



Australian
Competition &
Consumer
Commission



ACCC/AER Submission

Energy Reform Implementation Group

Response to Discussion Papers

December 2006

1 Introduction

The Australian Competition and Consumer Commission (ACCC) and the Australian Energy Regulator (AER) welcome the opportunity to comment on the Discussion Papers issued by the Energy Reform Implementation Group (ERIG).

The ACCC/AER notes that ERIG is to develop implementation arrangements for further reforms to the Australian energy markets in the following areas:

- Electricity transmission
- Electricity market structures
- Energy financial markets

The electricity transmission and electricity market structures work streams are directly relevant to the work of the ACCC and AER. Among its responsibilities the ACCC enforces section 50 of the *Trade Practices Act 1974* (TPA), which prohibits acquisitions that would result in a substantial lessening of competition. The ACCC/AER notes that the Discussion Paper raises questions about the role of section 50 in considering electricity industry market structure issues. The AER is responsible for regulating the revenues of Transmission Network Service Providers (TNSPs) in the National Electricity Market (NEM) and promulgating the regulatory test. The ACCC/AER notes that the Discussion Paper canvasses a number of issues related these roles. This submission focuses on issues related to these two work streams.

The ACCC/AER commends ERIG on the Discussion Papers. ERIG has undertaken a comprehensive review of potential reform issues. As will be evident in this submission, the ACCC/AER agrees with the direction that ERIG adopts in the Discussion Papers. However, the breadth of issues canvassed in these papers means that there are some implementation issues that require further consideration. This submission largely focuses on these implementation issues.

2 Electricity transmission

In its Transmission Discussion Paper ERIG has engaged in a detailed discussion about the performance of the transmission sector in the NEM. It also has canvassed a number of proposals to reform national planning arrangements for electricity transmission in the NEM. The ACCC/AER supports the overall direction of the paper.

This submission discusses six key issues outlined in ERIG's Transmission Discussion Paper:

- the performance of the transmission sector
- harmonising and clarifying reliability and planning criteria
- replacing the regulatory test with new planning and investment obligations
- models for a national planning function and
- the location of a national planning function
- investment and operational incentives

Some of ERIG's suggested reforms to planning arrangements represent a significant change from current practice and will raise implementation challenges. In light of this, the submission will not only discuss the advantages and disadvantages of the options proposed by ERIG, but also identify issues which the ACCC/AER considers relevant to implementing these options.

2.1 Performance of the transmission sector

The ACCC/AER previously submitted that transmission fulfils a number of roles in the efficient operation of the NEM and that transmission has continued to remain a highly reliable sector. The ACCC/AER also recognised that an efficient transmission system is a function of both investment levels and the result of effective planning, operation, and the setting of appropriate technical standards.¹

In its Discussion Paper, ERIG has found that:

- the transmission sector is performing well to date and that the current level of transmission and interconnection investment is reasonably appropriate for the installed generation capacity and peak demand in the NEM.²
- it does not consider that increases to transmission capacity to avoid short term regional price differences or to support inefficient locational decisions by generators necessarily delivers economically efficient outcomes for the market as a whole³

¹ ACCC/AER 'Submission in response to the Energy Reform Implementation Group Issues Paper' (August 2006), p.3

² Energy Reform Implementation Group Discussion Papers (November 2006), p.104

³ Energy Reform Implementation Group Discussion Papers (November 2006), p.106.

- electricity transmission in the NEM is not characterised by either massive underinvestment or seriously deficient interconnection capacity⁴
- investment drivers on both the regulated and non-regulated sectors should be mutually reinforcing and closely aligned⁵

The ACCC/AER agrees with ERIG's findings in relation to the role and performance of transmission in the NEM.

The ACCC/AER considers that the current regulatory regime for transmission investment has provided a stable and effective framework for efficient investment in new electricity transmission capacity in the NEM. Since the first transmission revenue cap the transmission sector has been provided over \$5 billion in capital expenditure allowance to facilitate transmission investment, which represents half of the overall regulated asset base.⁶

The AER has recently undertaken work on the market impact of transmission congestion (MITC). The indicators show total congestion costs in the NEM of \$36 million in 2003-04 and \$45 million in 2004-05. Given the turnover in the electricity market was \$6 billion in 2003-04 and almost \$7 billion in 2004-05, it would appear that the cost of congestion is currently relatively low.

These preliminary investment and performance outcomes indicate that the transmission sector is generally responding well to the needs of the market and that the regulatory framework is supporting necessary transmission investment. However, some caution should be exercised with the interpretation of the MITC data, as it outlines results for only two years and is not forward looking. The AER will soon release the MITC data for the 2005-06 period which should reveal some longer term trends.

