

# NETWORK INDUSTRY REGULATION AND CONVERGENCE IN SERVICE DELIVERY: CHALLENGES FOR SUPPLIERS, USERS AND REGULATORS

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## ABSTRACT

The Australian Competition and Consumer Commission (ACCC) has competition and fair-trading law responsibility for Australian industries. It has gained regulatory responsibilities for third-party access to telecommunications, soon will become the national regulator of gas pipeline access under a legislated code developed by the jurisdictions and industry working in a common forum, and will progressively become the national regulator of electricity transmission.

This paper describes the ACCC's concept of the term 'efficient incentive regulation', gives examples of government decisions on network industry operations to which it is relevant and describes the general approach the ACCC will take in applying that concept, to encourage competition, innovation, economic investment and fair dealing by suppliers with users.

The paper describes the relevance of the rise of national product markets and convergence in the delivery of telecommunications, electricity and gas services to the types of decisions the ACCC and State-based regulators will have to take and places those decisions in the context of common issues in regulatory reform internationally. Regulatory decisions taken for one network industry may have particular positive effects if the underlying principles flow on to others.

A necessary part of dealing with national industries is the coordination of regulatory effort where Commonwealth and State/Territory regulators are involved. There is the risk in Australia that separation of regulatory powers between jurisdictional and national levels may cause welfare gains to business, customers and the wider community arising from the industry reform process to be lost if there are shortcomings in communications between regulators, duplication of effort or inconsistencies in approach. The paper describes the current division of responsibilities; the potential of the Utility Regulators' Forum to coordinate regulatory effort; and indicates the potential for losses of welfare and economic efficiency if COAG principles of a national approach to regulation are not fully embraced.

The paper discusses the range of tools available to deal with challenges arising from privatisations, from the entry of multinational players to network industries

and from the implementation of competition policy reforms, drawing on concerns about network industries raised with the ACCC, and on the ACCC's broader complaints experience. Finally, the paper outlines the reasons for policy-makers to pay particular attention to shaping and bringing light-handed but effective regulation to the areas of the converging network industries where market power remains unconstrained by competition, and for regulators to coordinate their administration of the regulated areas of network industries so that the policy objectives of incentive regulation are realised, resulting in the industry, users and the community sharing in the benefits.

## NETWORK INDUSTRY REGULATION

### Introduction

### THE COAG COMPETITION POLICY GOALS

In April 1995 the Commonwealth, States and Territories cemented their agreement<sup>1</sup> to a framework for competition review and reforms, following assent to the main body of the Hilmer agenda. The reform agenda encompassed the general application of the Trade Practices Act to commerce, provision for access to essential (natural monopoly) facilities, to which a right of access is necessary for upstream or downstream competition, structural and operational changes to achieve competitive neutrality between the public and private sectors and measures to introduce competition at the distribution or retail level of utility services, for example, by phasing out territorial monopolies.

On the eve of the COAG agreements, the Industry Commission (IC) released an assessment of the benefits to economic growth and revenue from the implementation of Hilmer and related reforms.<sup>2</sup> In round figures, the IC calculated that the benefits would include 5.5 per cent per annum growth in real Gross Domestic Product (GDP), three per cent increase in real wages, 30,000 more jobs, \$5.9 billion increase in Commonwealth revenues and \$3.0 billion increase in revenues to the States, Territories and Local Government<sup>3</sup>. These benefits were expected by the IC to be realised after a period of four to eight years from implementation, the IC commenting that 'the bulk of the flow-on effects need not take a great deal longer than the productivity improvements themselves'.<sup>4</sup> The gas and electricity sector was said to be the biggest single source of the estimated gains, contributing a GDP gain of 1.4 per cent.

The assumptions underlying the IC's report have since been subject to close analysis, focussing on whether the IC's selection of 'world best practice' examples for productivity growth potential were valid, and whether downwards price trends would have occurred anyway owing to technological improvements. Professor Quiggin estimated that the reform benefits would total 0.5 per cent GDP after taking account of unemployment effects, and considered that that figure was consistent with independent macro-economic projections about the economy's rate of growth and the level of unemployment.<sup>5</sup>

Whether one accepts one analysis or the other, it is common ground in the studies and in international reviews, for instance, by the OECD, that there are adjustment costs to regulatory and structural reform, particularly effects on pricing relativities and employment levels. My response is that it is imperative that the jurisdictions work all the harder to see that the projected benefits of reform are actually translated into benefits to the whole community<sup>6</sup> bearing the restructuring costs, and that they are not simply added to the profits of monopoly providers of goods and services. Otherwise the process will be widely seen as delivering substantial pain, such as unemployment, for little general gain.

Take the issue of third-party access. Part of the reform process is that, in response to the pressures of a competitive market, increasing attention is given by business to the efficiency with which capital is used. While renegotiation of employment practices is perhaps the element of the reform agenda that springs to the mind of many managers, the provision of third-party access to infrastructure services, which falls within the ACCC's purview, is no less an issue in utilising capital to greater effect. Australia has limited investment capital in its own right and pressing balance of payments problems. Traditional economic and legal principles would have suggested that the owners of infrastructure assets be left alone to operate their facilities solely in accordance with their own business objectives, and would have focussed on regulation of prices at some market point in the industry supply chain. One of the potentially adverse outcomes was the misallocation of investment funds. The operation of effective regimes of access to pipelines, transmission wires, telecommunications exchanges, and other assets of national significance including, I shall argue, upstream gas processing facilities, has the potential to achieve considerable national savings in infrastructure investment while bringing about upstream and downstream competition—the best of two worlds, recognising a wider obligation of owners of essential facilities to maximise community welfare.

The message is clear: block or put at risk effective access to important natural monopoly infrastructure and you put at risk the realisation of the projected GDP gains on which the reform program has been justified. Remember that the energy industries were put forward by the IC as the biggest contributors to the potential gains from reform. While Professor Quiggin and others

have questioned whether the magnitude of reform targets according to the IC will be realised, as far as I am aware, the energy industries have not.

## SCOPE OF THIS ARTICLE

This article describes how network industries have come under new regulatory regimes that depart from old cost-recovery models for monopolies. The article focusses on telecommunications, electricity and gas, which, as noted below, are separate industries converging into one multi-utility industry, albeit one serving several markets. New regulation focusses on the function—bottleneck facilities—rather than on the firm. It offers the potential to create price-based efficiency incentives, with some potential to mimic competitive pressures, leaving operational and investment calls with the companies, and to give incentives to achieve and share productivity gains with customers. Safeguards for users and end-consumers are a complementary and necessary feature of regulating network industries where competition, even when present in delivery of the end-product, would not, unaided, deliver fair outcomes, having regard to the immense resources at the command of these industries. I endeavour to place the ACCC's approach to regulation in the context of policy goals and international developments affecting the network industries.

