



Australian Competition & Consumer Commission

**THE AUSTRALIAN FINANCIAL REVIEW
QUEENSLAND POWER & GAS SUMMIT**

Energy Market – Will Consumers Gain?

24 November 1998

Mr Allan Asher

Deputy Chairperson

Australian Competition & Consumer Commission

We are all acutely aware that the electricity and gas industries have been undergoing major structural and regulatory reforms during much of the 1990s.

The immediate objective has been to increase the extent and effectiveness of competition in Australia's energy markets with the ultimate objective of improving efficiency, resource allocation and market growth within the sector and of delivering lower prices and more efficient energy services to industry and household energy users.

While there has been considerable progress to date in both sectors, neither the electricity nor the gas reforms can be regarded as being "in the bag" today. Much remains to be done before the energy reforms are effectively implemented. Still more will need to be done to ensure that the anticipated economic gains from the reforms are delivered to energy users in practice, rather than being appropriated by energy businesses who remain in a position to exercise their market power.

For these reasons, it is worth reminding ourselves of the important underlying objectives and benefits of the energy sector competition reforms and asking ourselves the question: how far have the reforms come to date and what remains to be done to achieve those objectives and realise those benefits in practice?

With that in mind, my presentation today will cover the following issues:

- the importance of the energy reforms, and of microeconomic reform more generally, to the national economy and to Australia's trading performance in the international economy; and
- the nature and extent of the reforms and the remaining and issues arising as a result thereof.

Energy Reform in the Context of the National Economy

While this is clearly a "parenthood" issue, it is worth recalling the overriding economic objective of the microeconomic reform agenda and of the energy market reforms which are central to that agenda.

Simply put, that objective is to improve the efficiency and price competitiveness of Australian industry as a whole, by lowering the cost and improving the efficiency of essential inputs such as energy, transport and communications services. This important economic objective is being pursued through measures to expose our public utility and infrastructure industries to the discipline of effective competition and/or "efficient" regulation of natural monopoly facilities. The immediate objective is to lower cost structures and raise productivity levels in Australian industry with the ultimate objective of stimulating investment, employment and economic growth and of improving our foreign trade and balance of payments performance.

With these large national economic gains in prospect, it is essential for governments and industry to push forward with the full, effective and timely implementation of the energy market reforms during the important implementation phase that still lies

ahead. In doing so, it is important to bear in mind that a number of significant obstacles to effective energy reform remain to be addressed, including the potentially distorting influence of uncompetitive market structures in the gas and electricity industries and the risk that inconsistent and/or inefficient national and state/territory approaches to the regulation of essential facilities may undermine the pursuit of efficient national energy market reforms. The economic benefits obtained from the energy reforms, both within the sector and for the economy as a whole, will be substantially reduced (and in the extreme could be largely eliminated) if these remaining obstacles to effective competition and efficient regulation are not addressed and removed as far as possible during the reform implementation process.

The Energy Sector Competition Reforms: Potential Gains and Remaining Risks

As we are all aware, the broad approach being taken by the energy reforms is to promote effective competition in those sectors of the electricity and gas industries where competition is feasible (i.e. in production/generation, marketing, wholesale and retail supply) and to underpin that competition with efficient regulation of the natural monopoly sectors of the two industries (i.e. transmission and distribution).

In practice, the substantial economy-wide economic benefits predicted by the then Industry Commission will be achieved only if the reforms also eliminate most of the existing barriers to entry and competition in the energy sector and result in major pro-competitive changes to the commercial and market conduct of energy market participants. If the reforms are to be fully effective, over the next few years we would expect to see dynamic and highly competitive energy markets characterised by:

- the free entry of new electricity and gas retailers and marketers promoting more competitive and innovative trading and contracting in energy and transportation in competition with established market participants;
- existing energy producers and distributor/retailers being forced to compete more aggressively (including by entering each others traditional markets) to protect their existing markets and to obtain a share of market growth;
- third party access arrangements giving large industrial energy users commercially viable options for separate direct purchases of energy and transportation as alternatives to the purchase of bundled services from incumbent distributors;
- entry of new gas producers and electricity generators in response to improved access to exploration acreage, the cost advantages and flexibility of new generating technologies and the commercial opportunities by a growing, competitive energy market;
- new energy infrastructure developments such as interstate pipeline and transmission wire interconnections promoting gas basin-on-basin competition and strengthening interstate competition among generators;

- gas and electricity businesses taking ownership and trading positions in the markets for both energy sources, to take better advantage of the competitive energy marketplace by providing convenient, lower cost, integrated energy products and services to customers; and
- stronger competition between gas and electricity as alternative energy sources in many household and industrial uses, as technology, commercial activity and competition lower energy costs and prices and bring the relative prices of gas and electricity closer together.

