Australian Competition and Consumer Commission

Promoting Competition and Fair Trading

Australian Institute of Energy
Melbourne

Energy Regulation: Past Experience, Present Challenges, Future Experiences

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Australia's economy has entered the 21st century in its strongest position in over 40 years with continuing strong growth, low inflation, low unemployment and low interest rates.

A key factor in this success is undoubtedly Australia's access to reliable and low cost energy resources which earn the nation more than $24 billion a year in direct exports.

In addition, low cost energy supplies underpin the success of other key industries such as aluminium, steel, and paper.

And while the energy sector is itself a major employer, directly providing jobs for 120 000 people, it indirectly supports the jobs of hundreds of thousands more through the competitive advantage it provides the Australian economy.

A recent report by the Department of Primary Industries and Energy found that demand for energy in Australia is projected to increase by 50 per cent by 2020, and the energy industry estimates that investments of at least $37 billion will be required by 2020 to meet the nation's energy needs.

They are awesome statistics and place a great responsibility on the Australian Competition and Consumer Commission to ensure we get the balance right when it comes to regulating the energy sector.

That balance involves the right of those making those massive investments in energy sources and infrastructure to earn a decent return while at the same time ensuring these resources can continue to be made available at a price that as far as possible mimics a competitive market and does not lead to the exploitation of monopoly positions.

And we have to do this in a way that ensures that whether industry or consumers choose gas or electricity is not determined by differing regulations in those sectors but by allowing both to develop in a way that encourages competition within, and between the two, to the benefit of industry, end users, and the nation.

This is the philosophy behind the creation of the most recent evolutionary development in energy regulation - the Australian Energy Regulator.

I will talk more about the AER shortly, but first I would to look at the record so far.

NCP reforms

The AER is the result of a decade of National Competition Policy reforms in the energy sector to open up the former government-controlled intra-state monopolies in gas and electricity to competition and make them more efficient.

Although reforms proceeded on a sectoral basis, federal, state and territory governments agreed through the Council of Australian Governments to similar reforms for both industries, including:

- Placing utilities on a commercial footing through corporatisation
- Vertically separating generation, transmission, distribution and retail businesses and 'ring-fencing' these businesses from other activities
- Allowing for customer choice of supplier through full retail contestability
- Encouraging third party access to transmission and distribution infrastructure on fair and reasonable terms
- Removing restrictions upon interstate trade and, in the case of electricity, establishing the National Energy Market (NEM)

The Australian Competition and Consumer Commission played a key role in this process by overseeing aspects of the deregulated monopolies where it was deemed that competition could only be achieved through government intervention.

- ***Gas***

In the gas sector, the agreement saw a major restructure of the industry, with monopolies such as pipelines being separated from more competitive segments of the gas industry, such as production and retailing.

In addition to structural reforms, governments agreed to remove barriers to interstate trade in gas and governments and industry developed a national framework creating a right of access by gas producers and retailers to Australia's major monopoly gas pipelines.

The record so far has been impressive.

The gas industry has ended the bad old days when local authorities took gas supplies from monopoly producers under long term contracts that left little room for an injection of competition from third parties.

Gas consumption has grown at an accelerating rate since the mid-1990s, averaging four per cent since 1995, while gas has increased as a proportion of Australia's energy mix from 12 per cent in 1980/81 to 20 percent in 2000. The augmentation of coal fired energy with natural gas is also, of course, a big plus for the environment.

The development of an effective access regime over the past decade also means niche players can now invest in gas exploration and development, confident they can access transmission and distribution systems on reasonable terms.

Now, with access to pipelines and other infrastructure available we are seeing a number of new developments in the Otway Basin, coal seam methane developments in New South Wales and Queensland and other new fields coming on stream, such as Yolla and Patricia/Baleen. It is also encouraging to see a number of new explorers have taken acreage in the Cooper Basin and major exploration programs foreshadowed or underway in the Gippsland Basin.

This is in turn increasing investment, diversity in ownership and reducing concentration of ownership in upstream gas production markets.

Gas users have also benefited with ACIL Tasman estimating that without access regulation the price for transmission and distribution services could have been 25 per cent higher.

- ***Electricity***

The record in the electricity sector is more mixed.