Notwithstanding the generally positive performance of the transmission sector ERIG has proposed some worthwhile reforms to transmission that could have the potential to further improve performance and therefore deserve consideration.

2.2 Harmonising and clarifying reliability and planning criteria

The ACCC/AER agrees with ERIG that the delegation of responsibility to TNSPs for setting the reliability criteria may create a conflict of interest where that TNSP also has responsibility for planning and investment. ERIG considers that such conflict is "exacerbated where the TNSP's revenue and profitability is also driven by constructing assets to meet their own reliability requirements".

The ACCC/AER agrees with ERIG's findings that there is a lack of clarity and consistency of transmission planning standards in the NEM. This results in a potentially less rigorous approach to determining the basis upon which a TNSP

⁴ Energy Reform Implementation Group Discussion Papers (November 2006), p.120

⁵ Energy Reform Implementation Group Discussion Papers (November 2006), p.113

⁶ Based on the depreciated optimised replacement cost (DORC) value of transmission assets which came under ACCC regulation in 1999.

undertake investment planning. Further, it creates uncertainty for existing and potential market participants when making decisions about investment.

Accordingly, ERIG considers that there may be a benefit in aligning the reliability standards across the NEM. The ACCC/AER supports ERIG's recommendation to implement a uniform and national approach to planning criteria. This would align with the national and uniform approach that has been successfully adopted for setting reliability standards in the wholesale electricity market.

ERIG proposes two options for the implementation of a NEM wide reliability standard, either one of which should be implemented through redrafting schedule 5.1 of the Rules:

- **Option 1:** a national economic valuation of reliability with deterministic planning standards for each connection point, based on a range of economic criteria. This shares many of the characteristics of the model adopted by ESIPC in South Australia.
- **Option 2:** a probabilistic economic valuation of reliability (a \$/MWh figure). This is the model adopted by VENCorp in Victoria.

The ACCC/AER considers that the strengths of option 1 are that it:

- is flexible in the way it can accommodate special circumstances around location specific customer reliability requirements
- is more transparent in that it is easier for stakeholders to understand and comment on
- may be easier to implement than option 2 as it is a more incremental change from the deterministic planning approach used in most jurisdictions

Whilst there are some concerns that this model may not facilitate the consideration of non-network options as well as a probabilistic approach, it has the flexibility to be made more outcome-based.

The ACCC/AER considers that the strengths of option 2 include that:

- This approach incorporates a more sophisticated approach to recognising economic benefits and potentially better aligns customers' willingness to pay with the need for the network augmentation
- it is technologically neutral and better facilitates consideration of non-network solutions compared to a 'n-x' deterministic standard

This model appears to have worked well in Victoria however it should be noted that the more sophisticated economic and modelling integral to this option (sometimes referred to as "black box" modelling) means that it can be more difficult for stakeholders to understand and participate in consultation processes.

The ACCC/AER considers that whichever model is adopted the objective should be to improve transparency about how the reliability requirements have been derived.

The ACCC/AER considers that informed discussion of these options may benefit from further work that develops the options in more detail.

2.3 New planning and investment obligations

In its previous submission, the ACCC/AER sought to clarify the role of the regulatory test in the current regulatory framework. The submission stated that the overarching role of the regulatory test is to *minimise inefficient* network investment in the NEM, rather than *facilitate* network development. The test seeks to maintain a level playing field between generation and transmission by preventing inefficient transmission investment and facilitating the development of commercial generation investment. The ACCC/AER submitted that in the context of an ex ante framework, the regulatory test is also a valuable consultative and transparency tool, and provides information to assist in regulatory decision-making at revenue resets.

In its Discussion Paper ERIG has concluded that the regulatory test's primary role within the regulatory framework is to serve as a public consultation and information tool. ERIG considers that:

... the usefulness of the test is currently limited by the extent to which information is available to analyse its application and the uncertainty created where the test is applied by the proponent of the transmission investment project.⁷

ERIG considers that the current form of the Regulatory Test is inappropriate to meet the perceived goal of facilitating transmission network investment as:

- a project by project assessment cannot be expected to deliver efficient, long term development of the national network; and
- a two limbed approach attempts to artificially identify and justify an individual project as either providing reliability or market benefits where in reality any network augmentation is part of a total network which delivers both (i.e. reliable and efficient supply).

