ENERTRADE SUBMISSION ON THE DISCUSSION DRAFT

REVIEW OF NATIONAL COMPETITION POLICY REFORMS

Introduction

The Commission's draft recommendation that the Ministerial Council on Energy should review the extent of electricity generator market power, and assess whether special industry-specific rules should be introduced in the industry (beyond the general anti-merger provisions in section 50 of the Trade Practices Act) fails to recognised a core feature of the National Electricity Market (NEM) – market processes determine investment and resource allocation.

Proponents for further disaggregation fail to provide evidence of any significant generator market power and neglect to acknowledge recent market developments. Any fair assessment of the national electricity market should note that participants are well informed, and despite the tightening supply/demand balance, wholesale energy prices have generally fallen or remained steady since the advent of the market. Furthermore, there are significant investment opportunities in generation for new entrants.

New special anti-merger rules in the electricity industry may discourage new investment by preventing participants from forming the most efficient contractual or organisational structures to reduce price and volume risk in the wholesale market.

The Development of the National Electricity Market

There is wide agreement that structural and legislative reforms in the electricity industry, initiated by the Council of Australian Governments (CoAG), have increased productivity and performance of the industry, resulting in substantial benefits for consumers, industry and the economy. These reforms included separating the competitive generation and retail segments of the electricity and gas supply industry from the natural monopoly transmission and distribution segments.

In the electricity industry, this has resulted in a NEM which is generally regarded as among the more efficient in the world. Enertrade considers that the market is, in the broad, working well, has evolved significantly (and is continuing to evolve) from its monopoly supply roots into a competitive wholesale and regulated supply market characterised by:

- *Market Transparency*

  Near real-time information about spot prices, demand, interconnector transfers and limits is available to market participants. Information is also readily available on demand, price, volatility and minimum reserve levels on a regional basis.

  Prices are calculated for each five minute dispatch interval, and the six dispatch prices are averaged every half-hour to determine the spot price for the trading interval for each of the regions of the NEM.

- *Effective Market Planning*

  The Statement of Opportunities, prepared annually by NEMMCO, is a key input in investment decisions and provides current and potential market participants with information on future requirements for electricity supply capacity, demand management capacity and augmentation of the transmission network to support NEM operations.

- *Market Diversity*

  There has been significant evolution in the mix of supply side options to meet demand. There are broadly five supply side options available to meet demand:

  Baseload generation, characterised by high capital costs, relatively low operating costs and long ramp rates.[1]
  Intermediate generation, typically with higher operating costs than baseload generation and possibly shorter ramp rates.
  Peaking generators, with lower capital costs, higher fuel costs, and short ramp times attributed to sources of fuel, such as hydro pump-storage, wind and natural gas.
  Embedded generation, with higher capital and operating costs, but with lower transmission or distribution use of system charges.
  Transmission interconnections, which facilitate the importation of electricity from adjoining markets with surplus generation capacity or lower cost generation.

  Market analyses often overlook all these sources of generation when examining market demand, in particular transmission interconnectors and embedded generators. Non-scheduled embedded generators, in particular, are often not taken into account in market power analyses.

Further change in the wholesale electricity market (including levels of market concentration) can be expected to occur, in particular now that the market is reaching a point in the investment cycle where considerable new generation and transmission investment is called for (and beginning to take place). Tables 1-3 list a host of current and planned generation and transmission projects, some from new participants.

Table 1: Proposed Scheduled Generation Projects

Proponent	Project	Status
TXU Australia	Tallawarra Power Station site, 400 MW gas fired	Publicly announced
Macquarie Generation	Tomago 800 MW gas turbines	Publicly announced
AGL	Hallet Power Station upgrade, increase up to 430 MW	Publicly announced
Origin Energy	Quarantine Power Station expansion from 90 MW to 170 MW	Publicly announced
Magnesium International Limited	Port Pirie, 400 MW gas-fired power plant	Publicly announced
Forestry Tasmania	Southwood Resources-Huon, 30 to 50MW wood fired power station	Advanced

Source: NEMMCO (2004) Statement of Opportunities. p 11-14.

[1] The time taken to increase or decrease output to respond to changes in demand.

Table 2: Committed and Advanced Generation Projects

Project	Description	Timeframe
Committed Projects		
Callide A	Commissioned with 120 MW capacity	1 April 2005
Yabulu	Open cycle to combined gas turbine conversion (capacity increase from 160 MW to 223 MW)	1 February 2005
Liddell	Upgrade to generation (unit 3 and 4 from 500MW to 515 MW)	1 June 2005
Lake Bonney Stage 2	Extended the generation from 80MW to 240 MW of wind capacity	2 October 2005
Port Lincoln	Upgrade to Generation (23 MW to 25 MW)	1 March 2007
Advanced Projects		
Kogan Creek Stage 1	Kogan Creek commissioning 500 MW	1 June 2007
Kogan Creek Stage 2	Kogan Creek full capacity 750 MW	1 September 2007
Redbank 2	132 MW	1 June 2005
Wambo units 1, 2 & 3	450 MW gas turbine	1 January 2005

Source: NEMMCO (2004) Statement of Opportunities. p 4-18.

