17th Annual Power and Electricity Congress

Regulating the National Energy Market

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Opening remarks

Thank you for inviting me to speak to you today about national regulation in the energy sector.

As you are aware, there has been massive transformation across the energy sector since the mid 1990s. It is widely recognised that as a result of these changes that the electricity and gas industries perform far better now that they did previously. Consider some of the developments we have seen over the past decade:

- The sector has been substantially restructured: We have moved from vertically integrated, state owned energy businesses to disaggregated businesses with a mixture of ownership structures.
- Victoria and South Australia have privatised their electricity supply industries and most of the gas supply sector is in private hands.
- Competition has been introduced into the generation and retail sectors.
- The national electricity market (NEM) is well established.
- Interconnection between the states has been substantially expanded with projects such as QNI, SNOVIC augmentation, DirectLink, MurrayLink and BassLink.
- Access regulation has been introduced for the transmission and distribution sectors along with a range of regulatory institutions.

Present indicators are that we are in for more change in the coming years. For example, we are seeing a high level of merger activity across the sector. The electricity industry is being restructured with vertical integration between generators and retailers the dominant model in markets were electricity assets have been privatised, that is in Victoria and in South Australia. With privatisation of government owned electricity retail businesses in Queensland, there is likely to be further integration of retail businesses as existing electricity businesses seek to acquire these assets.

I will come back to these industry structure issues later in this presentation and also in the panel discussion after morning tea.

But there are other changes underway with significant implications for our energy markets. Governments are about to introduce a new wave of legislative reform including a new National Gas Law (NGL) and amendments to the National Electricity Law (NEL). These changes will fundamentally alter the regulation of our energy markets.

In my talk today I would like to discuss some of the changes that are anticipated and the preparations that are in progress by the Australian Energy Regulator (AER) to deal with these changes.

First let me begin by introducing the AER and the reform process that led to its establishment.

Background to AER

The AER was established in 2005 as a constituent part of the Australian Competition and Consumer Commission (ACCC). It operates as a separate legal entity to the ACCC.

The AER is to assume responsibility for the economic regulation of the energy sector on a national basis with the exception of Western Australia where the Economic Regulation Authority will continue to perform the function of economic regulator. The AER will assume these responsibilities from State regulators on a staged basis over the next two years. From 1 July 2005, the AER assumed responsibility for regulating the wholesale electricity market and electricity transmission networks in the NEM.

The AER is scheduled to assume its gas transmission, and gas and electricity distribution regulatory functions on 1 July 2007. In the interim, the ACCC continues to regulate gas transmission pipelines, assisted by the AER, and the state and territory regulators continue to regulate electricity and gas distribution systems.

The Australian Energy Market Agreement (AEMA) also provides for the transfer of distribution and retail consumer protection functions to the AER and AEMC by 1 January 2008. It is expected that retail energy price controls will be retained by the relevant jurisdictions but can be transferred to the AER and AEMC at the discretion of each jurisdiction.

As the new national economic regulator for the sector with a new regulatory framework, the AER is seeking to take a forward looking approach to continue to improve the quality of regulation. To help us in achieving this outcome we will be seeking stronger engagement from all sectors of industry.

AER preparations

As noted above, the AER will shortly assume responsibility for distribution regulation. I would now like to turn to the AER's work in preparing for the transition of these functions.

A milestone in the AER's preparations has been reached with the recent release of the AER's *Electricity distribution regulatory guidelines: Statement of Approach*. This statement outlines the process for consultation on the development of guidelines for electricity distribution services. The AER wants to make its preparations for the transition as transparent as possible, and this Statement is aimed at providing guidance to interested parties in the energy

industry. The Statement is on the AER's website and I encourage you to have a look at it if you have not already.

Given that the legislative framework for energy regulation is still being developed, the AER will consult on its guidelines for electricity distribution through a staged process over the latter part of 2006 and 2007. The AER expects to release two packages of guidelines, one late this year or early next year, and another in the first half of next year. These will cover the regulatory functions required of the AER in its electricity distribution regulation, and any guidelines that the electricity distribution rules require.