ERIG considers there is merit in replacing the regulatory test with new arrangements and obligations to guide efficient transmission investment to improve the cohesion and co-ordination of transmission investment across the NEM. This involves:

- replacing the Annual National Transmission Statement (ANTS) and implementing a National Transmission Network Development Plan (NTNDP) for the development of the whole NEM and
- replacing regulatory test assessments for individual projects with a Project Assessment and Consultation (PAC) process

The annual NTNDP (the Plan) is to act as an information platform to facilitate planning and investment decision making across generation, load and networks. The Plan is to be determined by the national planner with the involvement of network owners and users. The Plan will reflect efficiency objectives, integrating both limbs of the regulatory test to ensure the network is developed to maximise market benefits whilst ensuring reliability standards. This is intended to guide both the development of the whole network and inform the AER's regulatory decisions.

⁷ Energy Reform Implementation Group Discussion Papers (November 2006), p.124

ERIG proposes that TNSPs would be required to conduct a PAC process instead of applying the regulatory test. ERIG envisages that this process would merge the two limbs of the regulatory test and ensure all options are considered.

The ACCC/AER considers that ERIG's proposal has considerable merit. The proposed arrangements have the potential to deliver significant benefits in coordinating network development, better informing the market and improving efficiency. The ACCC/ AER set out comments on the proposals that could be considered by ERIG or may need to be considered in subsequent work.

The AER appreciates the value of having whole-of-network planning information to inform its regulatory decisions and develop incentives. The Plan as a 10 year rolling document would provide the AER with a holistic view of the transmission grid and will assist in making decisions on transmission capital expenditure programs. It is likely that if TNSPs cooperate in the development of the Plan and propose projects that are consistent with the Plan, then this will lead to better decisions for transmission investment to support the NEM.

However, it is important for ERIG to more clearly articulate the status of the Plan and the respective roles of the TNSP and the AER, particularly the context of the second option for a national planner (strategic national planner and co-ordinator).

If the Plan is merely a guiding document for network augmentations, then it could be argued there is potentially a lack of discipline on TNSPs to build according to the Plan. The AER can approve the capital and operating expenditure allowances required to deliver the Plan, but actual investment made by the TNSP will depend on a range of factors including reliability requirements and the AER's efficiency and service standards incentive schemes. Investment outcomes could be different to those envisaged in the Plan.

The potential mismatch between investment outcomes and the Plan is most obvious for non-reliability augmentations where there are no specific investment or service standard obligations.

Possible approaches for addressing the possible mismatch between the Plan and actual investment outcomes under an Option 2 planning model include:

- Strengthening the last resort planning function. This function is currently limited to directing a TNSP to undertake a regulatory test assessment of a nominated project. There is no obligation on the TNSP to act on the outcomes of the assessment. The function could be strengthened to allow tendering of a project as a last resort measure. It may be more appropriate for a Last Resort Planning Power function to sit with the national planner, rather than with the AEMC where it currently resides.
- Strengthening the link between the Plan and PAC processes, for example by providing parties with the ability to dispute a PAC process that yields a result that is inconsistent with the Plan.

- Providing a high degree of transparency about the TNSP's performance against the Plan. The planner or AER could undertake this role of checking projects against the Plan.

If these problems cannot be addressed under an Option 2 model, it may be necessary to consider the third planning option discussed by ERIG, namely a national transmission service procurer. As with VENCORP this body would tender out major investment projects.

A number of other implementation issues need to be considered:

- ERIG has proposed establishing new efficiency objectives based on economic efficiency principles to act as criteria for the national planner in determining the Plan. The ACCC/AER supports this idea. Implementing this initiative will require consideration of who will be responsible for developing the specific criteria and how. One possibility is for the planner to develop criteria in consultation with market participants, guided by high level objectives set out in the ERIG final report.
- ERIG proposes that the guiding objectives for the Plan should be based on the integrated limbs of the regulatory test to ensure the network is developed to maximise market benefits whilst ensuring reliability standards. The ACCC/AER supports co-optimisation in principle, but the regulatory test was designed to assess individual projects, and is not appropriate as a broader planning tool in its current form. It would be useful to set out some higher level principles to guide the planner.
- Consideration needs to be given to the governance arrangements for the PAC process – will the PAC be set out in the Rules or is it to be determined by the national planner? The ACCC/AER considers compliance with the PAC should be required in the Rules, similar to the arrangements currently in place for the regulatory test.
- The details of the PAC such as project thresholds, consultation requirements and timing of consultation need to be clarified. The ACCC/AER suggests that the national planner would be well placed to provide guidance on these issues, for example through guidelines.
- ERIG proposes that the AER undertake all transmission revenue resets simultaneously. The ACCC/AER considers this would require appropriate transitioning including Rule changes to provide the AER with flexibility to extend or shorten regulatory periods.