As noted above, there are a number of remaining obstacles to the effective implementation of the energy market reforms which will have to be overcome to satisfy these reform objectives, including:

- the potentially distorting influence of uncompetitive market structures in the gas and electricity industries, including the existence of monopoly or oligopoly at the production/generation stages, vertical integration at the distribution and retail stages and the presence of barriers to entry to those sectors of the market; and
- the potential for inefficiency in the regulation of the natural monopoly facilities resulting in a failure to eliminate monopoly rents from the pricing of these essential infrastructure services.

The ACCC, in its role as Regulator, strives to address these issues.

The Role of the ACCC in Electricity Regulation

I would now like to discuss the form in which utility deregulation has and is taking place.

As previously stated, the introduction of competition to the electricity industry is one of the keys to generating productivity improvements that will benefit all parts of the Australian economy. The structural reforms taking place involve the disaggregation of vertically integrated monopolies into separate transmission, generation and distribution businesses. In most States the generation sector is also being disaggregated into two or more competing units. Further competition is being introduced at the retail level, with large customers allowed a choice of retailer in some States/Territories and retail competition being enhanced by allowing new entrants to compete with existing retail bodies.

Regulatory responsibilities are being separated from commercial activity, enabling management of the new entities to focus on appropriate goals for the organisation. The Commission's role in the reform of the electricity industry is to enforce the anti-competitive conduct rules in Part IV of the TPA, and in administering Part IIIA of the TPA which deals with access to the services of essential facilities, such as transmission infrastructure.

National Market

A major development has been the move to establish interstate trading in electricity between the interconnected states (New South Wales, Victoria, South Australia and

the Australian Capital Territory). The key characteristics of the proposed national market are:

- freedom of choice for electricity buyers (transitional arrangements are being put in place to open the market progressively to smaller buyers of electricity);
- non-discriminatory access to the inter-connected transmission and distribution networks;
- no discriminatory legislative or regulatory barriers to entry for new participants in electricity generation or retail; and
- no barriers to interstate or intrastate trade in electricity.

The proposed national market design is:

- all electricity to be traded through a wholesale pool;
- generators in the interconnected states being dispatched by a single controller;
- open access for the transmission and distribution grid;
- wholesale customers being entitled to purchase their energy requirements either from the spot market or through contracts with suppliers or a combination of both;
- market settlement function handling spot and forward trading in the market;
- two new market institutions - a Code Administrator (NECA) to monitor the operation of the market and a system operator (NEMMCO) to operate the market.

These principles have been embodied in a comprehensive code (National Electricity Market Code) that was authorised by the Commission on 10 December 1997. The code embodies both new interstate trading arrangements such as a wholesale market pool with existing practices such as technical standards for generation and connection to the network. The access elements of the code form a separate access undertaking under Part IIIA.

Transitional arrangements are already in place in New South Wales, Victoria and the Australian Capital Territory whereby a wholesale market pool has been established and these states have moved to a common merit order dispatch and common market rules. Queensland has also implemented arrangements to introduce a competitive wholesale market pool and will operate that market in parallel to the national market at least until Queensland is physically connected to the transmission grid in New South Wales. It is expected that the NEM start date will occur in late 1998.

A key piece of work being undertaken is the review of the pricing principles in Chapter 6 of the National Electricity Code. This review resulted from ACCC pressure to test the adequacy of the current Code principles in respect of network pricing. The Commission argued that NECA's review of transmission pricing should consider the following issues:

- the appropriate balance between cost reflective network pricing and postage stamp allocation of costs for TUOS charges;
- the extent of any cross subsidies in the postage stamp component of the TUOS charges; and
- the incidence of TUOS charges with a view to promoting cost reflective and efficient usage, investment and location signals.

The ACCC and representatives from IPART, ORG, GPOC, Queensland Electricity Reform Unit and South Australian Treasury are on a steering group that oversees the review's progress. Any changes resulting from the review would be submitted to the Commission for approval.

Issues for the Electricity Industry

Privatisation

In recent years State, Territory and Commonwealth governments have initiated various pro-competitive reforms, involving horizontal and vertical disaggregation of government owned monopolies, corporatisation or privatisation and the removal of various restrictions on the operation of free markets. These initiatives were given further impetus by the Competition Principles Agreement, whereby all governments agreed to a systematic review of all legislation restricting competition.

A process of corporatisation of the independent electricity bodies is being undertaken in many states and territories and Victoria has implemented a process of privatisation of electricity distribution and generation companies. Both South Australia and New South Wales have indicated a desire to commence a privatisation program for their electricity utilities. Tasmania recently restructured the Hydro-Electric Corporation to form separate generation, transmission and distribution / retail businesses. The Tasmanian Government has indicated a desire to privatise the transmission and distribution / retail businesses, and lease the HEC's generation assets for 99 years.

As a consequence of this, the assessment of privatisation proposals has become a much more significant part of the Commission's work in recent times. In many cases involving individual asset sales, a number of bidding consortia require individual consideration. The Commission's role is to ensure that the acquisition of an asset does not result in a substantial lessening of competition in a market. In assessing privatisations, the Commission considers the existing interests of all bidders.