Lest there be any doubt that the National Competition Policy reform goals are intended to serve the broad interests of Australian society, the Competition Principles Agreement specifies that State and Territory access regimes are to take into account the interests of the facility owner, customers, operational and technical requirements for safe and economic operation of the facility and the benefit to the public from having competitive markets. Principles in the Competition Principles Agreement for the assessment of particular policies or courses of action require that the following matters, where relevant, be taken into account:

- government legislation and policies relating to ecologically sustainable development;
- social welfare and equity considerations, including community service obligations;
- government legislation and policies relating to matters such as occupational health and safety, industrial relations and access and equity;
- economic and regional development, including employment and investment growth;
- the interests of consumers generally or of a class of consumers;
- the competitiveness of Australian businesses; and
- the efficient allocation of resources.<sup>7</sup>

Recent Commonwealth regulations in respect of access codes prepared by industry bodies require the ACCC to have regard to the same matters when considering whether to accept an access code.

The ACCC recently applied these principles in its draft decision on the market access code for the national electricity industry. These regulations necessarily oblige

the ACCC to keep in touch with policy developments and the concerns of industry, consumer and community interests in the broad sweep of Australian commercial activities. In its regulatory decisions and by its public discussion of the policy issues and business and community concerns that are relevant to those decisions, the ACCC aims to contribute positively to Australia's economic, environmental and social well-being, which form the theme for APPEA's conference, and which are clearly linked to the implementation of competition policy.

### Regulation and policy

The ACCC is often wrongly accused of seeking competition for the sake of competition. While the ACCC is a competition advocate, this is in the context of the objects clause of the Act, 'to enhance the welfare of Australians through the promotion of competition and fair trading and provision for consumer protection', and all of the work that the ACCC does is referable to that provision.<sup>8</sup> I have no sympathy for infrastructure projects that would duplicate existing facilities if the project cannot be commercially justified in its own right. Competition between uneconomic projects is likely to be relatively short-lived and a dissipation of capital. The principle of efficient investment in infrastructure, which underlies the explanation of regulatory goals in this article, is far more important than competition as a goal in its own right, and a more viable contributor to competitive activity in the economy and to real growth in GDP. However, it is part of the territory of endeavouring to be an effective regulator to point out when the policy goals underlying regulation are being frustrated. One can hardly be an effective regulator if one is merely a mute witness. Looking at the international context, the OECD noted:

'Despite the difficulties in judging their impact, competition and consumer agencies and authorities have undertaken substantial regulatory reform projects. Over the long run, these efforts have clearly had a significant impact in reducing barriers and promoting competition. In the US, more than twenty years of advocacy efforts by the Antitrust Division of the Department of Justice and the Federal Trade Commission have been instrumental in promoting competition in such sectors as telecommunications, surface and air transportation, securities trading, electric power, and professional services . . .'<sup>9</sup>

### WHY REGULATE?

Why pay special regulatory attention to infrastructure industries, particularly when the direction of reforms is to make their services increasingly contestable, and to foster inter-product competition?

Markets in these industries operate at different functional levels, and at some levels firms are in a position of market power owing to natural monopoly, in

that it is uneconomic to duplicate their facilities, and users are unable to exercise effective bargaining power. There was considerable debate at the time decisions were made by Telstra and Optus to simultaneously roll out parallel broadband cable networks (and since then in the light of emerging difficulties in pay television critics advancing as an alternative the roll-out of a single network regulated so as to prevent the capture of monopoly profits by its owner. Commercial decisions to duplicate gas pipelines are taken infrequently, alternative means to increase capacity being explored in the light of the risk of over-capacity, the monetary and time costs of obtaining new planning approvals and of purchasing and laying pipe, and the capacity of the market to sustain the cost structure of the industry. In respect of the upstream sector of the gas industry, the ACCC has noted that there is material in the public arena from producers and officials indicating that, for the particular fields and facilities considered, it is more efficient and less costly to transport product through existing facilities than to construct new plant.<sup>10</sup>

Where competition is sufficient at a functional level of an industry to constrain the price, quality and externalities of services that are cost inputs to a retail sector that is competitive, or for which there is an intention to create competition, it is unnecessary and inefficient to superimpose regulation, except transitionally. Where competition is not feasible, there is a case for regulating infrastructure at bottleneck points in the supply chain. There is a policy intention post-Hilmer to create more diverse markets generally, for instance, by permitting energy end-users to gain access to transmission systems so that they can deal directly with initial suppliers. Each of the industries under discussion is characterised by degrees of vertical integration. Without regulation of infrastructure services it is problematic whether these purchasers would have sufficient bargaining power to obtain access on fair commercial terms, bargaining power being a function of the number of options available rather than simply of size. Hence the development of regimes to negotiate terms and conditions of access, and the associated development of ring-fencing regimes where there are diseconomies or simply disagreement as to the merits of structurally separating vertically-integrated suppliers.

Finally, there are limits to the degree of retail competition in telecommunications, and to competition between gas and electricity (which might be argued as a preferable alternative to price or access regulation).

In the case of telecommunications, price controls apply. The essential purpose of those controls is to bring about at least some sharing of the benefits of competition with as broad a range of consumers as possible, particularly those who mainly consume services that are subject to lesser degrees of competition, such as access to the system (rental, connection) and local call services. That is, the controls can act as a form of safety net for consumers.

To turn to the energy industries, applications where gas may be substituted for electricity include domestic

water heating, space heating and cooking. There may be competition at the margin in new residential developments and factories on the metropolitan fringes. However, it appears that at present there are limited substitution possibilities between electricity and gas in industrial applications. The Australian Competition Tribunal recently noted substitution possibilities for gas at the margin, but also described gas as the 'industrial fuel of choice' in New South Wales industry.<sup>11</sup> Constraints on product substitution support the policy decision to foster electricity—electricity and gas—gas competition, broadening the supply options available by providing for rights of access to transmission and distribution services, and encouraging the development of secondary markets.

In these circumstances, in the ACCC's view there cannot be a 'hands off' policy approach to essential facilities; they are essential facilities because users upstream or downstream of the facility have limited options, for significant periods of time, to switch products in response to differential price changes. In fact, in the case of gas, there is a significant rising baseload of demand<sup>12</sup> which, were there not regulation of essential facilities, would give increasing scope for the capture of monopoly rents, particularly if there is vertical integration by ownership or contract, which gives incentives to exercise that market power. That is not to say that a legislated approach is the only possible approach to regulating facilities—a voluntary code-based approach is an alternative as long as it delivers workable access outcomes and maintains commercial incentives for efficient investment.

Where there is not yet sufficient competition in the provision of goods or services, there remains a case for 'safety net' price control in the transition from monopoly supply, as is the case in telecommunications. National gas pipeline access code provisions for the ACCC to determine whether Reference Tariffs are appropriate, reflect similar logic.