2.4 Models for national planning

ERIG has found that the current arrangements for transmission planning lack national coordination and are unlikely to deliver an efficient national network.⁸ ERIG has canvassed three options for a central national planning function:

1. modified status quo – this involves the establishment of a transparent and independent national planner to disseminate information
2. strategic national planner and co-ordinator – this involves a national planner to disseminate information, deliver strong and well informed independent advice on the efficient longer term development of the national transmission grid through transparent, independent and consultative processes
3. national transmission service procurer – this involves the establishment of a NEM-wide, not-for-profit corporate entity responsible for making decisions on transmission augmentations.

ERIG is seeking comment on these options.

The ACCC/AER considers that either Option 2 or 3 represents a significant step forward over current arrangements. Both options will provide a genuinely national approach to planning based on the interests of the NEM as a whole. Option 2 mitigates the potential conflict by separating the planning function from the commercial interests of the TNSPs, and Option 3 removes the conflict entirely.

Option 2 is a more incremental approach than Option 3. The creation of a national network development coordinator under this option would be effective in conjunction with ERIG's proposed national network development arrangements. As discussed in section 2.3 above, there is a risk that efficient planning outcomes may not be reflected in investment outcomes. Section 2.3 canvasses some options for addressing the potential mismatch.

One of the questions about Option 2 raised by ERIG is who should conduct the PAC process? In the event that the TNSPs conduct the PAC process there is a case for continuing to provide appeal arrangements for disputes. The disputes could be resolved by the national planner, given that it would be best positioned to understand the issues.

Option 3 involves separation of the ownership of transmission assets from planning the development of the network. This model has the advantage of testing the market through competitive tendering of major augmentations (rather than relying on regulation). This model has been successfully implemented in Victoria where VENCORP is responsible for identifying the need for transmission system augmentation and procuring transmission augmentation through the management of contestable tender processes.

Implementation issues that would need to be considered under Option 3 include:

- how best to achieve accountability for the national procurer

⁸ Energy Reform Implementation Group Discussion Papers (November 2006), p.146

- how to ensure appropriate recognition of local requirements- this includes establishing appropriate resourcing, decision making processes and procurement models for regions that are growing rapidly
- how to ensure efficient investment in the network in the absence of the Regulatory Test.⁹

The ACCC/AER expects that satisfactory solutions can be found for these issues.

Detailed analysis of the operational consequences of altered planning arrangements will be necessary before implementation, irrespective of the option chosen.

2.5 Location of the planning function

ERIG seeks comment on three institutional arrangements being considered for the national planning function in the context of the NTNDP/PAC process and suggested planning models. These options are:

- **Option 1** – the creation of a new entity
- **Option 2** –placing the national planning function under the AEMC in a structure similar to that of the Reliability Panel
- **Option 3** – placing the planning function within NEMMCO, subject to acceptable changes to the governance of NEMMCO itself.

The ACCC/AER considers that any option to set up an independent planner would be an improvement over the current arrangements. The key issue is the establishment of a national planner with the appropriate skill set and resources to do its job properly. Whilst not recommending one option over another, the ACCC/AER has three comments on these options.

First, the location of the planning function depends in part on the planning model adopted. Incremental changes, such as those envisaged in the second planning option (strategic national planner and co-ordinator), lend themselves to more incremental institutional change.

Second, locating the planning function in NEMMCO would build upon NEMMCO's existing engineering skills and experience in publishing the ANTS. It also avoids the costs and delays of setting up a new entity.

ERIG notes that this option would be subject to acceptable changes to the governance of NEMMCO. The ACCC/AER considers that this should not be a difficult task if NEMMCO's functions could be split appropriately between system operation and system planning, and a dual layer of governance introduced. A similar model already exists with the AEMC and the Reliability Panel.

⁹ The primary role of the Regulatory Test is to prevent inefficient network investment. This role would still need to be addressed under the Option 3 planning model in the context of an NTNDP/PAC arrangement.

The arrangements should include broad stakeholder representation. Positive feedback on VENCORP has demonstrated that a stakeholder model can work well.

Third, adding a planning function to the AEMC's responsibilities seems inappropriate. As pointed out by ERIG the approach is inconsistent with the separation of rule making and administration functions favoured by the MCE. Further, the AEMC lacks the necessary engineering and planning skills and experience to provide planning services. Giving the AEMC a planning role would require changes to the AEMC's board and staffing.

The governance issues raised by ERIG in relation to NEMMCO apply equally to the AEMC.