In assessing mergers and acquisitions, there are a number of other matters which the Commission must take into account, including the degree of countervailing market power; the level of market concentration; and the nature and extent of vertical

integration. The Commission will therefore assess each merger or acquisition on a case by case basis to determine whether it would have the effect, or likely effect, of substantially lessening competition in a market or markets.

Market Structure

In its determination on the National Electricity Code, the ACCC expressed concerns over the structure of the wholesale markets in some states. Analysis of market structure by ABARE indicates that there is a significant degree of market concentration in South Australia and New South Wales. ABARE found that the current market structure is such that large generation portfolios in South Australia and NSW would be in a position to dominate particular segments of the market. ABARE's modelling results indicate that strategic behaviour during periods of high demand could lead to significant increases in electricity spot prices. All generators in the NEM are estimated to benefit from the higher operating surpluses resulting from strategic behaviour by major players. Hence the Commission recommended that the South Australian New South Wales governments consider further structural reform.

The issue of market structure is not only crucial at the commencement of the NEM but will be of on-going interest, particularly in respect of possible re-integration of firms participating in the NEM. Concerns also include possible mergers within each segment of the market, arrangements whereby NEM participants operate in upstream or downstream sectors (such as a generation company also operating a retailing business) and merger proposals between different energy suppliers (such as an electricity industry participant buying a gas industry participant).

Convergence

The issue of convergence is one that the ACCC is likely to have to consider in assessing mergers and acquisitions in the utilities sector in the future. There have, for example, been recent reports in Australia of joint ventures and acquisitions involving telecommunications companies and energy distributors and retailers. The development of multi-utility service provider companies is a logical further step.

Convergence raises challenges to effective competition policy, in terms of possibilities for regulatory 'bypass' and for incumbents if the policy approach and the manner of regulation is uneven across the different industry sectors. It can also be argued that convergence holds the potential to create substantially-resourced business units holding market power. At the same time however, convergence may lead to industry growth and diversity and therefore lead to greater competition between products and greater choice of suppliers for customers. There are arguments for convergence in terms of economies in carrying out common functions eg integrated billing for energy; reduced consumer transaction costs. These benefits are likely to be maximised by having an integrated regulator which takes a consistent approach across industry sectors.

Reaggregation

The Commission also expects that it will have to assess reaggregation proposals, under the merger and acquisition provisions of the Act, in the utilities sector in the future. Consider for example, the possibility that in Victoria the five power generation companies seek to merge or to take over or to be taken over by the distribution companies. Of course there are some cross ownership restrictions built into

Victorian law (until around 2002). If these mergers went ahead they could undo the pro-competitive effects of the Victorian divestiture of the former State Electricity Commission of Victoria whilst on the other hand they would bring efficiency gains as I discuss below. Likewise when deregulation gives rise to the replacement of state by national markets, firms often manoeuvre and merge in order to cope with the new situation. Again sometimes there are considerable efficiency gains, but at other times with considerable anti-competitive effects.

In the electricity industry there are several kinds of mergers which may arise for consideration in future. First, horizontal mergers within a state, eg. between power generators or distributors within one state located in the same state. Secondly, there may be vertical mergers between, for example generators and distributors in the state. Thirdly, there may be conglomerate mergers between different utilities (as mentioned earlier). Fourth, there may be interstate mergers combining some or all of the above elements.

In assessing these mergers under s.50, one background factor worth noting is that the ownership structure of the energy industry and some other deregulating industries has been greatly affected by public ownership arrangements over the years. The ownership pattern which might have emerged in a privatised market subject to competition laws was not present owing to the preference of most Governments for the public utilities to have both horizontal and often vertical integration. Clearly the deregulation of current public utilities brings advantages compared with the artificial integration established by Governments. For example, the Victorian disaggregation of the electricity industry would seem to represent an improvement over the pre-existing monopoly arrangements. However it is not especially likely that an initial disaggregation will yield the optimum ownership patterns in the industry. In free markets, reliance is placed on the workings of the capital markets to achieve more efficient ownership arrangements and on competition policy to make sure that those arrangements are not anti-competitive (unless they can be shown to be in the public interest).

The present Victorian electricity market starts without the benefit of these processes unfolding over the years. It is quite likely that restructuring pressures will arise to create more efficient arrangements. The possible efficiency benefits of such mergers will need to be recognised and accepted under the *Trade Practices Act*. Equally however, it will be important to ensure that mergers are not simply anti-competitive and designed to undo the pro-competitive effects of deregulation. The Commission will consider any moves towards reaggregation of privatised electricity businesses on a case by case basis in order to assess whether they are likely to lead to a substantial lessening of competition.

The Commission understands that a Queensland State Government task force is currently examining the structure of the Queensland Electricity Supply Industry. One issue that the task force is considering concerns potential reaggregation of the generation and/or distribution sectors.