During the 1970's and 1980's the electricity industry was publicly owned and vertically integrated. State based markets meant that each state was self sufficient in terms of generation, however, it was widely accepted that there existed significant over investment in generation plant in NSW and Victoria. In particular, Victoria was building expensive new power stations even though in NSW excess power could be made available if stronger interconnection was constructed.

Since 1999 the ACCC has progressively assumed responsibility for regulating transmission from state regulators. The ACCC's role was to influence government decisions about such factors as the number of competing generators needed for a market, the design and operation of the wholesale market and, under the merger provisions of the TPA, to approve the sale of electricity businesses to the private sector to ensure a government monopoly was not replaced by a private monopoly.

Over the first five years of this regime around $4.6 billion will have been invested in transmission. This investment adds around 36% to the replacement costs of transmission assets. This is very high considering the long life of these assets. However, these high levels of investment have come at a price though. Transmission nominal prices have increased in all states, rising by an average of 16%. The increase in prices has been a result of growing demand and the need to accommodate efficient investment to ensure a reliable supply of electricity to Australia.

Just as crucial are reliable and transparent service standards, which is why last week we issued our draft decision on transmission service standards in the national electricity market.

Our approach would see the impact of transmission network constraints and outages in the NEM quantified, with quarterly reporting of two measures of market impact:

- the marginal cost of constraints (the estimated change in costs if a constraint is relieved by 1 MW); and
- the total cost of constraints (the estimated cost of completely relieving any constraints).

We believe these measures will provide increased transparency about a transmission network service provider's quality of service performance.

The measures are also a first step towards creating new incentives for transmission companies to take into account the impact of their decisions on the market.

Under the existing scheme providers are rewarded for exceeding, and penalised for failing to achieve, specified targets.

The limitation of this measure is that the targets do not necessarily have an impact on the market. Under the new scheme the regulated revenues of transmission companies will, in part, be linked to market outcomes.

Interested parties have until September 1 to comment on the draft decision. We then expect to issue a final decision in October 2004.

Australian Energy Regulator
Perhaps the most exciting development in energy regulation though has come about as a result of the reform programme undertaken by the Ministerial Council on Energy which resulted in:

- a national legislative framework for energy market regulation to be agreed between the Commonwealth, States and Territories; and
- the establishment of the Australian Energy Market Commission (AEMC), which is responsible for rule making and market development, and the Australian Energy Regulator (AER), responsible for market regulation;

The principles behind the Australian Energy Regulator were that it should be:
- independent in its decision making, but through its close links to the ACCC able to take an approach consistent with competition law; and
- achieve national consistency in regulating electricity and gas transmission and distribution.

In line with that first point, the AER has been established under the *Trade Practices Act*, and will be a part of the ACCC but a separate legal entity. This means that the AER will make decisions on regulatory matters independently of the ACCC.

When fully operational it will comprise three Members who will be statutory appointments, including a full time Chair and two part time Members. One of the members will be a Commissioner of the ACCC, namely, me.

There will be a single body of staff providing assistance to both the AER, and to the ACCC on energy matters, creating a substantial body of specialist skills and

knowledge. This will deliver the objective of a single national energy regulator and avoid duplication of processes by the ACCC and AER.

This brings us to the second point – consistency in regulation.

Different approaches to regulating utilities across industries distort investment decisions and create unnecessary costs and barriers for utilities operating in more than one industry.

In short, whether industry or consumers choose gas or electricity should not be determined by differing regulations in those sectors favouring one or the other. The goal of regulation should not be to favour one rival or the other, but to allow both to develop in a way that encourages competition within, and between the two, to the benefit of industry, end users, and the nation.

Consistency in regulation across gas and electricity, and across the different jurisdictions, will reduce regulatory costs to business and reduce barriers to entry by interstate companies.

The AER will ensure that at all times there is a consistent approach to all aspects of competition law such as mergers, enforcement and so on.

So how will this all work in practice?

The ACCC will continue to perform its existing functions under the Trade Practices Act. These include:

- enforcement of Part IV (Restrictive Trade Practices, including mergers)
- authorisation of conduct under Part VII that may otherwise contravene the Trade Practices Act; and
- approval of access codes and acceptance of access undertakings.

Recent amendments to the Trade Practices Act facilitate a new streamlined process for amending the electricity and gas codes, allowing the ACCC to rely on consultations undertaken by the AEMC in making our rulings.