2.6 Implementation of reforms

Making decisions on the options and implementing the wide ranging reforms proposed will require substantial ongoing work and commitment. Given tight time frames and the need for stakeholder engagement it is not realistic for ERIG to necessarily come to firm positions on all the options or address the implementation details. It would be useful for ERIG to outline a possible process for taking forward the next stages.

The MCE is responsible for driving reforms and maintaining COAG's commitment to a reform program. The ACCC/AER submits that the MCE could progress the implementation of ERIG's reform program by forming an implementation unit which would be responsible for considering and resolving practical and operational issues which are beyond the scope of ERIG. Any program to progress ERIG's recommendations should clarify and test the operational details of ERIG's new planning and investment framework as discussed above.

2.7 Investment and operational incentive arrangements

ERIG considers there is a need to redress the balance of the incentive regime and to ensure that the power system as a whole is considered without a technology bias and recommends:

- Improving capital expenditure incentives on TNSPs and driving efficient operation of the transmission system;
- Supporting efficient generation investment;
- Enhancing the information provided to stakeholders and ensuring process transparency.

The ACCC/AER supports ERIG's findings. As capital expenditure incentives are prescribed by chapter 6A of the National Electricity Rules, it will be necessary to monitor and review the incentive package over time to gauge whether adjustments to the incentive mechanisms are warranted. Adjustments may be required to better balance cost cutting and service incentives as well as the balance between capex and opex efficiency incentives, depending on the outcomes of the current revenue determinations.

ERIG also recommends the urgent development of performance measures and incentives for transmission pricing and revenue and increasing the scale of those incentives.¹⁰ The AER is currently progressing work to improve the Service Standards framework.

¹⁰ Energy Reform Implementation Group Discussion Papers (November 2006), pp.125-129

3 Electricity market structure issues

From the mid-1990s State governments in conjunction with the Commonwealth Government implemented wide ranging structural reforms in the electricity supply industry. In each jurisdiction these reforms vertically separated contestable generation and retail activities from natural monopoly network elements (although in many states combined distribution-retail businesses were created). The reforms also involved creating competing companies at generation and retail levels.

Since the reforms were implemented, there has been some horizontal integration of generators, retailers and network businesses. There has also been significant vertical integration of generators and retailers, and proposals to vertically merge generation and transmission functions.

Each reaggregation proposal has been considered by the ACCC under section 50 of the TPA. ERIG's Discussion Papers comment on the ability of section 50 to adequately consider the competitive effects of various merger proposals. The ACCC/AER has the following comments to make on the issues raised in the Discussion Papers.

3.1 Generation – electricity transmission mergers

Following issues raised in the Parer Review (2002), the National Competition Policy Review (2005) and by the ACCC (2004, 2005) regarding integration in the electricity industry, the Council of Australian Governments (COAG) in February 2006, reaffirmed its commitment to national energy market structures that foster competition by:

Requesting the [Ministerial Council on Energy] (MCE) to develop specific recommendations under the National Electricity Law (NEL) to maintain such separation of generation and transmission activities in a form that complements the provisions of the TPA that prohibit the substantial lessening of competition.¹¹

As a result, the Ministerial Council on Energy is developing cross-ownership rules. The introduction of cross-ownership rules in the NEL will prohibit the integration of generation and transmission assets in the NEM and will remove potentially anti-competitive distortions that integration can bring to the market. Along with ERIG, the ACCC/AER supports the proposed cross-ownership rules and their timely introduction.

ERIG endorsed the introduction of cross-ownership rules as it came to the view that integration is 'neither desirable nor likely to be effectively regulated through section 50 of the TPA'.¹² In addition, ERIG endorsed the cross-ownership rules as a means of

¹¹ Council of Australian Governments (February 2006), National Competition Policy Review – Energy, Decision 2.4 (b).

¹² Energy Reform Implementation Group Discussion Papers (November 2006), p.9

preventing subtle forms of discrimination that a vertically integrated firm might choose to engage in such as sharing confidential information with its affiliates.¹³

There are a range of other drivers that also account for the need to protect competition in the electricity industry in addition to the reasons outlined by ERIG. Mergers involving natural monopoly and contestable activities may allow a regulated entity to discriminate in favour of its upstream or downstream businesses.

There is already a regulated access regime, with generator dispatch managed by NEMMCO, and prices set by the AER. Nevertheless there is considerable scope for transmission businesses to favour their own generation interests through, amongst other things, investment decisions, maintenance decisions and timing of network outages. These are problems of a regulatory nature, which are difficult to fully capture in the substantial lessening of competition test in section 50 of the TPA.