Tarong Energy Authorisation Application

The Commission appreciates the concerns over instances of involuntary load shedding that have occurred in Queensland as a result of low reserve and

unanticipated plant outages. Over summer, higher demand for electricity will mean that further involuntary load shedding in Queensland is possible.

On 6 November 1998 the Commission received an application for authorisation from Tarong energy for the co-ordination of generator output at times of insufficient supply in the Queensland electricity market. The application is supported by the two other major Queensland generators, CS Energy and Stanwell Corporation, and by the Minister for Mines and Energy.

The Commission is currently investigating the competitive effects of the proposed arrangements. A decision on the application will be released shortly.

Regulatory Approach

I would now like to spend a few minutes briefly outlining the approach that the ACCC intends to take in relation to its electricity regulatory roles.

The ACCC favours an approach based strongly on incentive regulation. The theoretical underpinning for incentive regulation is that with the ability to retain cost reductions as profits the service provider has a strong incentive to be more efficient in the provision of access services and to expand its market share and to contribute to market growth. To achieve the potential efficiency gains from competition it is important that the prices of access not reflect the exercise of market power by the service provider and that the structure of pricing among users and between different categories of service be based on the costs involved in providing each service. However, if regulation adjusts prices to simply allow the service provider to recover costs and achieve a normal rate of return on investment, the service provider will have little incentive to be efficient in the provision of such services; indeed there may be an incentive to reduce efficiency. Hence the need for incentive-based regulatory mechanisms.

There is a range of analytical tools available to the ACCC to shape incentives to achieve a higher level of cost efficiency in the firm, to generate appropriate signals for investment, and to share the benefits of regulation between the firm, the customer and the community.

The chief regulatory tools and some issues they raise are:

- Methodology of price control base - which costs should be counted, what is the relevant capital base and risk of the entity, and what returns to capital are reasonable?
- Design of the efficiency incentive or ' - X' factor in price controls linked to the consumer price index or other index - raising issues of methodology and consistency with cash needs.
- Periodic review of the price control base and efficiency incentive mechanisms - the trade-offs between (un)certainly, relevance to actual performance and sharing gains with customers and (where there are externalities) the community.

- Periodic adjustment of mechanisms governing service standards - should the company be allowed a '+ S' factor to compensate for required improvements in service standards?
- Decisions as to how enhancements to service capacity are to be shared between present and future users.
- Establishment of efficiency benchmarks - a 'reality check' on whether efficiency standards are keeping pace, over time, with good practice elsewhere.

The regulatory regime being introduced in electricity, based on these techniques, provides a degree of flexibility of administration. The regulator can therefore act on the feedback it receives, even though some elements of the calculation may be prescribed or limited, such as asset valuation methods to be used in the calculation of capital returns. One point to consider is that although the preceding list of potential controls over the earnings of private assets may appear daunting, as natural monopolies they impact on the earnings of the wider community and they perform a public function in transmitting electricity. Therefore the public have an interest in the efficiency, safety, cost and other aspects of how that job is done. The ACCC will not proceed to determine rates without public consultation, which, importantly, includes the asset owner.

A case-by-case consultative approach will be adopted towards regulation of the electricity industry, with guidelines being issued that will be applied in a broadly consistent manner from case to case and across industries. The ACCC required, as a condition of authorisation of the National Electricity Code, that NECA conduct a review of the regulatory arrangements in the Code applicable to the pricing of transmission and distribution networks and associated connection assets during 1998. This review is intended to examine, amongst other things, whether the transmission network pricing model provides appropriate incentives for the use of generation and for investment in generation, network and demand-side alternatives.

While the Code establishes a range of regulatory principles, it also requires the ACCC to develop a Statement of Regulatory Intent to provide additional detail on the regulatory approach that the ACCC will adopt. The ACCC has not yet finalised its views on an appropriate incentive mechanism for electricity transmission networks but will include these views as part of its Statement of Regulatory Intent which will be released later this year.

In the ways outlined above, the ACCC intends to meet the fundamental criteria for a credible system of regulation - transparent, independent, delivering sufficient certainty and consistency to enable buy-or-invest decisions to be made, realistic in terms of the regulatory burdens imposed, conducive to overall objectives of providing incentives for efficient investment and operations, and serving the wider community.

ACCC Role in Gas Industry Reforms

Under the *Gas Pipelines Access Law*, the relevant regulator for gas pipelines differs according to the type of pipeline under consideration. The ACCC is the relevant regulator for access to services provided by transmission networks in all States and Territories except Western Australia. Distribution networks will be regulated by

independent State-based regulators, except in the Northern Territory, which has requested the ACCC regulate both its transmission and distribution pipelines.