#### BALANCING JURISDICTIONAL CLAIMS WITH OPTIMAL REFORM APPROACHES

One issue that the initial IC report did not explore was the optimal regulatory reform path to monitor and police the achievement of reform benefits, although that became the subject of an IC Information Paper published later the same year.<sup>13</sup> The second IC paper focussed on regulatory design and institutional issues, favouring 'light-handed' incentive-based mechanisms and enhancement of national regulatory arrangements in recognition of the development of national markets.

The COAG in-principle policy decisions for industry sectors and the subsequent framework agreements of April 1995 were all cast on the assumption that the jurisdictions would retain policy and regulatory responsibility for overseeing the reform of their traditional areas of responsibility. For instance, in the case of gas, the States would therefore have responsibility

for gas production issues, for transmission issues with the State and responsibility for distribution, just as the Commonwealth would continue to oversee telecommunications (a Commonwealth Constitutional responsibility).

Notwithstanding the above, these industries operations are becoming wider in scope: firms that are not national operators are being given ever encouragement by the COAG agenda (e.g. free and fair trade in gas, National Electricity Market) to expand their operations beyond State jurisdictional boundaries. The Australian Competition Tribunal recently noted 'expanding markets' for gas attributable to the COAG reforms.<sup>14</sup> In fact, far from remaining State markets with the entry of multinational players and common reform agenda being pursued (with variations) across most economies, the markets that are emerging have international elements in terms of the players and strategies that are unfolding, even though, in terms of the application of competition law to product supply they will at most be national markets.

The reform program coincided with intense efforts in the jurisdictions to privatise public utility enterprises and to apply the cash returns (after costs) from privatisation to budget programs or to debt reduction. The privatisations, as a withdrawal from government directly providing community services, undermined to some extent the rationale for the division of regulatory responsibility based on tradition. The selling strategies for a number of public enterprises (in as far as they involved the relaxation of, or holidays from, access codes or from competition legislation or stated reform policy, created inherent conflicts with the explicit views of the Hilmer Committee that regulation should not restrict competition and should be reviewed if it did.

The pervasive tenet of National Competition Policy is that regulation be 'light-handed', that is, only applied when clearly demonstrated to be in the public interest (as in the case of market failure). But it is also generally assumed, except by cynics, in discussion of National Competition Policy, that justifiable regulation should be effective—otherwise Australia would quickly have a *de facto* National Anti-Competition Policy. This means that regulation must be carried out by independent bodies who are not beholden to achieving revenue or capital return objectives of government. Rather, the framework agreements for National Competition Policy represent the regulator's broad charter, and specific regulatory legislation, which prescribes how the regulator shall discharge its obligations, should be consistent with that charter.

Another factor adding to the likelihood that fragmented or compromised regulation would be ineffectual is the path being taken by network industries (especially telecommunications and energy) to converge into a single industry, in response to rapid advances in technology, globalisation of service-sector markets and the removal, in Australia, of the final barriers to foreign capital investment.

I note, for instance, that the traditional boundaries separating telecommunications, computing and broadcasting industries are becoming less distinct, leading to new markets being created, with functional and corporate diversification. The key technological developments driving convergence of these industries are digital compression, fibre optic transmission systems, integrated network databases, high-speed signalling, and diversified telephony services such as cellular, Personal Communications Services (PCS), and Internet telephony. There have 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 regulatory 'bypass' arising from vertical or horizontal integration into ineffectively-regulated areas, complemented by transfer pricing, and the possibility of safe havens being put in place for incumbents if the policy approach and the manner of regulation is uneven across the different industry sectors. The potential outcome is the misallocation of resources in the economy. There also tends to be a misconception amongst policy bodies and some regulators that convergence equates to industry growth and diversity and therefore equates to greater competition between products and greater choice of suppliers for the customer. In fact, convergence holds the potential to create substantially-resourced business units holding market power, whereas users, in say the energy sector, may still be potentially constrained by sunk costs from switching products in the short to medium term.

An intensive OECD two-year multi-country research project into regulatory reform gives an international perspective to regulatory issues raised in the second IC study and in this article. The OECD analysis is particularly apt to the challenges facing Australian reform:

'After the decisions are made, they must be implemented. At this stage, the competition and consumer agencies' principal roles are enforcement and publicity, to apply the law and keep the process honest. The period of transition, before reform takes full effect, calls for special enforcement care. Even before the laws or rules actually change, the likelihood of new institutions can lead to anticipatory changes in firm behaviour. As firms adapt to the new, more competitive reality, enforcement will need to be sensitive to that process. Competition agencies and regulators must keep the reform goals in mind and adapt their actions accordingly. Where firms confront ambiguities and uncertainties about whether the regulatory or the competitive regime applies, competition enforcement should offer guidance, more than discipline.

'But competition enforcers must resist strongly industry efforts to reverse or ignore the reform process and persist in familiar, non-competitive behaviour. Anticipating greater competition, industry players

may take steps to reduce its impact on them, through alliances or mergers. Where these are likely to be anticompetitive in the post-reform environment, the competition agency must either take preventive action during the transition period (where that is permitted) or prepare for the possibility that enforcement and restructuring action will be needed after the parties no longer have regulatory immunity from competition law enforcement. Such enforcement action complement and reinforce reform outcomes. For example, the French competition authorities played a role in ensuring that road freight deregulation actually worked out and the benefits materialised. Merger enforcement actions in the US have deliberately reinforced the restructuring decisions set out in the recent Telecommunications Act.

'The competition agency can expect additional enforcement work in the post-reform period. In part, this increase would correspond to expansion of jurisdiction through removal of exemptions. In addition, some could represent backlash from the reform process, if firms attempt to revert to non-competitive pre-reform behaviour or otherwise resist the implications of reform. Formerly monopolistic firms may have habits that are equivalent to abusing dominant positions; these must be curbed. Newly or prospectively competitive firms, uneasy about their prospects in new conditions, may merge or collude to prevent competition. These moves must be reversed or deterred. Exemplary enforcement actions will educate the industry about the new rules and inform the public that their interests are being protected in the new setting.'<sup>15</sup>

With convergence in the network industries, with the shift in telecommunications access regulation from Austel to the ACCC and with the partial privatisation of Telstra, competition policy and regulation in all of these industries will be increasingly influenced by cross-industry merger issues, by the ACCC's competition compliance program priorities and by the seriousness with which the jurisdictions, not least the Commonwealth, back and resource the implementation of the reform agenda and address the anomalies (such as upstream access and regulation of entry) that remain.

In my view, these trends reinforce the logic of regulatory oversight by the national competition authority, discussed in more detail later in this article. In addition, the trend to convergence raises concern that unless the Commonwealth-State regulatory effort is consistent and coordinated, the welfare objectives of National Competition Policy are seriously at risk. The most danger would arise from a narrow intra-jurisdictional focus on ends and means in policy and regulation, which can only play into the hands of sectional interests amongst the national and multinational enterprises that have come into the purview of access regulation and other reforms stemming from COAG.