The ACCC/AER supports the development and implementation of cross-ownership rules as an effective complement to section 50 of the TPA. The ACCC/AER agrees with ERIG that ‘governments should promulgate the specific cross-ownership rules in this area as soon as possible’¹⁴ ‘to provide certainty to industry’.¹⁵

3.2 Generation – retailer integration

As noted in the initial ACCC/AER submission, the original design of the NEM was based on structural separation of generators from retailers. The stated objectives of the fully competitive national market included “the ability for customers to choose which supplier, including generators, retailers and traders, they will trade with” and “no discriminatory legislative or regulatory barriers to entry for new participants in generation or retail supply.”¹⁶

Under this market design, active hedging markets were required to manage spot market activities, 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 seen to help minimise barriers to entry of retailers and generators and in turn encourage strong competition particularly in the retail markets.

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.¹⁷ In Victoria cross ownership regulations were imposed limiting subsequent reintegration between retailers and generators.

¹³ Energy Reform Implementation Group Discussion Papers (November 2006), p.9

¹⁴ Energy Reform Implementation Group Discussion Papers (November 2006), p.9

¹⁵ Energy Reform Implementation Group Discussion Papers (November 2006), p.9

¹⁶ *COAG Communiqué*, Darwin 19 August 1994, Attachment 2(b)

¹⁷ See National Competition Council, *Assessment of governments’ progress in implementing the National Competition Policy and related reforms*, June 1999.

Since then 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. Now two of the three dominant retailers in the Victorian and South Australian markets, AGL and TRUenergy, are substantially integrated. The third major retailer, Origin, also has peaking plant and has announced plans to build base load plant in Victoria.

This move towards a model of competing "gentailers" represents a move away from the initial design of the NEM.

The benefits and the costs of gentailers have been outlined in the ERIG Discussion Papers and in the ACCC's / AER's first submission to ERIG. The potential benefits include:

- Improved risk management. 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 and risk costs. Integration may reduce trading costs and costs associated with trading risks, for example, credit risk costs.
- Significant generation investment. Most of new peaking plant in Victoria and South Australia has been built by the large retailers.

Potential costs may arise, however, if there is a significant loss of liquidity in hedge markets as gentailers hedge risks internally. These costs include:

- Raising entry barriers for stand alone retailers. 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/most generation is owned by competing retailers as is the case in New Zealand.
- Raising entry barriers for stand alone generators. If the gentailers build their own generation plant there may be little scope for new generation entry
- Risk management issues for small integrated retailers. All gentailers must manage risks such as generator outages. Large gentailers can more readily manage these risks through internal back up due to "portfolio" effects; whereas small gentailers are likely to be more reliant on external hedging. Accordingly smaller integrated players are likely to be more disadvantaged if there is a lack of liquidity in hedging markets.¹⁸

The ERIG Discussion Papers conclude that based upon the international experience, vertical integration between a generator and retailer is not a source of inefficiency or anti-competitive outcomes per se.¹⁹ The ACCC/AER agrees that competitive outcomes can be achieved under a market structure based on competing gentailers.

¹⁸ ACCC/AER (August 2006), 'Submission in response to the Energy Reform Implementation Group Issues Paper, p.19

¹⁹ Energy Reform Implementation Group Discussion Papers (November 2006), p.23

However this will depend on whether actual emerging market structures in the NEM delivers a sufficient number of “players” (integrated or otherwise) for the market to be competitive.

In Victoria and South Australia three integrated retail-generators dominate. As further assets are privatised it is reasonable to expect that this structure will be repeated across the NEM. ERIG has noted the disadvantages of three players in a generation context. Specifically ERIG notes:

... that implementing in particular the recommendation contained in Parer (2002), to disaggregate the three NSW government owned generation companies into smaller, competing firms, would lead to improved competitive market outcomes across the NEM. This is not only because of the direct benefit to New South Wales, but because of the positive spill-over effects from reform in Australia's largest state to the rest of Australia.²⁰

These comments equally apply to gentailers. If ERIG considers that a New South Wales generation structure based on three players is overly concentrated, a position that the ACCC/AER agrees with, it is appropriate for ERIG to carefully consider the implications of a market emerging based on three competing gentailers.

In its Discussion Paper, ERIG noted that it:

...cannot conclude that future vertical mergers in Australia will not lead to the emergence of market power and inefficient outcomes. But if these do emerge, they will do so because of excessive horizontal aggregation, not vertical integration.

The situation is therefore likely to require ongoing review.²¹

The ACCC/AER notes that market outcomes so far have been broadly favourable, both before and after the move towards greater retail – generation integration. However as the market evolves further, it may trend towards a few large gentailers. This could result in the market power issues and inefficient outcomes alluded to by ERIG.

