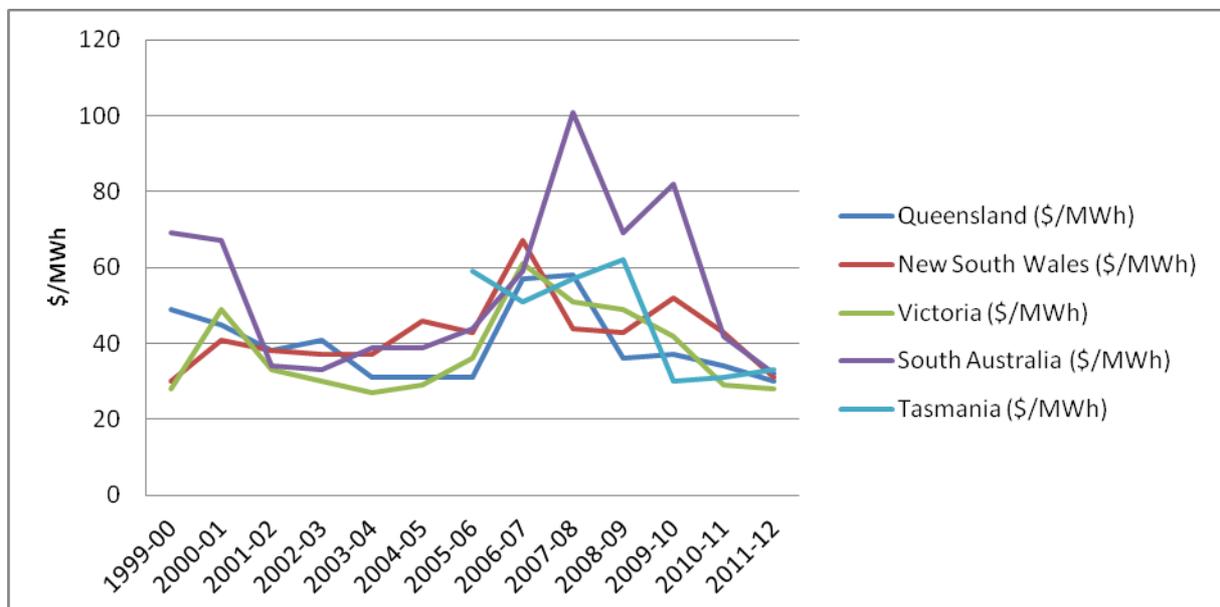
- NERA acknowledged and accepted that there were one-off, atypical market drivers affecting pricing outcomes in 2006-07 and 2007-08. Severe and widespread drought conditions and record high demands (and unplanned plant outages), particularly in New South Wales and Queensland, resulted in periods of high prices. Wholesale prices have fallen substantially in following years to a point where “more recently, wholesale prices have not been sufficient to recover the costs of new entry”.
- The AEMC is of the view that there are a range of factors that are likely to place downward pressure on electricity demand in the short to medium term – rapidly rising retail prices, the Renewable Energy Target, solar PV installations, energy efficiency programs and broader macro-economic conditions. AEMO’s recent publication of the National Electricity Forecasting Report 2012 confirms this assessment.

The NGF notes that both of the methodologies selected by NERA would be likely to report markedly lower LRMC estimates than an approach based on building a new standalone gas-fired plant to deliver an additional generating unit to the market.

Another data point - pricing outcomes for 2011-12

NERA’s analysis covered the period 2005-06 to 2010-11 – NERA finalised their report in April 2012. Wholesale price outcomes for 2011-12 confirm the AEMC and NERA conclusions, in a very dramatic way. Load-weighted wholesale NEM price outcomes in all regions for the past financial year were the lowest ever recorded (in real terms) and substantially below the LRMC estimates reported by NERA for 2010-11.