## WHAT IS REGULATED?

Since 1974, the ACCC and its predecessor, the Trade Practices Commission, have had competition and fair-trading law responsibility for Australian industries generally, and these provisions will continue to apply to industries for which special regulatory regimes apply.

Another predecessor of the ACCC, the Prices Surveillance Authority, established price reviews of a number of industries operating, at the time, in inadequately contested markets (such as float glass manufacture) and reviews of other industries where there was a policy imperative to exercise price restraint. Those prices-oversight functions have been wound back in the case of industries subject to increased import competition, with increasing price regulation resources being directed to services offered by corporatised government and former government businesses where competition is lacking or not feasible, e.g. airport landing charges, aviation services, certain telecommunications services, and gas pipelines, such as the Moomba-Sydney Pipeline System.

The new focus of price regulation is in establishing, by legislation or by industry/jurisdictional consensus, regimes to provide for negotiation of, and dispute resolution for, terms and conditions of third-party access to essential infrastructure services. Those regimes are complemented by revenue and/or price controls over the general level of charges established and/or controls over reference tariffs established for the purpose of negotiation of access. The character of regulations that are now in place reflects to a degree the nature of the product/service and the history of jurisdictional responsibility for the industry.

Telecommunications has always been a Commonwealth responsibility and, while in Commonwealth ownership, has been subject to evolutionary (but nonetheless substantial) reform measures over the past couple of decades including disaggregation from posts, corporatisation, the introduction of contestability of some services, and the introduction of new entrants to fixed line and mobile telephone communications, all leading to a decision to throw the telecommunications market open to competition from 1997. These reforms have been directed to introducing commercial disciplines into the provision of an essential service.

The path that telecommunications has taken to reform has differed from that for gas and in turn for electricity for jurisdictional and ownership reasons, and because there are differences in the service provided. In telephony it has been fundamental to maintain any-to-any connectivity of the service. Although the user may wish to have a choice of delivery routes, the user wants only one product: inter-personal messaging, or the ability to communicate in two directions with one specific party at the other end of the line. In contrast, in energy delivery the flow of product is one-way and the user may be satisfied with the delivery of product from alternative sources via

alternative routes, as long as the product specification is comparable.

With the opening of the telecommunications market to new carriers in 1997, the ACCC assumed regulatory responsibility for administering retail price control provisions, and was given powers to intervene in settling disputes as to wholesale price levels. At the retail level, final price controls (the levels of which are set by the Minister) apply to a number of retail services offered by Telstra, because competition in some fixed services has been limited. The price controls include price caps (using a 'CPI-X' formula) and obligations to notify the ACCC of intended price rises for services that are subject to the price cap provisions, in addition to other notification and disallowance provisions. For example, any proposal by Telstra to introduce a charge for directory assistance services must be notified to the Minister, who may disallow the charge on public interest grounds, following referral of the proposal to the ACCC for advice. A CPI-X rate of increase in prices is applied to a revenue-weighted basket of main services (i.e. for connection, line rentals, local, trunk and international calls, cellular mobile services and leased lines). This is more tightly constrained than for such services taken individually, giving Telstra some discretion in the mix of pricing it adopts. These controls will continue until 31 December 1998, by which time the current price controls will have been reviewed and new prices will then come into effect.

At the network/wholesale level, the ACCC administers the telecommunications access regime under Part XIC of the Trade Practices Act 1974 (the Act), by declaring services to be subject to access obligations, approving access codes and undertakings and arbitrating on notified access disputes. The access regime is closely aligned with the economy-wide access regime in Part IIIA, but contains certain telecommunications-specific provisions. Part XIB of the Act contains industry-specific provisions for investigation of anti-competitive conduct, which add to but do not replace general competition provisions in Part IV of the Act.

In the energy industries, the decision whether to declare infrastructure open to access is one that will be taken by State jurisdictions or the National Competition Council, depending on the level of the supply chain and ownership patterns that develop, and is not an issue for decision by the ACCC.

In general, the electricity market reforms will be regulated and supervised by the individual States (along with other regulatory responsibilities such as safety issues, the environment, retail competition and wires charges). The ACCC will administer access to facilities of national significance under Part IIIA of the Act, and the participating jurisdictions have agreed that the ACCC will also be the regulator of transmission pricing in the National Electricity Market (NEM), after a transition period. (State regulators will remain responsible for distribution pricing.) In addition, two industry-based institutions will be responsible for the day-to-day operations of the electricity wholesale market (NEMMCO)

and for compliance with the National Electricity Code (NECA).

The ACCC is finalising a Memorandum of Understanding (MOU) with NECA to establish cooperative arrangements for the light-handed regulation of the NEM. The MOU sets out the division of responsibilities for market surveillance between the two organisations. In general, NECA monitors compliance with the market rules set out in the National Electricity Code (Code), which establishes the rules and institutional arrangements for a competitive wholesale market for electricity traded within and between the participating jurisdictions. The ACCC monitors the market for contraventions of the Act. Under the MOU, NECA's market compliance unit will refer possible contraventions of the Act to the ACCC for further investigation, and likewise the ACCC will refer any evidence of non-compliance with the Code to NECA.

The ACCC's two current tasks in implementing the industry arrangements are:

- having in late 1997 authorised the National Electricity Code under Part VII of the Act, the ACCC will assess for authorisation future proposed changes to the Code; and
- working towards accepting a National Electricity Market Access Code and individual access undertakings (lodged as a subsidiary part of the Code, but dealt with under Part IIIA of the Act), which will be achievable when certain code changes have been finalised. This part of the Code establishes the principles and rules for the regulation of access to the monopoly transmission and distribution wires, and provisions for dispute resolution.

The NEM will apply to all States and Territories that can be interconnected before or around the turn of the century (New South Wales, Victoria, Queensland, South Australia and the ACT). Western Australia and the Northern Territory are not connected to NEM and, as distance means that interconnection would not be economically feasible, they will not be involved in NEM. It is possible that Tasmania will be interconnected to the NEM via submarine cable early next century.

In gas, the ACCC will officially become the transmission regulator in the first half of 1998, and State/Territory regulators will generally be responsible for distribution, however, the ACCC is to also be distribution regulator for the Northern Territory. The National Third Party Access Code to Natural Gas Pipeline Systems (National Gas Code) defines the ACCC's transmission regulation role. As national transmission Regulator, the ACCC will have 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.

It is worth highlighting that, in contrast to the electricity industry approach, each jurisdiction is to apply to the National Competition Council to have its legislative access regime (implementing the National Gas Code) certified as effective under Part IIIA of the Act. Once the regime is certified, covered pipelines would be exempt from declaration under Part IIIA.