Ex post assessments, such as ongoing review of changes in the energy sector will be ineffective in preventing these outcomes. Ex-post policy responses to market power issues, should they emerge from a concentrated gentailer structure, will be extremely difficult to implement.

3.3 Electricity distribution and retail integration

The ACCC/AER notes that in most jurisdictions tied distribution – retail entities were created when the industry was structurally separated in the mid 1990's. Since this time, there has been a tendency to separate distribution and retail activities firstly in the privatised states of Victoria and South Australia, and more recently in Queensland.

Theoretically, integration of electricity distribution and electricity retail businesses could give rise to a range of problems that are common when non-contestable businesses integrate into contestable markets. When the owner of essential

²⁰ Energy Reform Implementation Group Discussion Papers (November 2006), p.63

²¹ Energy Reform Implementation Group Discussion Papers (November 2006), p.58

infrastructure also participates in the contestable downstream market it typically has the ability and the economic incentive to discriminate against rivals in this market.

There has been considerable experience with stapled distribution – retail businesses in the NEM. The experience to date lends support to the argument that it is difficult in practice for a distributor to discriminate in favour of its own retail interests. In distribution, in each street / area serviced by a distributor there are typically many retail customers serviced by competing retailers. If a distributor discriminates against a street/area it will harm its customers as well as those of its competitors. By contrast, in transmission there are a limited number of generators, each with its own connection point. Identifying and discriminating against competitors would appear to be more straightforward.

Therefore, unlike the case of transmission – generation cross ownership, the ACCC/AER does not consider that distribution – retail cross-ownership restrictions are required based on the experience to date. Further, there has been a tendency for privately owned companies to separate network and contestable market activities.

While major concerns created by stapled distribution – retail companies do not appear to have emerged to date, this might not be the case in future. To pre-empt and address any potential adverse side-effects of integration of electricity distribution assets with electricity retailers, the ACCC/AER considers that ongoing monitoring may be warranted.

4 Gas market structure issues

As part of National Competition Policy, the Council of Australian Governments (COAG) agreed to a program of reforms to improve the effectiveness of the gas industry. These reforms included the introduction of the *National Third Party Access Code for Natural Gas Pipeline Systems* (the Gas Code) and retail contestability.

The gas industry reforms also included the separation of contestable from non-contestable gas businesses. As part of the gas industry's reform, existing long-term supply arrangements and joint-producer and joint-marketing arrangements operating under state law, or authorised under the TPA were left to run their course.

While COAG's reforms have improved the operation of the gas industry, ERIG has sought to assess whether integration between contestable parts of the gas industry (production and retailing) and gas transmission pipelines and electricity generation assets might raise competition concerns. These issues are explored below.

4.1 Gas transmission and electricity integration issues

Gas and electricity reforms have increased opportunities for energy businesses such as gas transmission pipelines to integrate into gas-fired electricity generation. This type of integration has occurred, for example, in:

- **Victoria** – at the Bairnsdale Power Station (94 MW), where gas is supplied from Alinta EATM Pty Ltd through a 2.3km lateral pipeline connected to Alinta Infrastructure Holdings' Eastern Gas Pipeline.²²
- **South Australia** – at the Torrens Island Power Station (1280 MW)²³ owned by TruEnergy, which sources gas from Victoria using the SEA Gas Pipeline owned by TruEnergy, Origin and International Power.²⁴
- **Queensland** – at the Barcaldine Power Station (55 MW combined cycle) power station fuelled by natural gas supplied by a 400km pipeline. These energy assets are owned by Enertrade.²⁵
- **New South Wales** – at the Narrabri Power Station (12 MW), where gas is sourced from the Coonarah gas field and transported to Wilga Park. The project is the sole undertaking of the Eastern Star Gas's wholly owned subsidiary Narrabri Power Limited.²⁶

²² AlintaGas website, 'Alinta – Operations – Generation – Bairnsdale Power Station, (accessed on 22 November 2006).

²³ TRUEnergy website, 'Torrens Island' <http://www.truenergy.com.au/Production/Torrens/Index.xhtml> (accessed on 23 November 2006).

²⁴ TRUEnergy website, 'TXU and SEA Gas reach pipeline agreement', <http://www.truenergy.com.au/About/News/News.xhtml?newsitem=94> (accessed on 23 November 2006).

²⁵ Enertrade, *Annual Report 2005/06*, p.1

²⁶ Eastern Star Gas, 'Narrabri Power Station', <http://www.easternstar.com.au/narrabri.htm>, (accessed on 30 November 2006).