Chart 1: NEM annual regional volume-weighted spot price, 1999-00 to 2011-12



The following table shows spot price outcomes for 2011-12 by region and presents those prices as a percentage of NERA’s low and high estimates for LRMC (based on the ‘approximation approach’). These volume weighted prices are in all cases substantially below any of the LRMC estimates. The NGF does not claim that this is evidence by itself to form any particular view, but it emphatically confirms the recent price trends reported by NERA.

Table 1: Annual volume-weighted spot price, as a percentage of 2010-11 LRMC estimate, by region

	2011-12 spot price (\$/MWh)	as a % of low LRMC	as a % of high LRMC
New South Wales	31	55%	40%
Queensland	30	55%	41%
Victoria	28	51%	37%
South Australia	32	50%	36%

Investment time frame

The AEMC’s framework for assessing the exercise of substantial generator market power required a relevant timeframe for examining whether there was evidence that such power had been exercised in a sustained or non-transient manner.

Given how clear cut the annual results were in each region, the AEMC was not drawn on making comment on the period of analysis, commenting only that “the Commission has considered the results of the NERA’s comparison of annual average wholesale prices with LRMC over a time-frame sufficient that new entry would be expected to occur in the absence of barriers to entry.”

The NGF understands why the AEMC was reluctant to put a definitive timeframe on the dynamics of the investment cycle in the electricity industry, but remains firmly of the view that the originally proposed period of 2 to 3 years is too narrow for the purposes of this type of assessment, for two reasons:

1. Both transmission and generation investments require significant lead times, not just for the construction of the project, but also to complete planning and approval processes. A minimum of five years should be the starting point for any significant investment response;
2. In addition, the specific characteristics of generation investments in an energy-only market, namely that investment expenditures tend to be substantial, that investment is irreversible, and that there is considerable uncertainty about future market outcomes (as well as government policies), investors have a strong incentive to delay projects. These factors mitigate against a prompt investment response as a result of high prices.

Geographic definition of the market

The AEMC reported results from NERA modelling of a hypothetical monopolist test which was applied to each NEM region to provide some indication of the relevant geographic market boundaries for its broader evaluation. Using data from 2010-11, NERA’s modelling suggested that by adding 5% to every plant bid within a region, a hypothetical regional monopolist would find such a strategy profitable, implying that competition from interconnectors would not be sufficient to limit price increases.

The AEMC indicated that these results “pointed to the conclusion that each region of the NEM should be treated as its own market for the purposes of the comparison of wholesale price to LRMC”.

The NGF does not consider that the ‘small but significant and non-transitory increase in price’ test is an appropriate test for defining the geographic boundary of the electricity industry. Such a simplistic approach does not take account of:

- the degree of actual price separation between regions and the incidence of constraints between regions;
- the ability of retailers to hedge inter-regional price exposures, backed by the purchase of inter-regional settlement residues;
- the degree of substitution between generators in different regions; nor
- the importance of forward contracting decisions in encouraging plant to bid low to ensure plant is dispatched and generators receive the prevailing spot price.

The NGF is of the view that the SNIP 5% test should not be the sole factor guiding a market definition assessment in any future competition assessment of the NEM given that it completely ignores the practical limits on generator bidding and .

Potential barriers to entry in electricity generation

The AEMC’s draft determination incorporates the analysis and findings of a detailed consultant’s report on barriers to entry in electricity generation. In its earlier submissions, the NGF highlighted the importance of looking at barriers to entry as a key indicator of the structural competitiveness of a market as part of a broader analysis. The NGF also noted that not all barriers to entry are inefficient or a cause for concern if they are a normal business cost in making a significant sunk investment.