The amendments also streamline the authorisation process for the National Electricity Code, allowing the ACCC to rely on consultations that have been separately undertaken by the AEMC in a code change process.

The AER will assume the ACCC's current electricity transmission revenue regulation functions, and NECA's National Electricity Code compliance monitoring and enforcement functions.

The AER's regulatory functions initially include regulating electricity transmission revenues, and ensuring compliance with the National Electricity Code. From July 2005, the AER will regulate gas transmission for all jurisdictions except Western Australia, with provision for Western Australia to join the gas regulatory scheme by agreement.

During 2006, the AER will become responsible for the regulation of electricity distribution and retailing, other than retail pricing. Jurisdictions may transfer responsibility for regulation of retail prices to the AER.

The transfer of distribution and retail regulation to the AER will require the development of a national framework. The Ministerial Council on Energy will shortly release for consultation an issues paper on distribution and retail regulation. Following consultation on the issues paper, a national distribution and retail regulatory framework will be developed, and considered by the Ministerial Council in 2005.

The plethora of regulatory approaches to distribution and retail regulation imposes substantial costs on the energy sector, and inhibits the establishment of national energy retailers. Progress on the task of harmonising distribution and retail regulation is needed urgently to reduce the compliance burden on the energy sector.

So that's the story to date – some very impressive results from opening up the state run gas and electricity utilities to competition and now, with the maturing of that process, the creation of a single, independent regulatory to achieve national consistency in regulating electricity and gas transmission and distribution.

But at the same time, there have been a number of recent developments in the energy sector that the Commission is concerned have the potential to put a halt to these gains – namely, mergers within the electricity industry and some recent conflicting interpretations of Gas Code provisions

In particular, the Commission has decided to seek a Federal Court review of the Tribunal's latest ruling on the Moomba to Sydney Pipeline to clarify some key issues.

I'll have more to say about that in minute, but first, electricity mergers.

Mergers

Recently the Commission has received several applications for informal clearance for proposed acquisitions that would bring many of the elements of the electricity supply chain back together and would re-aggregate the contestable generation and retail sectors. Such substantial re-aggregation in the NEM would be a reversal of the pro-competition structural reforms that have been achieved over the past decade.

There are three types of mergers that raise competition concerns in the National Energy Market, in particular:

1. ***Horizontal mergers between generators***

As you would no doubt be aware, the Commission has considered applications for mergers of large baseload generators in Victoria. In general, our main concern is the ability of a large merged entity to manipulate spot prices and also to influence future contract prices.

The Parer Report recognised these concerns and recommended further disaggregation in the generation sector to stimulate competition, and specific criteria for mergers between generators to be included in the ACCC's Merger Guidelines. However, it is

not clear whether Parer's recommendations are likely to be effective. The Federal Court's decision on AGL makes clear that regardless of any changes to the merger guidelines, it is still the court's decision that is determinative. As some of you may have seen from our recent submission to the Productivity Commission, it is the ACCC's view that these complex issues might be more effectively addressed through a policy response by State Governments or the Ministerial Council on Energy.

2. Vertical mergers between transmission, distribution, generation and retail entities

Vertical mergers may give the merged entity the ability and the economic incentive to restrict the level of competition in the contestable market by restricting its competitor's access to the essential facilities it controls. The entity could do this by raising prices, imposing terms for access that raise cost for their competitors, or through a more subtle reduction in the quality or timeliness of the essential service.

The Commission has recently considered these issues in relation to the proposed acquisition of TXU Australia by SP Energy. The proposal raised significant competition concerns regarding the joint ownership of parts of the National Electricity Market transmission network with merchant activities in generation and retail.

The ACCC regards the structural separation of the operation and control of the transmission from merchant activities as an important competition issue in the NEM.

However, following the offer of court-enforceable undertakings by SPE, the ACCC is satisfied that its concerns have been addressed and will not be intervening to block the acquisition.

These undertakings provide for the separation of the transmission and generation businesses, including certain activities associated with the ownership and operational control of TXU's Master Hedge Agreement with Ecogen and Torrens Island Power Station.

The ACCC is satisfied that the undertakings provided by SPE appropriately address our concerns, including the commitment to non-discrimination, restrictions on access to information and enhanced ring fencing commitments.