The AER believes that there is sufficient consensus among stakeholders on the fundamental elements of the likely regulatory regime to begin work on the guidelines. The AER has been particularly guided by the AEMC's rule determination for electricity transmission, and the MCE's latest announcements regarding the 2006 and 2007 legislative packages for energy network regulation.

The AER is mindful of the concerns expressed by stakeholders regarding the possibility of pre-empting policy outcomes, and will ensure that its guidelines comply with the relevant legislation as it is developed and implemented. The AER has also set out its work program to ensure that the first guidelines deal with issues that are relatively settled, such as the post-tax revenue model and the roll forward model. Areas where policy is being developed, such as service standards and connection and capital contributions, will be dealt with once policy has been settled.

We are also mindful of our responsibility to provide clear guidance as to how the AER intends to carry out its regulatory functions for the New South Wales and ACT electricity distribution resets. This is why we believe that we need to move forward with the guidelines work at this time. We want interested parties to have sufficient time next year to comment on the draft guidelines that we release.

The timetable of guidelines may change as the legislative environment becomes clearer but we believe that the work we are doing now will facilitate a smooth transition of regulatory functions.

Given that the MCE has set a time frame for the AER to take up responsibility for administering existing decisions, AER staff are already undertaking work preparing for this role. Staff have met with their counterparts in jurisdictional regulators to discuss a number of issues that will arise from existing distribution decisions.

The AER expects that the details of the transition of these responsibilities will be spelt out in the rules for electricity distribution. However, we are working with our colleagues in the jurisdictional regulators to ensure that we have considered all likely challenges in the handover of responsibilities.

The transmission regulatory framework proposed in Chapter 6A

One of the key development processes that has taken place recently which impacts on the AER's regulatory role is the writing of new rules for electricity

transmission by the AEMC. These Rules set out the framework for the economic regulation of electricity transmission revenues. The AER has been following this process closely and has made a number of submissions.

The Final Rules largely reflect the AER's Statement of Regulatory Principles (SRP) in adopting an ex ante approach to the determination of capex and opex, and maintaining incentives on capex, opex and service standards. Overall, the Final Rules provide a workable package for the regulation of transmission network service providers and are a step forward from earlier drafts.

The Final Transmission Revenue Rules were released on 15 November 2006, so the AER is still considering the implications of some aspects of the Final Rules.

The Rules introduce a more prescriptive approach to regulation. For example, parameter values for determining the rate of return are prescribed in the Rules. While this prescription provides greater certainty for transmission companies, it may restrict the AER's capacity to flexibly respond to the individual circumstances of each business.

The Final Rules also appear to put in place some restrictions on the AER's ability to publish information on transmission network providers' financial performance. The potential implications of these restrictions on transparency in the electricity market will need to be considered.

The framework for distribution regulation is now being developed by the MCE. I understand that the distribution rules will largely be based on the transmission rules, unless differences can be justified. While there has been a lot of interest in the AEMC's review of the transmission rules, because distribution accounts for a greater proportion of the final delivered cost of electricity, the MCE's distribution review will be followed even more closely. Indeed, the impact of distribution charges on wholesale electricity prices is roughly four times greater than that of transmission charges.

Market structure

Finally I would like to touch on market structure issues. These issues are particularly topical, given the recent release of the Discussion Papers by the Energy Reform Implementation Group (ERIG) dealing with these issues. I would like to give my views on some of the market structure issues that ERIG is considering.

Generation – transmission cross ownership restriction

In the ACCC's view, effective structural separation of the operation and control of the transmission sector from generation is an important issue in the National Electricity Market. When the owner of essential transmission infrastructure also participates in the contestable generation market, it typically has the ability and the economic incentive to discriminate against rivals in this market.

There are numerous possible methods to effect that discrimination. In some cases these are subtle, and therefore may be difficult to detect. Discrimination

could occur through limiting or raising the price of access to monopoly services to competitors by:

- imposing terms for access (restricting access to the transmission network by delaying or degrading connections);
- investment and maintenance decisions (restricting the quantity and quality of the transmission service provided or pursuing improvements in the network performance for its affiliated interests);
- sharing commercially sensitive information regarding competing generators with its affiliated generator or retailer;
- line rating decisions; and
- negotiation and processing of connection agreements.