As national transmission Regulator, the ACCC has assumed the following responsibilities:

- evaluating access arrangements for transmission pipelines, including assessing the scope of the services being offered and determining Reference Tariffs; assessing the capacity trading and queuing arrangements in the primary and secondary markets; assessing compliance with minimum ring-fencing requirements and evaluating whether additional obligations are appropriate; establishing minimum information requirements; gathering and checking such information; and consulting with interested parties;
- assessing revisions to access arrangements;
- ongoing monitoring and enforcement roles in relation to ring-fencing arrangements, achievement of rate of return targets, cost and demand projections and effectiveness of incentive mechanisms, potential breaches of the Code's hindering-access prohibition, and changes in market circumstances;
- resolving disputes over access to spare or developable capacity;
- approving affiliate contracts; and
- approving competitive tendering processes.

Each jurisdiction is to apply to the National Competition Council to have its legislative access regime certified as effective under Part IIIA of the *Act*. Once the regime is certified, covered pipelines are exempt from declaration under Part IIIA.

This means that the ACCC operates as Regulator under the Code in accordance with an Inter-Governmental Agreement and jurisdictional legislation, rather than in accordance with an industry-wide undertaking and provisions of the *Act*. This distinction is apparent in the enforcement of the access arrangements made under the National Gas Code, where the Regulator deals with 'breaches' of the access arrangement typically only when a dispute arises between a user and the Service Provider. This is quite different to a court-enforceable access undertaking made under Part IIIA of the *Act*. Some provisions of the Code, such as breaches of the ring-fencing provisions and of the prohibition on hindering access, can be enforced in the more traditional way. Under the model of enforcement through dispute resolution, the ACCC will be even more dependent upon the involvement of market participants to ensure that access is effective.

This new and diverse range of regulatory functions has brought out the importance of State and Federal regulators coordinating their assessment of cross-jurisdictional applications for regulatory approval. To this end, jurisdictional regulators have formed the Utility Regulators' Forum which seeks to coordinate research and regulatory response to a wide range of issues, including information requirements of regulators, ring-fencing of accounting information, monitoring of quality standards, 'best practice' and benchmarking, appeals processes and regulatory data bases.

The ACCC also has an Energy Committee on which the heads of State counterpart agencies, who are *ex-officio* members of the ACCC, have input to the ACCC's regulatory decisions and regional considerations can be taken into account.

Incentive Regulation and the National Gas Code

Most of the access pricing principles under the National Gas Code are contained within chapter 8 of the Code. The Commission seeks to minimise the regulatory burden on industry (and hence lower the overall cost to consumers) by maximising competition wherever possible. In cases of natural monopoly, where competition is typically neither feasible nor efficient, the Commission generally seeks to create a set of incentives which encourage those in positions of market power to conduct their business in a socially desirable manner without the regulator having to second guess their every move. Facilitation of competitive secondary markets in service provision, such as pipeline capacity, is an efficient method of reallocation and can provide valuable information for the ongoing regulation of the primary Service Provider.

The theoretical underpinning for incentive regulation is that with the ability to retain cost reductions as profits, the service provider has a strong incentive to be more efficient in the provision of access services and to expand its market share and to contribute to market growth. Higher than expected performance in both these areas will lead to better than initially-expected profits and better utilisation of resources. Generally, users of the services benefit directly only in future periods after regulated prices are subjected to review and the new cost structures are taken into account when re-establishing the regulated prices.

To achieve the potential efficiency gains from competition in upstream and downstream markets, it is important that the prices of access not reflect the exercise of market power by the service provider and that the structure of pricing to various users and between different categories of service be based on the costs involved in providing each service. The price paths for services in question are usually defined at the beginning of a review period to achieve these ends.

If regulation adjusts prices to simply allow the service provider to recover costs and achieve a normal rate of return on investment, the service provider will have little incentive to be efficient in the provision of such services; indeed there may be an incentive to reduce efficiency. Hence the need for incentive-based regulatory mechanisms.

Most incentive mechanisms seek to avoid heavy handed revenue control and to divorce the permitted charges for access from the reductions in costs or efficiency gains the service provider is able to achieve over and above those that were expected at the beginning of a review period. Hence above-normal profits are only restrained after the period under review has passed and the regulator looks forward to the next period.

There is a welter of analytical tools available to policy-makers, regulators and stakeholders to shape or check on incentives to achieve a higher level of cost efficiency in the regulated firm. They can also be used to generate incentives for investment at levels that are consistent with allocative and dynamic efficiency in the

industry, and a sharing of the benefits of regulation between the firm, the customer and the community.

It is important to remember that although the regulatory control over the earnings of private assets may appear somewhat heavy handed, as natural monopolies they impact on the earnings of the wider community and they perform a public function, for instance, in transmitting telephony messages or electricity over the wires by the path of least resistance. Therefore the public have an interest in the efficiency, safety, cost and other aspects of how that job is done.

The ACCC will not proceed to make determinations without public consultation, which, importantly, includes the asset owner. While investment in infrastructure is essentially an industry decision, the Commission will regulate with the objective that such decisions are not distorted by access conditions being too harsh (e.g., access prices set too high, leading to either a lessening of competition or wasteful duplication) or too lax (e.g., access prices set too low, leading to inefficient use of existing facilities). The aim is to encourage decision-making consistent with maximising benefits to users and the community.