Table 3: Interconnector Projects

Proponent	Details	Proposed Date/Status
TransGrid	Augmentation to address north to south power transfer limits from Hunter Valley and Sydney to Yass, Canberra areas.	From 2008/notional
	Augmentation to address north to south power transfer limits from the Yass/Canberra areas to Snowy, Victoria and South Australia	To be determined/ publicly announced
VENCorp	Increase all Murraylink limits by around 100MW	April 2005/ advanced
ElectraNet SA	Increase interconnector capabilities – likely increased in all Murraylink interconnector capabilities by around 200 MW	November 2009/ proposed
Powerlink & TransGrid	Increase the northerly flow on Directlink to a full 180 MW under system-normal conditions	2005/ publicly announced

Source: NEMMCO (2004) Statement of Opportunities. pp. 13-5 -13-11.

In view of the continuing process of market development, and the generally acknowledged need for new investment, Enertrade considers it would be premature to step in at this point in the investment cycle with a review of generator market power. Such a review could raise issues with prospective investors that the market design within which they thought they were investing could be changed through special rules aimed at market generators.

Market Power

According to the Parer report[2], generators in some jurisdictions were able to exert market power at certain times, thereby increasing pool price variations.

These conclusions were narrowly based on view that concentration of ownership facilitates the ability for incumbents to exercise market power, especially when state interconnection is limited.

Enertrade considers that, to some extent, the Parer report's findings have been rendered out of date by more recent developments. In particular, the Federal Court's decision in the *AGL v ACCC*[3] case to define the market for electricity generation as being the whole of the NEM.

In any case, Enertrade considers that the wholesale electricity market is currently quite competitive, given:

- *Market definition*

  The *AGL v ACCC* case, defined the market for electricity generation as being the whole of the NEM. This definition is broader than the state-based geographic market definition traditionally adopted by the ACCC. The Court found that the markets for generation were national rather than state-based and has indicated a reduced concern that generator mergers would result in market power.

- *Interconnectors*

  Continued investment in new or upgraded interconnectors, has lead to increased import capabilities. This capability was highlighted in the *AGL v ACCC* case and was viewed as a facilitating factor in the evolution of the NEM.

  Interconnectors assist in minimising price differentials (price spikes) between regions in the NEM. It can also provide an economically viable alternative to investment in generation facilities when an adjoining market has a significant cost advantage in electricity generation which exceeds the cost of constructing and operating the interconnection.

- *Market Participation*

  Since the 1998, there has been significant investment in generation and interconnection. Investment in generation has added a new 4,300MW, or 13 per cent to available capacity. Meanwhile investment in new or upgraded interconnectors has increased import capabilities by 1,650MW or over a third[4].

  As noted above (Tables 1 - 3), there is significant planned and committed levels of public and private sector investment in generation and interconnection.

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[2] Energy Market Review (2002) *Towards a Truly National and Efficient Energy Market,* Final Report (W. Parer, Chairman).
[3] *Australian Gas Light Company v Australian Competition and Consumer Commission* (No 3) [2003] FCA 1525.
[4] NECA (2004) *Annual Report 2003/2004.*

- *Pricing*

  Spot pricing provides signals for future investment in generation and transmission infrastructure. As supply capacity decreases in relation to demand the spot price will increase and new generation or network capacity will be attracted into the market. A market price above the firm's marginal cost does not indicate market power. Rather, these price movements are integral components of an effective market and provide market information about mismatches in supply and demand, and the type of new generation required (whether baseload or peaking).

  Since 2001, spot prices have increasingly been aligned across regions within the market and the excessive and most extreme volatility in the prices has to a significant degree subsided[5]. This can be attributed to the demand/supply balance, stronger interregional connections, transparency within the market, and improvements in market knowledge. The prices that have resulted are consistent with the operation of an effective market, and are inconsistent with the assertion that generators have market power.

- *Barriers to Entry*

  The critical long-term issue in determining whether markets are competitive is the height of barriers to entry (or exit).

  Enertrade considers the height of barriers to entry in the wholesale energy market are not significant.

  Some groups have argued that barriers to entry are significant because of the presence of significant sunk costs, resulting in a risk of asset stranding if market prices fall. However, the potential for asset stranding is minimal, given:

  - the availability of market information on demand and supply and the timing for further investment through publications such as NEMMCO's annual Statement of Opportunities;
  - strong growth in demand and reasonable predictability in demand growth; and
  - the ability to move some plant. For example, gas turbines may be moved in response to changes in regional prices.

  In fact, the risk is that intervention to restrain perceived market power by introducing special merger rules may actually increase the barriers to entry by:

  - reducing the flexibility of market participants to manage risk (in particular intraregional volume risk); and
  - dampening or distorting signals for new investment due to increased financing and operating costs.

  The risk that new merger rules could increase barriers to entry is discussed further below.

