

Mr Gary Banks  
Chairman  
Productivity Commission  
PO Box 80  
Belconnen ACT 2616

24 December 2004

Dear Mr Banks,

### **Comments on electricity market structure issues**

Thank you for the opportunity to present the views of the Australian Competition and Consumer Commission (Commission) at the public hearing on the Review of National Competition Policy Arrangements on December 13 in Canberra. At the hearing the Commission outlined its concerns about reaggregation in the electricity industry. During the hearing you requested that the Commission comment on the speech delivered to the NSW Power Conference by Mr Rod Sims on 12 October 2004, in which he discussed electricity market structure issues. The Commission is pleased to comment on issues raised in that speech.

The Commission concurs with many of the views expressed in Mr Sims' speech regarding the issues and trends in the development of the National Electricity Market (NEM). However, the Commission believes that it is appropriate to elaborate on some of those issues, which have developed from ACCC's perspective as the Australian competition regulator.

First, the Commission agrees with Mr Sims that vertical and horizontal disaggregation was the most important aspect of electricity reform and that introducing competition in the contestable sectors of generation and retail has been very successful. As the Commission commented at the hearing, the NEM is internationally recognised as close to, if not the, best operating competitive electricity market in the world.

Second, the Commission strongly agrees that reaggregation between transmission and generation is undesirable. The Commission believes that there are few if any benefits, and significant competition risks. As Mr Sims suggests, regulation would need to be far more prescriptive to deal with the competition risks associated with a combined generation/transmission company. As was explained at the hearing, the Commission sees this form of reaggregation as the largest risk to competition in the NEM. The Commission has also previously submitted that section 50 of the *Trade Practices Act 1974* was not designed to deal with such issues, and the Commission is not confident that this section alone can be relied upon to prevent this form of reaggregation. These risks were highlighted by the SPI/TXU merger.

Third, the Commission agrees that the issues are not so clear concerning the aggregation of distribution and retailing. These activities were merely 'ring-fenced' rather than vertically separated at the outset of the NEM, based on the argument that

economies of scale and scope would be available from this structure. It appears that the economies of combination may have been overstated, as many distribution companies, particularly in Victoria, have subsequently discarded their retail operations (or visa versa). Nevertheless, few problems appear to have been caused by this structure.

The Commission believes that the more difficult issue is whether future mergers between generators and distributors are likely to cause problems. This is an emerging issue as distributor/retailers seek to acquire generators. Competition issues may arise if embedded generation (generation located within a distribution system that does not rely on transmission to access customers) becomes a more common feature of the NEM. This issue requires careful consideration and the Commission currently does not have a definite view. However, the AGL/Loy Yang and SPI/TXU matters have demonstrated that, at present, it is very difficult to build a cogent case under section 50 against the acquisition of a generator by a distributor (or visa versa). This may be because competition concerns are unlikely to arise or it may be because the NEM is not sufficiently developed to reveal such problems. What is clear is that if, from a policy point of view, aggregation between generators and distributors is undesirable, section 50 could not be relied upon to achieve this objective.

Fourth, the Commission agrees that much of the mooted consolidation in the generation and retail sectors may be both efficiency enhancing (taking account of economies in retailing) and pro-competitive (particularly as consolidation across the NEM, especially in generation, would be likely to enhance the prospects of contracting for wholesale electricity supply across the NEM). However, there are some qualifications that the Commission would like to make in relation to the points raised in Mr Sims' speech:

- It is unclear how the market shares exhibited in the speech have been calculated, but in the Commission's experience, it is generally more accurate to calculate market shares on the basis of despatched power rather than nameplate capacity. The former approach will tend to better recognise the important role of base-load generators in the NEM (which are despatched almost continually) as compared to intermediate and peaking generation. This approach will also tend to present a more concentrated structure.
- Work conducted by the ACCC's consultants (including the work prepared by Frank Wolak, as our expert witness in the AGL v ACCC matter)<sup>1</sup>, and our own internal work, strongly suggests that it is important to focus attention on concentration in base-load generation in considering likely market power and competition effects. Indeed, it might be argued that base-load generation should be considered as a separate wholesale market because of the ability of base-load generators to exercise market power. However, the Commission believes that, regardless of the merits of this argument, convincing a court of the existence of a separate base-load generation market would be difficult