3. Vertical mergers between generation and retail sectors

The Commission is concerned that cross ownership between base-load generators and large incumbent retailers may reduce the ability of other retailers to secure competitively priced hedge contracts. As retailers need hedge cover in order to mitigate the risk of price volatility in the spot market, this may have the effect of raising barriers to both entry and expansion for electricity retailers.

Such vertical integration also creates an incentive for other generators and retailers to merge, creating a market dominated by integrated generator-retailers. This would increase barriers to entry, leading to fewer new entrants and less intense competition in the retail market. However, the Commission recognises that this may be an issue primarily because of the current state of development of the NEM. There is nothing intrinsically wrong with vertical integration between generators and retailers in the long term (in fact, the Commission recognises many advantages), provided both generation and retail markets become, and remain, effectively competitive.

The Commission is also concerned that the section 50 test used by the Commission to assess merger proposals may not be an adequate instrument for detecting market power in the NEM. The section 50 framework traditionally uses rules of thumb like the Herfindahl–Hirschman Index (HHI) market concentration measure. However, it is becoming apparent that the traditional competition measures do not capture the unique characteristics of the National Energy Market and how these can lead to a substantial lessening of competition.

This is a significant challenge that the Commission faces in addressing the issues raised by electricity mergers and we are eager to develop solutions to prevent inappropriate concentration and re-aggregation in the electricity industry.

Gas Code rulings

As I mentioned earlier the second major area of concern is a series of recent interpretations of the Gas Code.

The most recent of these was of course the Tribunal's decision, handed down on 8 July, on the Moomba to Sydney Pipeline Access Arrangement.

In that decision the Tribunal rejected both the valuation methodology applied by the ACCC and that proposed by the pipeline owner, East Australian Pipeline Limited.

It instead adopted the depreciated optimised replacement cost (DORC) methodology based upon the net present value of cost as the preferred approach for valuing the MSP. Curiously, neither the ACCC nor the service provider based their valuation of the pipeline on this approach.

We also believe the decision is inconsistent with the WA Supreme Court’s decision on another Gas Code ruling in the Epic Energy case.

It is the view of the ACCC that this decision has created some doubt about how the code should apply and as a consequence of this, we last week lodged an application with the Federal Court seeking judicial review of the Australian Competition Tribunal's decision.

The ACCC application is confined to the Tribunal's application of the law, consideration of evidence and reasonableness of its propositions relating to the methodology to be applied when establishing the initial capital base of the pipeline pursuant to the National Gas Code.

While our appeal application specifically applies to the MSP ruling, this was just the latest in a series of cases going back to 2001 which we believe have left important questions unanswered about the Gas Code Access arrangements.

Since 2001 there have been four appeals to the Tribunal over Gas Code Access Arrangement decisions by the ACCC. Given the relative infancy of operation of the regime, that is perhaps not surprising. The likelihood for appeals to arise is high, given the many industry stakeholders that serve to be affected by an access arrangement determination including those seeking access (i.e. shippers), producers,

large end users/consumers, retailers and of course the owner/operator of the pipeline system itself.

In the first of these, lodged in 2001, the Commission's decision to include a trigger mechanism in the access arrangement for the Duke-owned Queensland Gas Pipeline was upheld.

In the remaining three appeals, by Epic, GasNet and the Moomba to Sydney pipeline, the appeals have been upheld.

The Epic matter centred on the regulatory value of the Moomba to Adelaide pipeline, in particular the cost of steel pipe, and whether the Pelican Point expansion should be included in the capital base. Excluding this expansion meant that the regulated tariff was increased.

The value of GasNet's pipeline had been set in the initial access period. The appeal, however, resulted from the new owner's concern with aspects of the methodology used to set the cost of capital for the new regulatory period.

The MSP appeal related to both the regulatory value of the pipeline as well as the cost of capital to be used for setting reference tariffs. As I noted previously the Tribunal proposes the use of a particular deprival value methodology for setting the initial capital base of the pipeline.

However, it's worth putting these appeals in perspective. The ACCC has approved 12 access arrangements. These arrangements embody hundreds of minor decisions. Most of these issues were resolved during the ACCC's consideration of the access arrangements.