These concerns that the regulated entity might discriminate as to the terms of access for rival competitors are problems of a 'regulatory evasion' nature, which are consequent on the existence of information asymmetries. These are unlikely to be fully captured in the substantial lessening of competition test in section 50.

Therefore, the ACCC considers that the TPA alone will not be sufficient to address such issues. The ACCC has previously supported the introduction of specific provisions aimed at limiting the level of cross ownership of generation and transmission as means of dealing with this problem. At present the MCE is developing such cross ownership restrictions. The development of these cross ownership provisions will be an effective complement to section 50 of the TPA. Once implemented the cross-ownership rules will assist in giving effect to COAG's objective of maintaining separation between the contestable and noncontestable elements of the electricity supply industry and in doing so will foster and protect competitive pressures in the industry.

ERIG has similarly concluded that generation – transmission mergers are not desirable and has endorsed the COAG decision to ensure the structural separation of these assets.

Generation –retail integration

ERIG has also turned its attention to the most pronounced structural change in the electricity industry in recent years – the emergence of integrated generator – retailers.

The original design of the NEM was based on structural separation of generators from retailers. While there was no explicit stated national policy requiring vertical separation, in each NEM jurisdiction vertical separation was adopted. In some jurisdictions, this followed an examination of the most appropriate models, specifically, South Australia and Tasmania. In Victoria cross ownership regulations were imposed limiting subsequent reintegration between retailers and generators.

This separation of generation from retail was adopted because it was considered that active hedging markets would be required to manage spot market with contracts written around the volatile energy only spot market. This

model was designed to encourage the liquidity of the contract markets and establish an open market to enable retailers and generators to manage their risks. Structural separation between generation and retailing was also seen to help minimise barriers to entry of retailers and generators, consistent with COAG's objectives for the industry, and in turn encourage strong competition particularly in the retail markets.

Since the initial reforms in the 1990s, significant vertical integration has occurred in Victoria and South Australia. AGL purchased a 35% stake in Loy Yang A in April 2004, and CLP purchased SP Energy's retail and generation assets in mid 2005.

Two of the three dominant retailers in the Victorian and South Australian markets are now substantially integrated (AGL and TRU). The third major retailer, Origin, also has peaking plant and has announced plans to build base load plant in Victoria. The other major generator, International Power, has entered into a retail alliance with Energy Australia.

The move to generator-retailer integration to create "gentailers" represents a fundamental change to the original model. Instead of buying through contract markets, integrated retailers generally hedge risk internally with their own generators. There are a number of possible costs and benefits to the change. On the positive side, the benefits include:

- improved risk management, as integration can be used by retailers to mitigate the risks associated with generator market power by providing a natural hedge against spot market volatility.
- reduced transaction/risk costs, as integration may reduce trading costs and costs associated with trading risks, for example, credit risk costs.

However, costs may also arise if there is a significant loss of liquidity in hedge markets as integrated retailers hedge risks internally. More specifically, barriers to entry for stand alone electricity retailers increase if it becomes more difficult for them to secure competitively priced contracts. This risk is most obvious where all or most generation is owned by competing retailers. This has happened most notably in New Zealand, where dominant regional generator-retailers have emerged, rendering stand alone retail entry very difficult.

The first major generator-retail merger was AGL's acquisition of a stake in Loy Yang A. At the time the ACCC had a number of reservations about AGL's proposal. First it represented a fundamental change from the original reform model, and in Victoria's case, the policy maker's intentions. Second the experience in New Zealand pointed to the risks of loss of liquidity discussed above. Third achieving a level playing field means that the right time to assess and test the appropriateness of large generator-retailer mergers is the first, not the second or third proposal.

Because of its concerns, and concerns with the undertaking offered by AGL, the ACCC did not clear the proposal. The decision was successfully tested in the Federal Court, with the acceptance of undertakings on ring-fencing. Since the AGL decision, the ACCC has assessed and approved similar acquisitions, including China Light and Power's proposed acquisition of TXU's retail assets.