- **Western Australia** – Alcoa purchased an interest in the Dampier to Bunbury Natural Gas Pipeline (DBNGP) after Epic Energy went into receivership. The gas is used as a feedstock at its smelter in Kwinana.
- **Tasmania** – Alinta is constructing a 220 MW gas fired generator in Northern Tasmania. The gas will be supplied through Alinta Infrastructure Holdings’ Tasmania Gas Pipeline.²⁷

Integration between gas transmission pipelines and generators has given rise to concerns that such conduct might need regulation in a manner similar to the proposed cross-ownership rules between electricity transmission and generation.

The proposed cross-ownership rules between electricity transmission lines and generation assets are intended to prevent misuse of the non-contestable part of the supply chain from distorting competition in related markets. In a similar manner, cross-ownership rules between gas transmission pipelines and generation assets would also be attempting to prevent such conduct.

There are a number of differences between the gas and electricity industries that should be taken into account when considering if cross-ownership rules are needed. In particular gas transmission pipelines built by generators are often purpose built or have by-passed an existing pipeline. Seagas, for example, has introduced new competition into the electricity generation market as well as introducing inter-basin competition in gas.

In these circumstances, introducing cross-ownership rules to gas transmission pipelines to prevent their integration into electricity generations could stifle:

- **Upstream gas development and investment** – where such investment is reliant upon or made viable because of investment in integrated transmission pipeline and electricity generation investment. This could reduce inter and intra gas basin competition.
- **Transmission pipeline investment** – where such investment is part of an integrated project that integrated a new pipeline to a new generator.
- **Competition in the electricity generation market** – by deterring or preventing new investment in gas-fired electricity generation assets.

The differences between the gas and electricity industries indicate that cross-ownership rules do not appear warranted for integration between gas transmission and electricity generation, at this time. However, as the nature of the gas and electricity industries continues to change, the implications of gas transmission and electricity generation integration should be kept under review to assess whether the benefits of integration outweigh the potential detriments.

4.2 Other gas market integration issues

The competition implications of gas transmission and electricity generation cross-ownership issues aside, there are a range of other vertical and horizontal integration scenarios that ERIG needs to consider.

²⁷ AlintaGas website, ‘Alinta – Operations – Transmission – Tasmanian Gas Pipelines, (accessed on 22 November 2006)

4.2.1 Transmission and upstream producer integration

Integration between transmission pipelines and upstream gas producers raises similar issues as integration between electricity generation and transmission businesses. In the gas industry, however, the risk is of the transmission pipeline owner discriminating in favour of its own upstream production interests.

In practice, the issue of gas transmission businesses discriminating against upstream rivals has not arisen in a material way to date. In most cases each transmission pipeline only services one producer and there is no competitor to discriminate against. For instance, the Moomba to Adelaide and the Moomba to Sydney Pipelines each only serve one upstream gas producer joint venture.

In these circumstances, the policy issue is whether intra-basin competition is likely to develop in future and accordingly how material the problems raised by potential mergers, sales or acquisition in the upstream gas industry. For example, some intra-basin competition is beginning to emerge in Queensland between coal seam methane and natural gas.

The ACCC/AER does not recommend cross-ownership restrictions at this time, but encourages ongoing review/monitoring of developments in the gas industry to ensure that cross-ownership between gas transmission pipelines and upstream producers does not undermine competition.

4.2.2 Transmission pipelines and retail integration

Transmission pipeline owners contracts directly with gas suppliers and retailers. In theory a gas pipeline owner could discriminate against competing retailers by choosing to provide access in a manner that is not comparable with its own integrated businesses. Such discrimination could occur through non-price activities which are more difficult to detect and prevent and may even fall outside direct network regulatory arrangements.

The risks and impact of such cross-ownership in the gas industry may be mitigated where more than one transmission pipeline services a market. Nevertheless there are examples where one transmission pipeline serves a market, for example in Victoria with GasNet. Given the potential risks of such discrimination, the ACCC/AER encourages ERIG to review this matter further.

4.2.3 Distribution and retail integration

As in electricity, there are some instances of integration between gas distribution and retail businesses.

In the context of a vertically integrated distribution business discriminating against its retailer rivals, the views of the ACCC/AER on integration between electricity distribution and retail businesses (as set out in section 3.3) also appear to be applicable to the gas industry. The ACCC/AER believes that in practice such discrimination is difficult to carry out and no significant gas retail access complaints have been raised with the ACCC/AER.

4.2.4 Horizontal integration in the gas industry

Based upon the ACCC's experience to date, the TPA appears to be effectively regulating gas industry integration at the various horizontal levels of the gas supply chain.