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<sup>1</sup>Australian Gas Light Company v Australian Competition Consumer Commission (no.3) [2003] FCA 1525: Professor Frank Wolak, Professor of Economics, Stanford University; Chairman of the Market Surveillance Committee for the Independent System Operator of the California Electricity Supply Industry

given the Federal Court's decision in *AGL v ACCC*. In that decision all physical supply of electricity and derivative supply arrangements were regarded as being in the same market, such that, if physical supply were monopolised, then retailers and others could rely on derivative supply arrangements as a substitute product. An analysis of the exercise of market power typically concerns whether the supply and demand conditions in any particular period enable a generator to know that it will have to be dispatched at any price, or at least dispatched at a high price. Market power is exercised when base-loaders manipulate the market clearing price by physical or economic withdrawal of capacity (bidding into the market at a high price). The greater the opportunities for this manipulation, the greater the market power of the generator. In the Commission's view, this market power is substantial when it has a substantial impact on annual average prices for wholesale electricity supply. It is only base-load generators who are likely to have sufficient opportunities to have this substantial effect, and therefore the Commission's view is that base-loaders play an important role in electricity supply.

However, in making this assertion, the Commission does not suggest that base-load generators should not earn prices higher than marginal costs. In fact, as was explained by Joe Dimasi of the ACCC at the hearing on December 13, such outcomes are a critical part of the NEM design as an energy-only market. However, pricing above marginal cost does not imply that generators are bound to exercise market power or otherwise manipulate the market. Base-load generators recover their capital costs when higher cost generators have to be dispatched and therefore set the market-clearing price for all dispatched generation. This should provide for a more stable and predictable market than the current environment where many base-load generators seek to recover capital costs (and perhaps more) by manipulating market outcomes through physical and economic withdrawal of capacity. The Commission considers that the increased uncertainty created in the current market tends to deter entry in both generation and retailing sectors and, ironically, is one of the factors promoting vertical integration between generators and retailers. Further, increased concentration in base-load generation may cause substantial problems, especially as demand eventually erodes the large overhang of excess generation capacity that the NEM inherited.

A further related point is that competition analysis should not only focus on base-load generation, rather, it should also focus on demand/supply and concentration within each region instead of the NEM as a whole. The Commission explored this point in detail at the December 13 public hearing. During the hearing, the Commission submitted that even with substantially increased interconnection capacity, interconnection will remain capacity constrained, the capacities will be well known and demand within each region will, predominantly, continue to be met by base-load generation within that region. Further, as the work of Dr. Darryl Biggar has demonstrated, neither the low proportion of time when links are constrained nor price correlation across regions can be relied on to suggest that fields of rivalry in generation have been unified.<sup>2</sup> Monopolised generation within a region brings with it

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<sup>2</sup> see Appendix B of the Australian Competition and Consumer Commission Submission (No.DR 165) 10 December 2004, Dr Darryl Biggar, economic consultant to the ACCC, *The exercise of market power in the NEM : An analysis of price-spike events in the NEM January – June 2003*,

the capacity to exercise extreme market power and so competition analysis must take account of supply/demand considerations on a region by region basis.

Mr Sims' speech notes the growing trend toward the integration of generation and retail activities and questions how concerned we ought to be about this. In relation to the vertical integration of AGL and Loy Yang, the Commission's concerns were twofold:

- First, that this particular acquisition would tend to reduce contracting for wholesale electricity (derivative instruments) in the NEM. The Commission's evidence was that deep and healthy contract markets were critical to effective competition in the NEM (as in all other electricity markets around the world). Indeed, vibrant contract markets and generator hedging through derivative markets reduces the incentives for generators to engage in market manipulation.
- Second, that the acquisition would be likely to increase pressures for the aggregation of other retail/base-load generators which would inevitably concentrate both generation and retail sectors as there were only so many base-load generators for retailers to merge with. However, if as is noted in the speech it is correct that independent retailers and generators can compete comfortably against the integrated 'gentailers', then the Commission's concerns are likely to be somewhat alleviated, albeit with a lower level of and depth in derivatives markets. Additionally, the Commission agrees with Mr Sims' previous comments that if both retail and generation are, separately, effectively competitive (and remain so) there will not be a problem with aggregation between the two contestable levels. If however, vertical integration with base-loaders is the best way to manage market risks, and those market risks increase with each vertical integration, then fully integrated, more concentrated electricity supply is the likely long term structural outcome. Whether this is necessarily a problem remains to be seen and is something to be cautiously aware of. If 'thin' hedge markets are the problem, gentailers may address the symptoms of increased risk, but they will also exacerbate the problem rather than solve it.