It is essential that reform outcomes be objectively reviewed from time to time, taking care to distinguish outcomes of reform initiatives from inevitable pricing trends consistent with technological change and to distinguish and have regard both to the level of competition and to the level of enhancement of competitive capacity, which includes such dimensions as research and development, and expenditure on exploration and infrastructure development.

ACCC Experience in Implementing the Code

I would now like to consider some of the ACCC's recent experience as transmission regulator in the Victorian gas industry.

In order to expedite its gas reform process, the Victorian government introduced a transitional access Code, which is identical in all material respects to the National Code. The Victorian government nominated the ACCC as transmission regulator and the Office of Regulator General (ORG) as the distribution regulator. The Victorian Government simultaneously submitted its gas access regime and associated access arrangements to the National Competition Council (NCC) for effectiveness certification; the ACCC for approval of their transmission access arrangements; and to ORG for approval of their distribution access arrangements. The access arrangements set out the terms and conditions on which access to transmission services will be made available to third parties in Victoria.

Applications were also submitted for the authorisation of the Victorian Market and System Operations Rules (MSOR) which govern wholesale spot market operation, and provide for systems security, connection to the transmission system, dispatch and metering.

On 28 May 1998, the ACCC released its Draft Decision on the three Victorian Gas Transmission Access Arrangements and its Draft Determination on the MSOR. The preliminary decisions proposed by the ACCC are to approve the access arrangements subject to certain amendments being made and grant conditional

authorisation to the MSOR. The ACCC has now released its final determination authorising the MSOR and its final decision on the Access Arrangements was handed down last month. BHP Petroleum Pty Ltd and BHP Petroleum (Bass Strait) Pty Ltd have applied for a review of the authorisation.

The most controversial issue arising out of the Draft Decisions was the choice of an appropriate weighted average cost of capital (WACC) for the access arrangements. The WACC is essentially the rate-of-return allowed on the capital base. It is calculated as a weighted average of returns investors could otherwise achieve through various industry-specific debt and equity instruments. The ORG and the ACCC used a similar approach in determining the WACC for both transmission and distribution assets, and calculated a **real pre-tax** figure of 7%. Concerns were expressed within the industry, as well as by potential investors and the Victorian Government that the figure was too low.

The Commission recently released its final decision on the Victorian access arrangements, and both the ACCC and the ORG have determined a real pre-tax WACC of 7.75%, which is equivalent to a nominal after tax return on equity of at least 13.2%. A private investor, however, may obtain a higher effective rate than this due to the tax benefits flowing from the operation of Australia's tax system.

In considering the WACC it needs to be recognised that network assets are natural monopolies with the potential, in the absence of regulation, for owners of such assets to earn monopoly profits above what could be expected in a competitive, commercial environment. A cornerstone of the reform process is that third party access pricing should replicate a competitive market. The purpose of setting a regulatory rate of return and asset base is to determine appropriate reference tariffs for third party access. The objective of the regulator in setting the rate of return is to strike a rate that eliminates excessive monopoly profits, but at the same time does not discourage investment. The regulator is also required to balance the competing interests of the service provider and those of end users.

In relation to the MSOR, the Victorian Treasurer has introduced into the Victorian parliament the *Gas Industry Acts (Amendment) Bill 1998*, which, if enacted, would specifically authorise the MSOR for the purposes of section 51 of the *Trade Practices Act*. The effect of this would be that the MSOR would be exempted from the application of the provisions of the *Act*. The Commission is concerned that the proposed exemption may provide an unfortunate precedent for the application of the National Competition Policy, particularly in view of the fact that the Commission has already conducted an authorisation process for the rules in question. In the short term, the proposed exemption would also deny BHP Petroleum's right to seek a review of the ACCC's decision, and it would appear to remove some flexibility for ongoing review of the MSOR.

Upstream Reform

The development of effective competition in both downstream and upstream gas markets in Australia is of vital concern to the ACCC. The reforms implemented to provide pipeline access should drive greater competition in the downstream gas retail markets. However, the benefits of these reforms may be severely limited or not eventuate if there is a lack of competition upstream.

The primary objective of gas reform is to remove any barriers that may inhibit free and fair trade in gas, to encourage a competitive gas supply industry. The greater the number of participants competing in the supply of gas, the better for users and the community as a whole, which benefits at least indirectly as a result of the lower production costs faced by power generators and manufacturers.

Aggregation of production interests and coordinated marketing arrangements of gas production joint ventures in the main Australian gas basins are potential obstacles to the development of a competitive interconnected, multi-state Australian gas market. The Commission is aware that the achievement of a more competitive market structure in the upstream gas production sector will be a difficult task, particularly in basins where gas production and use is project-focused and associated with members of the joint venture contracting on common terms with customers for large, long-term quantities of gas.