The NGF strongly supports the Competition Economists Group’s key finding:

The weight of evidence indicates that barriers to entry are unlikely to be a major concern in NSW, Queensland and Victoria, although this may be because between incumbent firms is strong rather than entry necessarily being easy in each of these States. In particular, individual firm market shares do not suggest a high likelihood of unilateral substantial market power and concentration levels are below or declining to be close to ACCC’s threshold for competition concerns. Evidence on pricing close to LRMC does not suggest barriers to entry or lack of competition between incumbents are creating the potential for excess pricing. ... We identified no evidence of strategic barriers to entry in NSW, Queensland or Victoria.²

LRMC measures should not be relied upon to monitor market performance

Wholesale electricity prices over the past few years have been low relative to any measure of LRMC. While this demonstrably supports the NGF’s position that the AEMC should not intervene to impose price limits on current NEM design, we do not support the use of an LRMC versus price methodology as the basis for an ongoing indicator of market efficiency.

² Competition Economists Group, Barriers to entry in electricity generation: A report to the AEMC, June 2012, p.64.

The NGF maintains its concerns with a simple theoretical approach that posits a cycle of high prices followed by investment followed by a period of low prices. Investment dynamics in a capital-intensive market like the NEM are more complex. :

1. There is a range of different methodologies for calculating LRMC that have been applied to utility pricing, and each is dependent on the assumptions and cost data available at the time. For example, an incremental system-wide LRMC approach is not the same as the LRMC of building and operating an additional unit of particular generation technology.
2. Any test that focuses on average historical prices may be misleading. For an investor, the focus is on post-entry prices and whether they will be sufficient to recover the cost of the investment. What is crucial is not the current height and shape of the price duration curve, but its height and shape post-entry. Given the scale and cost of major new power station assets, generation investment will only take place if expected post-entry (rather than actual) prices are greater than LRMC over some longer-term timeframe.
3. The LRMC standard assumes that investors undertake a standard (static) net present value calculation of revenues and costs. Such an investment criterion is no longer valid where there is uncertainty about future market outcomes and government policies, investment projects are irreversible and sunk, and investments can be delayed. In these circumstances, there is an option value attached to waiting, and it is often optimal to postpone the timing of the new investment.

The NGF considers that any evaluation of generator market power must look at a broad picture – including a sufficiently long term timeframe for an investment cycle, consider all relevant factors affecting short-term price movements, assess whether there are ‘inefficient’ barriers to entry for new investors, and take account of all reasons why generation investors may delay huge and irreversible project decisions.

Summary

The AEMC’s review of the MEU Rule change proposal has taken place against the backdrop of sharply rising retail prices for all customer groups – some 60% to 80% over the past five years, with further increases likely in the near term. The AEMC’s analysis has shown starkly that wholesale electricity prices have remained at or well below new entrant levels, apart from a period dominated by severe drought conditions. Low wholesale electricity prices in the past few years have offset retail price increases, not contributed to the rises.

Rising retail prices are hurting both consumers and generators alike. These rises are driven by escalating monopoly regulated network charges, the rate of the carbon price, the Federal mandatory renewable target program, state-based greenhouse programs, and the cost of energy efficiency schemes. Unlike prices determined in a competitive wholesale market, all of these cost increases are a direct consequence of government policy or regulatory action in one form or another. There is much greater scope for moderating or reducing retail prices by changing these policy settings than by attempting to artificially suppress short term spot market prices.

The NEM gross pool design will always be subject to close public scrutiny. The fact that AEMO publishes five-minute spot prices, all generating unit bids and re-bids, and real-time unit output makes our market incredibly transparent. With such a high market price cap relative to average price outcomes, short term price volatility is often seen as a problem not the market working as it was designed to do. What is not seen so readily is the range of risk management instruments working to protect prudent participant contracting decisions.

The NGF welcomes and supports the findings and conclusions in the AEMC's draft determination and we thank the AEMC for the work it has undertaken and the key concepts it has established. Given the lack of evidence to substantiate the MEU's calls for a radical change to the dispatch process, the NGF could not envision any reasonable grounds for deferring from the draft decision in the AEMC's final determination.

Yours faithfully

A handwritten signature in black ink, appearing to read 'TR', with a long horizontal flourish extending to the right.

Tim Reardon
Executive Director