The Commission agrees with Mr Sims' view that we need to watch for a substantial lessening of competition within each region as well as across the NEM. However, the Commission considers that defining two geographic markets to apply to the same product, at the same functional level and at the same time runs would appear to run counter to relevant anti-trust jurisprudence.

The Commission also concurs with Mr Sims' comment that, provided we assess competition in each region, there is no reason why section 50 would not be an adequate constraint on anti-competitive mergers in the retail sector. The Commission also supports Mr Sims' comments on generation mergers, but would like to add two qualifications to those comments:

- First, generator market power is somewhat constrained in NSW in that there remains an overhang of excess generator capacity. However, it appears that this is changing rapidly and therefore the opportunities for generators to

exercise market power in NSW are likely to increase substantially in the near future. This would appear consistent with the experience to date in Victoria, albeit that NSW would be on a larger scale.

- Second, Mr Sims argues that a court would regard a market structure with anything less than four or five generators within a region as likely to raise competition concerns. However, in the Commission's view the concentration levels of generator entities at which a court would regard merger proposals as raising competition concerns are not clear. It may be argued that the Commission should test these issues in the courts. As was submitted at the hearing, the Commission believes that section 50 is designed to protect competition in contestable markets that are already effectively competitive, but is ill-equipped to remedy a market structure which is already less than competitive, such as the one that currently exists in the NSW generation sector. However, the Commission believes that reliance on section 50 to ensure a minimum number of generators in each region for effective competition is a high risk strategy. Although it is possible that policy measures may be implemented to dissipate entrenched market power after the event (the countervailing power envisaged by Justice French), the Commission considers this to be a second-best approach. Indeed, Mr Sims notes that "there is no point approving mergers which require continuing and close regulation. It is better not to allow the electricity industry structure to evolve this way in the first place."
- Finally, the Commission is inclined to agree with Mr Sims' views about vertical integration between generation and retail, provided there is a sufficient number of competitors. However, the Commission reiterates its doubts about the efficacy of section 50 to ensure and preserve competitive market structures.

To summarize, the key issues from the Commission's point of view generally accord with Mr Sims' speech, with the exception of an assessment of the likely effectiveness of section 50 in dealing with certain issues, as outlined above. The Commission considers that ensuring separation between generation and transmission is of prime importance, and integration of generation and distribution is an issue that should be treated with caution. It is in this area in particular that the Commission considers section 50 to be ill-equipped to maintain the vertical separation of contestable and monopoly activities. This is true both for acquisitions and in the case where a transmission company builds a new generator. Specific measures to maintain this structural separation are entirely consistent with the Hilmer report, National Competition Policy principles and the CoAG Electricity Reform Agreements (which will now be difficult to enforce).

Further, the Commission believes it is appropriate to reiterate its views on the role of section 50. Firstly, the Commission considers that section 50 was not designed to promote competition in generation where initial horizontal separation was inadequate, and more generally, section 50 was not designed and is inadequate to promote competition in this way. Further, the Commission maintains that the 'substantial lessening of competition' test is the appropriate test in principle. However, due to the complexity and characteristics of electricity markets, the Commission considers that

there are significant risks in relying solely on section 50 to ensure a minimum number of generators and/or retailers in each region. Indeed, the efficacy of section 50 is relevant to the increasing trend of vertical integration between generators and retailers, with the important consideration being to ensure competition at both levels.

If you have any queries concerning the issues raised in this letter, or wish to discuss the matters further, please do not hesitate to contact me on (02) 6243 1142.

Yours sincerely

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Commissioner

C.c. Mr Rod Sims  
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Port Jackson Partners Limited