This means that the ACCC will operate 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.

There is no provision for upstream access at this stage, notwithstanding that such access is likely to contribute to potential entry to exploration and production, and would be consistent with the COAG policy criterion that access give rise to competition at other levels in the supply chain. The ACCC notes the stated position of the majority of the production industry that COAG has not to date provided for nor envisaged upstream access in the gas industry.

In the following section, I deal with the objectives of existing regulatory powers in the network industries and how the ACCC will discharge these powers.

## EFFICIENT INCENTIVE REGULATION

'Incentive regulation is the use of rewards and penalties to induce the utility to achieve desired goals where the utility is afforded some discretion in achieving goals.'<sup>16</sup>

A relevant comment to explain the rationale for incentive regulation is:

'Generalised incentive regulation could be characterised as decoupling prices from costs via new regimes, such as yardstick regulation or price caps. As regulators move away from command and control micromanagement, they are lowering entry barriers and utilising incentive regulation in those markets with residual market power.'<sup>17</sup>

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.

The concepts and methodologies underlying efficient incentive regulation are international in nature and have been the subject of OECD research. However, as will be explained later in this article, there are a number of factors, chiefly relating to the need to coordinate regulatory effort to address unconstrained market power, that pose severe challenges to the realisation of this ideal. While, unfortunately in global terms, many of these difficulties are shared by other nations, that at least gives the opportunity for some global cooperation in finding solutions.

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. 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 revenue control and, as indicated in the above quotations, 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.

To put these concepts into the context of the network industries, in telecommunications, a decision as to whether a firm should 'build or buy' infrastructure will be strongly influenced by the ACCC decision whether to declare essential telecommunications services open to

access and the terms decided for interconnection. (Interconnection or access terms are a strong influence on entry to energy industries as well, as indicated by the debate over the terms and phasing-in period of access to AGL's distribution network decided by the New South Wales regulator.)

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 firm and 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.

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)certainity, 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 and comparison with external references—a reality check on whether efficiency standards are keeping pace, over time, with good practice elsewhere. Such comparisons are likely to assist in reviewing '– X' factors, and are useful in determining whether forces of competition or new entry would work sufficiently well to constrain the price of access.

While application of these techniques will involve progressive familiarisation and introduction to cases, the upside is that the regimes being introduced provide 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 (electricity and gas codes). At time of writing, pursuant to State legislation the ACCC is investigating proposed access arrangements to apply to gas transmission in Victoria, against criteria set out in the Victorian Third Party Access Code for Natural Gas Pipeline Systems, which has been put into effect pending implementation of the National Gas Code. In the Victorian access case, the ACCC is examining the methodology proposed to regulate

revenues, including capital base and expenditures, returns to capital and operational expenditure.

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, 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 determine rates without public consultation, which, importantly, includes the asset owner. While infrastructure duplication is essentially an industry decision, the Commission will regulate with the objective that industry's decision about whether to construct network infrastructure is 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.

### How regulate?

To meet business needs for guidance on how the ACCC will apply these concepts in practice, the ACCC has been preparing booklets to explain its approach in particular industries. The ACCC has indicated its preferred pricing principles for telecommunications access but stated that:

'the Commission will consider whether the pricing principles apply to particular declared services on a case-by-case basis'.<sup>18</sup>

This reflected a concern that pricing principles might not be suited to services that are not well developed or for which there is a high degree of risk associated with uncertain demand.

The ACCC continued:

'The Commission does not consider it appropriate to specify for all declared services a methodology for determining an access price. However, in cases where the service is well developed, necessary for competition in dependent markets, and where the forces of competition or the threat of competition work poorly in constraining prices to efficient levels, the Commission will, in the usual case, base such a determination on the total service long-run incremental costs (TSLRIC) of providing the service.

'The Commission recognises that estimating TSLRIC is difficult, time consuming and subject to error. As a result it will, in the usual case, adopt one of two approaches to estimating the TSLRIC. The first involves altering the existing access price on the basis of changes in costs. The second involves measuring the full cost of providing the service. Both approaches will require input from access providers, access seekers and other parties in the measurement and verification of the costs. In many cases estimates of TSLRIC may

provide a range of prices. In such cases the Commission will use the pricing guides and benchmarks to further narrow this range and, where necessary, to determine the price'.<sup>19</sup>

The ACCC defined 'TSLRIC' as:

'... the incremental or additional costs the firm incurs in the long term in providing the service, assuming all of its other production activities remain unchanged. It is the cost the firm would avoid in the long term if it ceased to provide the service. As such, TSLRIC represents the costs the firm necessarily incurs in providing the service and captures the value of society's resources used in its production.

'TSLRIC consists of the operating and maintenance costs the firm incurs in providing the service, as well as a normal commercial return on capital. TSLRIC also includes common costs that are causally related to the access service'.<sup>20</sup>

The guide went on, in an Appendix, to explain the ACCC approach to valuation, estimation and allocation issues for telecommunications. I intend that a similar, case-by-case consultative approach be adopted towards regulation of the energy industries, with guidelines being issued that will be applied in a broadly consistent manner from case to case and across industries.

In the electricity industry, the ACCC required, as a condition of authorisation of the National Electricity Code, that the National Electricity Code Authority (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 (including whether more efficient local generation is encouraged), network and demand-side alternatives. The review will consider whether the existing pricing regulation should be changed having regard to the Code's pricing objectives and principles; the economic efficiency of the price signals; equity considerations of access seekers; the legitimate business interests of network owners (including commercial certainty); the balance between regulatory risk and network cost containment; and an appropriate transition path.

Some of the issues that the ACCC has requested be reviewed by NECA include:

- the incidence of transmission use of system (TUOS) charges;
- the balance between cost reflective and postage-stamp elements of the TUOS charges;
- the extent of cross-subsidies in the postage-stamp component of TUOS charges;
- principles and guidelines to cover efficient bypass of networks; and
- the feasibility of separately levying TUOS and distribution use of system charges.

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 (including incentive mechanisms). The ACCC has not yet developed its views on an appropriate incentive mechanism for electricity transmission networks but will include these views as part of its Statement of Regulatory Intent during the course of 1998, after consultation with interested parties.

Similarly in the gas industry, the ACCC intends to issue published guidelines on pricing issues. The current review of the Victorian proposals will make a significant contribution to working through the methodological issues. In the meantime, the ACCC will give guidance on the process issues, and encourages applicants to make preliminary contact with the Commission so that concerns and uncertainties can be discussed and resolved wherever possible.

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.

## CHALLENGES FOR SUPPLIERS, USERS AND REGULATORS

State/national level regulation of national markets contested by national and international players

Each element of the above sub-heading only becomes an issue if market power is unconstrained by other commercial interests, or is unconstrained because regulation is ineffective.