[5] NECA (2004) *Annual Report 2003/2004*.

- *Contract Market Liquidity*

  Continued growth has been experienced in the contract market. To date, approximately 15 per cent of energy traded in the wholesale market is in the form of futures contracts.

NECG's analysis of the wholesale electricity market

NECG analysed the efficiency of the NEM in its report, *Has the NEM failed?* in the context of the debate about rebidding rules. The report addressed a range of misconceptions about the NEM, including that:

- the electricity market is characterised by a substantial degree of market power, which is facilitated by rebidding practices;
- certain price spikes that have occurred in the market either demonstrate, or may be attributable to, such an exercise of market power by the generators concerned; and
- price spikes make no positive contribution to market efficiency.

NECG's analysis indicated that the efficiency or inefficiency of the market rests on whether there are mechanisms for disclosing information relevant to efficient consumption and investment decisions, and that the price signals generated by wholesale price movements were necessary to generate this information. In particular, they found that:

- volatility in spot prices is not a sign of inefficiency *per se*. Rather, volatility 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. However, empirical analysis suggested that the behaviour of prices in the spot market, including in terms of the dynamics of price formation, was consistent with an efficient signalling role rather than necessarily reflecting the exercise of market power.

Recommendation would reverse NCP Objectives

The current draft recommendation runs counter to the principles espoused in the Competition Principles Agreement (CPA). Under the CPA, States were required to introduce competition into potentially competitive markets and to regulate natural monopoly elements of utility industries. The philosophy was to expose competitive sectors of utility industries to general market laws and conditions, including the anti-monopoly provisions of the Trade Practices Act (such as section 50). The draft recommendation would risk selective reregulation of the competitive sectors of the energy industry.

Enertrade considers that industry-specific competition rules are generally undesirable, and should not be contemplated unless compelling evidence has been produced that there is

a need for them. Industry-specific merger controls do not feature in any other industry in Australia – including highly concentrated industries.[6]

Much has been made of the special characteristics of the electricity market and market power as a basis for special industry-specific competition rules. Enertrade considers that these differences have been overstated, and are indicative of the definition of the wholesale electricity market rather than indicating the potential for market power within that market. For example, one factor commonly cited as evidence that the wholesale electricity market is special and requires special regulation is the fact that electricity must be produced and used instantaneously. However, this feature of electricity supply counts as much against market power as it does for it. This is because at times of high supply availability and low demand, generators actually have to bid negative prices in order to be dispatched and thus minimise overall running costs. Few other markets provide for dispatch of products at high negative prices (as low as negative $1,000 per MWh) in order to resolve battles among suppliers to sell to the market. Still fewer would then argue that these battles among suppliers to sell to market are a sign of their market power.

Potential Costs of a Review of Market Power

A review of generator market power could impose significant costs on the market, particularly if it resulted in special industry-specific rules governing mergers in the electricity supply industry, or resulted in disaggregation of existing participants.

Section 50 of the Trade Practices Act already prevents mergers that result in the substantial lessening of competition. Market participants would rightly be concerned at moves to introduce further controls beyond those in section 50.

Further, measures to restrict mergers or force disaggregation could impose costs on the wholesale electricity market in a number of ways.

Firstly, they could increase the marginal cost of production by sacrificing economies of scale and scope associated with current arrangements. Such economies could come from a number of sources, such as more widely spread management expenses, reduced fuel costs associated with bulk supply arrangements, cost advantages arising from co-location of coal and gas-fired generation, and reduced risks arising from diversification across a portfolio of baseload and peaking plant.

Secondly, new restrictions could impact on the willingness of generators to enter into hedging arrangements. At present, a significant source of risk for generators entering into such arrangements is volume risk. Volume risk relates to the danger that, due to unforeseen plant or transmission outages, a generator will not be able to supply electricity to cover its hedge positions. Exacerbating this risk is the fact plant outages typically result in higher regional prices.[7]

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[6] With the arguable exception of the four pillars policy in the banking industry.

[7] Suppose a generator enters a hedge for 100 MW at $35/MWh over a particular period. In the ordinary course, it is not particularly concerned if pool prices rise above $35/MWh, as this only limits its upside revenues to $35/MWh. However, if its plant fails, and pool prices rise above $35/MWh, it will be exposed to the risk that it will have to source higher-priced electricity to cover its hedge positions, and will therefore lose revenues due to entering the hedge arrangement.

At present, participants are able to reduce volume risk by holding a broad and dispersed generation portfolio. New restrictions on mergers or forced moves towards disaggregation would significantly increase volume risk. This increase in volume risk could impact liquidity in the hedge market by reducing generators' willingness to enter hedge arrangements.

Conclusion

The electricity market is dynamic and continually developing, has reasonably low barriers to entry or exit, and exhibits competitive market prices. In such circumstances, and when no significant evidence has been produced demonstrating the existence of generation market power, it is difficult to see the justification for conducting a review of market power. Market participants will quite rightly see the review as a fresh regulatory risk.