The trend towards greater integration of retailers and generators seems likely to continue as businesses act to ensure they are not disadvantaged in their ability to buy and sell electricity and manage risk compared to other generator retailers. The trend to vertical integration will ultimately deliver a very different market structure than the one that existed at the commencement of the NEM.

ERIG has concluded that the situation is likely to require ongoing review.

ERIG's recommendation highlights an important issue. ERIG has raised concerns with generation market structure in New South Wales and supported disgaggregating the three generation companies into smaller firms. The ACCC supports this proposal. However, it appears that the model of generator-retailer competition that is emerging in some jurisdictions is becoming similarly concentrated. For example, in Victoria we are only one merger away from a market structure dominated by three integrated generator - retailers. In these circumstances, the ACCC questions whether an approach of relying on monitoring will lead to the emergence of a market structure as concentrated as the structure ERIG has raised as an issue in New South Wales.

There is considerable data on the operation of the market and some data on retail market outcomes. Given the risks associated with the trend to generation – retail integration, policy responses will need to be considered if the data points to emerging problems.

Horizontal mergers

ERIG has concluded that section 50 of the TPA is capable of dealing with the competition issues associated with horizontal electricity mergers. This is the ACCC's general view as well.

The ACCC has previously considered a number of horizontal retail mergers under section 50 of the TPA. Based on this experience, the ACCC is of the view that the TPA adequately covers consideration of competition factors associated with horizontal retail electricity mergers such as market power and market definition. Therefore, the ACCC believes that horizontal retail mergers do not need to be covered by industry specific cross-ownership rules.

The ACCC has also considered a number of horizontal generation mergers under section 50 of the TPA. To date, the ACCC considers that the TPA has generally been effective in the consideration of competition issues associated with these horizontal electricity generation mergers. The ACCC notes that in the AGL v ACCC case, French J defined a NEM wide market for generation. The Court did not agree that markets for generation were state-based and thus it has been argued that this decision potentially gives greater scope for generators to merge 'without gaining' market power. The ACCC notes that the findings of French J have not been tested in the context of a significant generation merger. While the ACCC has recognised French J's decision in subsequent merger proposals considered since the AGL – Loy Yang case, the ACCC has stated that, in its opinion, a different market was relevant. For example, when considering China Light and Power's proposal to acquire the contestable assets of SP Energy, the ACCC considered that a more limited geographic market was appropriate. The ACCC considered the relevant

geographic markets to be the market for the supply of wholesale electricity in Victoria, and also in Victoria and South Australia combined.

As noted above, a major trend in electricity market structure is towards greater integration of generation and retail activities. An issue that may have to be considered in the future concerns the horizontal aggregation of generator retailers, or the acquisition of generation by gentailers. Such a merger would appear to raise more acute competition issues than the other horizontal mergers that I have outlined. As it has never been tested, it is not clear how effective section 50 would be in dealing with horizontal acquisitions by generator-retailer companies. Once an uncompetitive market structure is in place, the TPA can do little, if anything, to promote a competitive market structure.

Concluding remarks

The electricity industry has undergone a remarkable transformation since the commencement of its reform in the mid-1990s. The transformation is likely to continue into the future.

At the regulatory level, the AER has been established and in coming years will become a 'one stop shop' national energy regulator. We want a cooperative relationship with all interested parties in the energy industry as a means of ensuring quality regulatory outcomes. We understand that there will always be some asymmetry of interests, but given a new regulatory framework and a fresh AER approach we are looking at better regulatory processes. We will also be careful to ensure that in this transition period our processes don't get ahead of the MCE's policy development.

In terms of market structure, competition and competitive pressures have increased the performance of the contestable elements of the previously integrated stated-based utilities. While competition has delivered benefits there is a need to protect and promote competitive pressures. The introduction of cross-ownership rules to prevent integration between generation and transmission is a step in the right direction. The next big challenge is to ensure that the TPA can screen out other types of electricity industry mergers that are likely to undermine competition.