A number of factors may give rise to unconstrained market power, as discussed in the following paragraphs as discussed in the following paragraphs:

- **Structural deficiencies in the market.**

Concentration of market share and barriers to entry at one or more functional levels may originate from players' control of bottleneck facilities unless workable access regimes are in place, from corporate acquisitions, from the advantages of incumbency (customer base, financial resources, contractual rights over lines of supply to the market, etc), from industry convergence, from coordinated marketing activity where the players have a substantial presence in the market, from the failure in practice of ring-fencing regimes, from anti-competitive legislation, from government tendering, licensing or franchise decisions (even in the post-COAG environment, sometimes as part of government disengagement from marketplace operations), and from other causes, including regulatory decisions on the transitional path to deal with stranded costs of unproductive assets and to

move to cost-reflective pricing. The loss of bargaining power following the disaggregation of government utilities and the introduction of contestability of downstream activities is another contributor to structural deficiencies, as long as significant areas of market power remain unaddressed.

- **The increased globalisation of players, which increases their leverage in dealing with governments and regulators and may complicate effective regulatory compliance if key decisions are taken offshore.**

The OECD study of Regulatory Reform suggests to me that this is a common problem to be resolved by national governments.

- **Policy-making and regulatory deficiencies, for instance, if industry reform issues are addressed simply as technical and restructuring/competition issues without adequate regard to the design of consumer protections for the new environment.**

Other potential deficiencies arise if policy-making proceeds in the belief that competition is effective, on the evidence only that a host of potential entrants have appeared on the scene. Lack of regulatory independence, noted earlier, is a failure causing concern to the ACCC when it impacts directly or indirectly on the community.

- **Information asymmetry, the fact that the regulated party knows its own business best and is in a position to colour the presentation of information to the regulator.**

The quality of information is important in making calculations about the permitted incentive regime and price caps to apply to regulated parties, because there is the risk that a regulated party may pad costs to minimise the size of the required 'X' factor. Good quality information is also important in discovering the cost of community service functions, as corporatised and privatised utilities are faced with a competitive environment at the retail level, and they and government share a desire to minimise their financial exposure. In addition, some community service functions, in as far as they contribute to regional development, social equity and welfare or other policy objectives, do not readily lend themselves to data analysis, but are no less important for that, as demonstrated by the Parliament having made specific regulatory provision for the issues listed earlier in this article.

Lack of information may be a problem for users even in a competitive market. The banking sector's breakout into a multiplicity of charging scales gives an illustration of the difficulty of exercising choice when comparisons are difficult and time-consuming to draw. Privatisation and contracting out of utility services have led to the loss of a number of information, privacy and review mechanisms, and to 'commercial-in-confidence' being open to abuse in attempts to avoid accountability for poor performance.

- **Service quality and legal gaps exposed by deregulation.** For instance, the privatisation of utilities has caused

concerns to be voiced by community groups that maintenance and service standards have fallen with the loss of corporate memory and resources, and that utilities will operate at the margin of externally-imposed standards.

It is here that the CPI-X formula may be a two-edged sword, as it gives an incentive to cut service standards in cutting costs, with only the prospect of intervention at periodic regulatory review, unless regulators are sufficiently informed and determined and users or the public sufficiently disadvantaged and disenchanted en masse to press for corrective action before periodic reviews fall due. Even so, the nature of some network services is such that there is a danger that an operator can run down infrastructure over a period before the effects become obvious.

Important issues, such as whether and how warranties as to the standard of quality of goods and services implied under legislation will apply to utilities are not fully resolved at this stage. Previously, quality standards in network industries were set and enforced by government. Now for instance, under the Act and State and Territory legislation, suppliers are required to compensate consumers where goods (which include gas and electricity) are not of merchantable quality or are not fit for any particular purposes advised by the consumer.

- Functional disaggregation of network industry utilities (such as electricity) may cause users to wonder whether anyone will accept responsibility if a service deficiency occurs, and whether users should bear the burden of proof.

This again illustrates that the division of regulatory and legal responsibility according to tradition is liable to leave the consumer unprotected against shortcomings in the delivery of the product of a chain of interaction between various users of the infrastructure.

- Multi-jurisdictional regulation of nationally-sold products may create pressures to harmonise service standards at the lowest common denominator.

To take the energy industries, distribution will generally be regulated at State level, and transmission by the ACCC. Significant differences in the regulatory principles, methodologies and procedures applied in the electricity and gas markets could introduce distortions to the relative allocation of capital. The respective codes have endeavoured to meet these concerns to some extent, for instance, in relation to asset valuation, but a challenge remains in the implementation.

The ACCC and any single regulator have neither the powers nor the resources to address all of the above issues, but they can pursue strategies to maximise their effectiveness within the ambit of legislation reflecting the policy framework, and use their experience to contribute constructively to the discussion of policy reform directions. Take the gas industry: the ideal is that a buyer make a 'seamless'

purchase arrangement linking the services of any supplier, transmitter and distributor that meet the buyer's needs. The ACCC acknowledges that the industry is in a period of transition to more competitive operations, but complaints coming to the ACCC about the difficulty in setting up arrangements for the transfer and sale of interstate gas cause concern that the transition is so agonisingly slow that potential entrants are being stymied in their market opportunities and that the industry will be dominated at key points by oligopolies or monopolies.

## ACCC response to challenges

The ACCC will address the challenges facing effective regulation of the network industries in a number of ways, noting that technical standards harmonisation issues are the subject of technical committee initiatives under COAG.

### MERGERS POWERS

The ACCC will address market power arising from market structure through active enforcement of the mergers and acquisitions provisions of the Act, provisions that are under particularly strong test with the sale of quite massive infrastructure assets, and the likelihood of pressures in coming years for disaggregated entities to recombine under new ownership and new combinations of technologies.

That is not to say that ACCC intervention will necessarily be directed to bringing proceedings to block acquisitions and mergers: that happens in the minority of cases. What the ACCC may look for is outcomes, with enforceability guaranteed by undertakings under s.87B of the Act, that address the structural concerns. The Ampol/Caltex merger illustrates the point.

### AMPOL/CALTEX MERGER

On 14 December 1994, Ampol and Caltex announced a proposal to combine their petrol refining, wholesaling, distribution and retail operations. They were respectively the fourth and fifth-largest refining and marketing companies in Australia. The ACCC considered that the merger of the two companies would reduce the degree of independent supply activity by the majors, and that an increase in the profit margins of the majors was likely to be associated with an increase in prices to consumers.

In late March 1995, legally binding undertakings under section 87B of the Act were offered by the companies with the aim of resolving the ACCC's objections to the proposal.