The Australian Competition Tribunal, in its recent decision concerning the AGL Cooper Basin supply arrangements, recognised that there must be a balancing of “the forces that may limit the prospects for effective competition.” The Tribunal recognised that common ownership of exploration leases, production facilities, the existence of economies of scale in the development of reserves and the construction of pipelines in gas fields may all raise barriers to entry and restrict the numbers of viable participating enterprises, with a resulting impact on gas consumers.

Acreage management systems

It is clear that for prospective acreage, granting exploration permits of smaller size and for shorter duration will allow more explorers to be involved in gas exploration and potentially enhance supply competition. This is especially the case in previously explored or particularly prospective regions or where gas is already being produced. In such areas, the Commission advocates permit sizes that are as small and for as short a time period as considered economically viable.

A related issue is that of the issue of petroleum Retention Licences (PRLs). The Commission is concerned that the issuing of PRLs can reduce the benefits of shortening the terms of Petroleum Exploration permits and the introduction of more stringent relinquishment requirements.

Third party access to upstream facilities

The Commission is concerned that access to transmission and distribution pipelines alone is unlikely to deliver competitive outcomes to downstream industrial and household gas users unless obstacles limiting upstream competition are overcome. Access to upstream facilities is one of the means of enhancing competition upstream.

The benefits of access to upstream facilities in contrast to the cost of duplicating facilities have been stated by industry players themselves in an application for Authorisation submitted by Santos Ltd & Ors to the Commission:

it is undoubtedly more efficient given that facilities do exist to process both wet and dry gas, and given also that the Unit Parties (who are now the same as the Patchawarra Southwest and Murta Block parties) have invested considerably in constructing them, that the Patchawarra Southwest and Murta Block parties continue to toll their product through existing facilities rather than construct new plant. Stand alone economics which were undertaken by Patchawarra Southwest and Murta parties established that it was less economic for those joint ventures to build their own plant than for them to toll through Moomba. The economics supporting this conclusion have not changed. Tolling is therefore of benefit to the public.¹

Infrastructure costs will be a major consideration for any potential new entrants and will impact on their ability to compete successfully.

The Commission notes that access to upstream facilities is an important aspect for new players to consider before entering a market. It is likely to have a significant impact on whether potential new entrants bid for acreage in existing production areas following the relinquishment of exploration licences.

A study by MESA² found that, in the absence of access to existing processing facilities, for new investment to be economic a minimum field size exceeding 35 billion cubic feet (BCF) of recoverable raw gas would be required. In contrast, fields with as little as 5 BCF of recoverable raw gas were found to be economic if access to existing facilities is negotiated on a deprival value cost basis. In this context, while the ACCC is of the view that reducing the size of exploration permit areas could have the potential to enhance competition, it also recognises that this competition may not be realised unless new entrants have access to existing facilities on reasonable terms. In fact, the perceived inability to gain access to existing facilities could be a barrier to potential new entrants from bidding for acreage at all. These concerns are magnified by the fact that future discoveries in already producing basins are likely to be smaller, as it could be expected that the previous exploration would have identified the largest fields.

Part IIIA of the Trade Practices Act 1974 (TPA) establishes a legislative regime to facilitate third party access to the services of certain essential facilities of national significance. However, s.44B excludes from the regime some services which include those relating to the supply of goods and the use of a production process, '*except to the extent that it is an integral but subsidiary part of the service*'³. Upstream gas facilities are predominantly for the purpose of gas supply and production. Thus Part IIIA does not apply to these facilities unless they are an integral but subsidiary part of a service already covered by Part IIIA (a covered service). It appears that whether upstream facilities form an integral but subsidiary part of a covered service would depend on the facts of the case. Particularly in the case of upstream gas processing

¹ Santos Ltd & Ors, Application for Authorisation No. A90560, 18 February 1994, Annexure 2, par 70.

² R C M McDonough, Mines and Energy South Australia, *Economics of Gas Field Developments in the Cooper Basin After 1999*, APPEA Journal, 1997.

³ Trade Practices Act 1974, section 44B - Definitions

facilities, the general view is that they would not be an integral but subsidiary part of a gas transportation service and thus would not be covered by Part IIIA.

Marketing arrangements

(a) Coordinated marketing and separate marketing

Presently, coordinated marketing of gas by joint venture partners is common practice in the Australian gas industry. This may be attributed to the fact that gas markets in Australia operate as 'contract' or 'project' markets, where gas is only produced to meet specific and often long-term contractual obligations. Such a market structure may create practical problems which currently make separate marketing not feasible.

On 29 July 1998, the ACCC approved an application for authorisation submitted by the North West Shelf Project in Western Australia. The applicants had sought an authorisation to enable parties involved to discuss and agree together the common terms and conditions, including price and methods for marketing and selling the gas produced by the project (coordinated marketing). While recognising that coordinated marketing may act as a barrier to entry to the gas market, the Commission found that separate marketing was not currently viable in an environment of few producers and buyers; a predominance of long term contracts; and the absence of spot and secondary markets.