Across the four Tribunal cases there were a total of 22 grounds for appeal. That is, when the Final Approval was issued the ACCC and the service provider had not reached an agreement on 22 aspects of the access arrangements.

The service provider abandoned 10 of these grounds before the Tribunal even considered the matter. On a further 3 the ACCC conceded the point. In 7 of the original 22 the Tribunal found in favour of the applicant, while in 2 cases the ACCC's decision was upheld.

Another way to assess the outcome of this process is to look at the impact of the revenue outcome of the Tribunal's decision benchmarked against the service provider's application and the ACCC Final Approval.

As you can see from this slide, even when the Tribunal has upheld the appeals the final revenue outcomes have fallen well short of the revenues originally claimed by the service provider.

Gas Tribunal decisions

Effect on revenue

	Service provider	ACCC	Tribunal
MAPS	$59m	$50m	$54m
GASNET	$95m	$77m	$79m
MSP	$86m	$68m	?

Note: for MAPS, ACCC rev of $50m is an estimate excluding the Pelican Point expansion ($54m with expansion)

Our concern is that the current approach rewards cherry picking, and encourages appeals where the applicants have nothing to lose and everything to gain by challenging specific aspects of our decisions, while leaving the rest of the decision untouched.

For example, the agreed approach to setting the cost of capital has been an assumed 60:40 debt equity ratio. This benchmark has implications for other parameters used, including the benchmark credit rating for determining the risk premium on debt. In the recent MSP Tribunal decision a lower credit rating was viewed as appropriate by the Tribunal however there was no recognition that a corresponding adjustment to the benchmark gearing level was required. If such an adjustment had been undertaken the overall cost of capital and in turn tariffs would have fallen.

The result of cherry picking has been the creation of a level of inconsistency in Gas Code interpretation which ultimately leads to a higher level of regulatory uncertainty that can only be detrimental to the future management of the access regime, for service providers and users alike.

Gas transmission companies have more to lose than anyone in such an uncertain environment. Under the current regime, gas transmission companies have been very successful businesses. An example I can point to is the performance of the ASX Utilities Index. Businesses in this index outperformed the S&P ASX 300 accumulation index over the past four years. Moreover, the market values of these businesses trade at a premium to the value of their regulatory asset bases. This suggests that regulated returns are higher than necessary to maintain regulated asset values.

All of which I would have thought rather put the lie to the industry's claim that ACCC regulation has, in the words of one major player "had a chilling effect" on investment.

It's also worth noting at this point the release, just this week, of the final report of the Productivity Commission's review of the gas access regime.

The Productivity Commission is, as most of you in this audience are well aware, not the biggest fan of regulation so it is significant that its report recommends retention of a gas-specific regime, after finding the original arguments for the regime are still valid and are likely to remain so for some time.

The report observed that under the existing regime, Australia has seen developing competition in upstream and downstream markets, lower gas transport charges, significant pipeline investment and efficiency gains for the broader economy. Moreover, it found the gas market is maturing and the construction of new pipelines that have assisted basin on basin competition is occurring.

By and large, the ACCC welcomes and supports the recommendations set out in the report, many of which we believe will streamline the functioning of the current regime resulting in lower administration and compliance costs.

The report has accepted a number of the ACCC's suggestions including clarification of the status of pipeline expansions, removal of one step in the decision making process and adjustment of the merits review process to address the cherry-picking problem.

One of the key recommendations in the report is the introduction of a second tier of regulation that is less intrusive than the current approach of setting reference tariffs. In the right circumstances, a carefully designed second tier of regulation offers benefits.

However, the ACCC believes it is critical that the second tier still provides effective regulatory oversight because pipelines are only regulated if they have the capacity to exercise market power. If the second tier is ineffective then pipeline companies would be able to take advantage of their market power to the detriment of gas users and the broader economy.

Conclusion

Nearly a decade on, the evidence shows National Competition Policy, administered by the ACCC, has been good for the development of the energy sector, good for industry, good for consumers and good for the nation.

Australians spend around $50 billion on energy each year with energy exports earning the nation a further $24 billion a year.

With both local and international demand for Australian energy resources set to grow substantially in the near future, energy regulation will continue to play a vital role in meeting this increased demand which is so critical to Australia's future growth and living standards.