The undertakings provided for the sale of six large oil terminals on the east coast and in Adelaide to allow the importation, storage and distribution of petrol supplies to independent wholesalers and retailers. This was supported by a transitional arrangement whereby the companies would offer to supply at least a billion litres of

petrol per annum on reasonable commercial terms to independent wholesalers, distributors and retailers. These key provisions were complemented by measures to make properties and businesses intended to be sold available to independent operators at the distribution and retail levels.

In accepting the undertakings, the ACCC envisaged that the chief benefits would be derived from the independent importation of petrol through the seaboard terminals. As events transpired, while the Port Alma and Brisbane facilities were sold to independent operators, other independent terminals were established in Sydney and Melbourne in place of the Ampol/Caltex facilities being sold, and two terminals (Adelaide and Newcastle) did not find willing buyers. An important development in this period was the entry to independent retailing of Woolworths, having arranged its own sources of supply.

These developments have increased competition at the wholesale and retail levels and produced substantially lower retail prices in Melbourne, and to a lesser extent, Sydney. The entry of Woolworths has produced significant retail price reductions, particularly in country areas of New South Wales and Victoria.

The Ampol/Caltex decision and others involving a negotiated outcome and enforceable undertaking given by the acquiring party, have prompted criticisms that the ACCC is interfering in commercial investment decisions by designing new market structures. The mergers provision (section 50), which prohibits mergers that substantially lessen competition, is a structural provision. A number of undertakings have combined structural and access elements. The ACCC regards the outcomes as conducive to effective market function, preferable to litigation aimed at blocking proposals that may have significant public benefit once the competition issues are addressed, and preferable to leaving it to sectoral interests to redesign the market structure to their liking. The ACCC endeavours to meet transparency obligations by keeping a public register of s.87B undertakings.

#### THE UTILITY REGULATORS' FORUM AND OTHER COOPERATIVE INITIATIVES

The ACCC, in conjunction with Commonwealth and State regulatory agencies and policy advisers, established a Utility Regulators' Forum, which first met in September 1996, to share information on issues arising from microeconomic reform, through meetings, a quarterly newsletter and working groups. Members of the Forum will investigate and report back to the Forum on recommended approaches to tackle such issues as information requirements of regulators, information disclosure, ring-fencing of accounting information, monitoring quality standards, competitive neutrality, benefit-sharing and rate structures, 'best practice' and benchmarking, appeals processes and regulatory data bases. In addition to fostering the Forum, the ACCC has created an Energy Committee of the Commission to oversee regulatory issues coming to the ACCC in which

the input of the heads of State counterpart agencies, who are ex-officio members of the Commission, will assist in coordinating a national response.

In my view there are clear benefits to regulators, regulated firms and consumers from an integrated and informed approach to regulation. The European Union's clear priority since its origins forty years ago, to harmonise and ease the burden of regulation of cross-border flows of goods and services, emphasises the potential gains from coordinated activity. Internationally, OECD has initiated a 'PUMA' group to exchange information on current regulatory management and reform activities in OECD countries, to provide case studies of the design, practical difficulties, and benefits and costs of new regulation, and to give general principles for design and implementation of reform initiatives. Other international institutions, such as the OECD Committees on Consumer Policy and Competition Policy, and the World Bank can help to promote cooperation between regulators, vividly illustrated by a recent coordinated swoop by consumer protection agencies on Internet fast-money schemes, and in a less colourful way, by World Bank training programs in regulatory principles. The ACCC has also promoted the development of a new forum for international cooperation in the 'International Society of Consumer Affairs Officials', to seek out solutions to problems arising from the creation of borderless markets and technological advances.

#### OTHER ISSUES THAT GOVERNMENT, THE REGULATOR AND INDUSTRY CAN ADDRESS TOGETHER

In exercising its adjudication powers, the ACCC may apply conditions to the grant of applications for authorisation under Part VII of the Act and to the acceptance of access undertakings under Part IIIA, as demonstrated by decisions at the draft and final stages in respect of the National Electricity Code. Certain conditions had as their objective the reining-in of proposed derogations so as to make for consistency across jurisdictions and an earlier transition to competitive markets, and early review of Code provisions that, if misused, could shelter market gaming. The ACCC expressed concern that independence of regulators would be compromised if they were not at arm's length from government, particularly if government relies on income streams from utilities. In its final determination on the Code, the ACCC acknowledged that the majority of the participating jurisdictions have established, or are considering establishing, independent regulators for electricity network pricing. The ACCC expressed the view that the jurisdictional regulators should be statutorily independent of executive government by the time of the commencement of the NEM network pricing regimes in 1999.

The Act prohibits unconscionable conduct against consumers or businesses. If passed, the Trade Practices (Fair Trading) Amendment Bill 1997 would increase the

ability of small businesses to utilise these provisions, potentially to address some of the service and quality issues that can arise. Other proposed amendments to the Act would, if passed, increase the range of remedies available and improve the effectiveness of representative proceedings.

In response to the question of the warranties of quality standards that should be implied into the supply of goods and services by utilities, the key issue is the extent of the supplier's responsibility for loss or damage caused to the consumer by goods or services of unmerchantable quality, for instance, as a result of power surges or brownouts. Although the issue has not been tested in court, in consultation with the ACCC, electricity and water utilities have been coming to grips with the warranties provisions in practice. A working party established by the Electricity Supply Association of Australia, on which the ACCC is represented, is also to address the issue. The ACCC has liaised with the water industry on information measures necessary to protect consumers from the adverse effects of ingestion of 'blue (copper-affected) water'. In addition, the Commonwealth Government is currently undertaking a cross-jurisdictional review of inconsistencies in the post-sale warranties provisions.<sup>21</sup> It may be that some of those issues are addressed through that process as well.

Imposing licence conditions upon utilities can, in some cases, be an effective alternative to legislation in addressing the challenges of the new utility markets. For example, licence conditions could specify the service and quality standards to be maintained. Again, an important principle is that the regulator be independent of government policy-makers and that compliance with the standards be vigorously audited on a regular (but not predictable) basis.

Codes of conduct are being used by a number of industries as a means of self-regulation or co-regulation with government. By identifying industry members that are bound by the appropriate industry standards, codes represent a public statement of the industry's responsiveness to customer needs and concerns. Codes generally regulate the interaction between individual industry participants and consumers by providing standards of conduct and procedures that industry members should maintain (including guidance to consumers), and informing consumers of their rights and responsibilities and of the standards of quality and services they can expect.

Developed voluntarily on the initiative of an industry, codes can provide a flexible, cost-effective approach to problem areas. Some initiatives, such as customer service codes or charters, have been specifically developed for promotion at the individual business level. An example of such customer service initiatives is the Natural Gas Customer Service Code currently being developed by the Australian Gas Association. Customer service initiatives set out the quality of service standards customers can expect to receive, and outline avenues for taking up complaints, the means of commenting on service standards, and the way the charter or code is kept up to

date. An example of a code-like provision directed to the prevention of future disputes can be seen in the outcomes of the State's independent investigation into the failure of the Bolivar sewage treatment plant in Adelaide in mid-1997. Following the investigating engineer's report, the Environment Protection Authority requested the operators to, amongst other things, develop a comprehensive environmental management system conforming with a specified international standard and providing for audit and improvement.