Notwithstanding the decision to authorise the North West Shelf project, the Commission is aware of the ongoing evolution of gas markets in Australia and has identified a list of market features which are present in other gas markets where separate marketing is the norm. These include:

- a large number of customers creating a diverse gas demand profile;
- a number of competitive suppliers;
- a range of transportation options creating a pipeline grid;
- storage close to demand centres;
- brokers/aggregators providing supply and/or demand aggregation services as well as bundled supply packages;
- gas-related financial markets; and
- significant short term and spot markets.

Clearly, where possible, separate marketing is more competitive than joint marketing and is to be preferred. By creating price competition between as many suppliers of gas as possible, separate marketing should result in lower prices and more choices for consumers and users of gas.

Coordinated marketing of gas by joint venture producers may be in breach of the TPA but can be authorised if the public benefits exceed the anti-competitive detriments. The TPA provides an appropriate mechanism for the transparent consideration of whether coordinated marketing is in the public interest. The

authorisation process also provides a mechanism for review if the circumstances change materially. The Commission believes that the authorisation provisions of the TPA are the appropriate mechanism for considering coordinated marketing and that no additional specific legislative regime is required. We also believe that State Governments should not grant exemptions from the operation of the TPA for coordinated marketing, but rather allow the same transparent authorisation process to apply to all gas producers. This will be even more important as jurisdictions are inter-connected and basins begin to compete.

(b) Gas supply contracts

Long-term contractual arrangements for gas supply is a main feature of Australian gas supply contracts. Such arrangements may have their merits as well as detriment.

The Australian Competition Tribunal, in handing down its decision on AGL's Cooper Basin Natural Gas Supply Arrangements, recognised that long-term contractual arrangements may be required so that borrowings for significant capital expenditure can be secured against the cash flow of the venture. The Tribunal indicated that the term of a contract that provides the necessary cash flow should be properly related to the period within which borrowings are to be amortized. It further observed that

there may also be other commercial circumstances where the assurance of a lengthy contract term is required if the public benefit to be derived from a major development is to be realized. In such circumstances,... a lengthy contract term does not necessarily represent a detriment, but rather may contribute to the achievement of a benefit.

However, the Tribunal also noted that some provisions allow for suppliers to extend the term of contract or refuse gas supply additional to the contract quantities. These provisions could prove anti-competitive if applied rigorously. It was of the view that 'take-or-pay' formula might be acceptable in the past to the effect that it was used to secure cash flow. But it is no longer acceptable in today's more sophisticated financial environment where preferable contractual devices that serve the same end are available.

Inter-basin competition

Inter-basin competition is an important first step towards a fully competitive gas supply industry. As new pipeline interconnections are established, markets that have been subject to a single supplier for over twenty years will have the prospect of sourcing their gas from another supplier. While the Commission expects inter-basin competition to be of some benefit, two or three suppliers is rarely sufficient for a fully competitive market to eventuate.

So while inter-basin competition is a desirable and appropriate short-term objective, it is critical that measures be put in place now that will facilitate intra-basin competition in the medium to longer term.

Jurisdictions need to make changes now that will encourage the entry of new explorers into existing producing basins, because of the lags from exploration to

potential production. This means that acreage management and access to upstream facilities are critical in making gas discoveries more likely to be economic to produce.

There are a number of new prospective gas supply sources, including Papua New Guinea and the Timor Sea, which can feed into an East Australian grid and, through swaps, backhauls and other flexible marketing and transportation arrangements, impact on gas supply throughout the region. Some areas, such as Moomba and Wallumbilla, are positioned in such a way that they lend themselves to development as natural hubs. They could be managed in a way that encourages flexible transportation and gas swap arrangements.

This would allow brokers and aggregators to better match supply and demand, providing confidence to small producers that they are able to sell the volumes of gas which would otherwise be difficult to market.

Conclusion

While such a competitive gas supply industry may still seem far off, a number of steps need to be taken now to ensure that it becomes a reality.

The energy sector competition reforms have the potential to deliver substantial economy-wide benefits. However, this will not be achieved simply by implementing the electricity and gas access codes, important and necessary as those measures are.

It will also be necessary to overcome a number of existing barriers to entry and effective competition in the electricity and gas markets and to recognise that effective implementation of the NEM Code and the NGA Code will be at least as important as getting the regulatory rules, the governmental agreements and the supporting legislation right.

In large measure, blocking tactics to date against extending the debate to initiatives for reform in all sectors have paid off in terms of delay and frustrating the competition objectives of the reform agenda. In the meantime, contracts are extended and renewed with the user not having the choices that might otherwise have been available. These tactics have succeeded because users generally lack sophistication, resources and comparable access to government.

While that may give considerable comfort to those who oppose reform measures on their own patch, that victory comes at the expense of national welfare, it diminishes the wealth overall of all functional levels of the industry and it diminishes the shareholder wealth of firms who get by being essentially defensive rather than vigorous.

Although the ACCC is not a policy-making body, it will take every opportunity in exercising its regulatory powers to probe and resist arguments for complacency with the current state of affairs.