The ACCC offers guidance to business and industry on the content of codes and charters and on the consultative processes to bring them into being. The ACCC contributed to the development of the operating framework of the Energy Industry Ombudsman of New South Wales and to the development of codes of conduct for dealings between electricity retailers and consumers. In Victoria, the ACCC has established an agreement for cooperation with the Electricity Ombudsman, including the sharing of aggregated data, and other exchanges of information.

Some measures that the ACCC considers will address some of the information asymmetry concerns of regulators include:

- having enforceable requirements that facility operators maintain records for regulatory purposes of specified costs and other data and provide information to the regulator in a timely manner and in prescribed formats;
- regulators maintaining detailed benchmarking data on the cost, productivity and tariff performance of Australian and overseas energy facility operators; and
- using incentive options to encourage facility operators to reveal their relevant costs and their potential to improve efficiency.

Finally, reform outcomes need to 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.

## MESSAGES FOR THE ENERGY INDUSTRIES

In this article I have set out a case for shaping and bringing about effective regulation of the areas of the converging network industries where market power remains unconstrained, and to coordinate the oversight of the regulated areas so that the policy objectives of incentive regulation result in a sharing of benefits amongst the industry, users and community. The ACCC and interests furthering reform (including downstream interests already themselves directly affected by reform) have encountered a substantial resistance from upstream interests to reform measures flowing through to their sector. That was apparent even well before COAG's policies for the gas and electricity sectors were agreed,

when, for instance, industry was taking the initial steps to develop a gas pipelines access code. That experience is consistent with observations by OECD on resistance to change.

Critics of the ACCC have questioned the ACCC's role in speaking publicly on and adopting positions on regulatory reform issues. The ACCC is not a policy-making body and while it has access to government it does not have the advisory role that is the preserve of the policy departments. Nevertheless, the whole scheme of competition reform and the growth of national and international markets in the delivery of network industry products have placed the ACCC as one of the focal points for people expecting action to resolve perceived shortcomings in design and implementation of the policy reform agenda. The ACCC will do what it can to articulate those concerns and to lend its experience to governments endeavouring to find innovative solutions. To again refer to the OECD, it recently wrote:

'Competition authorities should have the authority and capacity to advocate for reform inside governments, and should be able to stimulate regulatory reform where more competition would benefit consumers.'<sup>22</sup>

To the extent that industry has concerns about the ability of regulators to grasp the technical reasons for the way things are done, the ACCC is very aware of the need to engage skilled advisers with industry experience, it is developing its specialist staff and welcomes the opportunity to have informal discussions with all interested industry players, in order that regulatory issues be given perspective and operate as efficiently as possible in the interests of the industry and wider community.

## Upstream reform issues

### GAS

The ACCC has concerns that market power in the upstream sectors of gas and electricity is an impediment to delivering reform benefits. The Australian Competition Tribunal's AGL Determination gave weight to those concerns in relation to gas, when the Tribunal expressed the view that the market is undergoing a transition from monopoly to at least 'contestability' and possibly to full workable or effective competition in the future. The Tribunal plainly attributed the impetus towards contestability and eventual competition to the COAG reforms, as follows:

'On the one hand there are the dramatic changes associated with the implementation of the National Competition Policy: the corporatisation and privatisation of gas utilities; the removal of State government imposed barriers to interstate trade; the vertical separation of production, transmission and distribution, met in part by ring-fencing arrangements; the implementation of third party access rules to transmission pipelines and to distribution and

reticulation networks; and the unquestioned application of the Trade Practices Act to the conduct of all business entities within the gas industry.'<sup>23</sup>

But the Tribunal also identified forces, associated with concentration of market power in exploration, production and transmission, that conflict with these reform directions, and pointed to the need for competition to develop between producers.

'As against this, there are forces that may limit the prospects for effective competition. There is much common ownership of leases for exploration and production in the gas fields. Ordinary commercial sense indicates that ring-fencing arrangements are quite compatible with an awareness of common interests. There are large economies of scale in the development of reserves and the building of pipelines that will restrict the numbers of viable enterprises. While new players can play a useful role in developing financial instruments and participating in secondary markets, the final outcome for consumers of gas will depend to a considerable extent on the extent to which competition develops between producers of gas, for it is they who control the initial supply, though competition downstream would certainly squeeze subsequent costs and margins.'<sup>24</sup>

In my view, the gas production industry's position that coordinated marketing be maintained indefinitely, the lack of substantial progress by governments in fostering new entities in exploration, as well as the industry's slow progress in resolving user concerns such as the need to reach agreement on the redirection of gas from one pipeline to another where the link point is a processing plant, have only added to pressures to extend access to upstream gathering lines and processing facilities, and to liberalise access to tenements. Pipeline and user interests in particular are questioning whether the investments undertaken to supply gas in a rapidly expanding market justify established producers continuing to require in new arrangements the same level of contractual security they enjoyed in the development era of the 1960s-80s, and the same level of government concessions, while other interests are faced with the need to compromise in the face of a changed downstream market and perceived imbalances in negotiating with upstream interests. There are mounting pressures for upstream reform, of which the Commonwealth/State package to accelerate energy markets reform in order to reduce greenhouse gases, is the most significant recent development. The ACCC would therefore welcome the opportunity to contribute to the ongoing ANZMEC/Gas Reform Implementation Group reform process.

The ACCC believes that the development of greater competition between gas producers may be possible through such measures as the following:

- construction of new pipelines and links so as to facilitate inter-basin competition between producers;
- liberalisation of the delivery point of gas from processing plants, thereby making possible

interconnection of pipelines served by the one plant, and fostering opportunities for secondary market sales into non-traditional geographic markets. Thus the ACCC has proposed as one of the conditions of authorisation of coordinated marketing by the North West Shelf Incremental Venture that liberal delivery points be a part of the supply agreements negotiated by the parties with customers;<sup>25</sup> and

- development of enforceable regimes for third-party access to processing facilities and gathering pipelines.

In the ACCC's view, the protection of an enforceable access regime is necessary if prospective independent producers are to enjoy certainty that if they find commercial reserves, they will be able to have their gas delivered to the processing facility and processed under reasonable tolling arrangements with the facility owners, who are likely to be incumbent producers.

The key feature of workable access regimes is that they provide for mandatory dispute-resolution procedures and include a commitment by all relevant parties to participate. The ACCC is aware that an initial effort is being made by State Government to foster upstream access (South Australia and Victoria). A framework for access regimes nationally might be developed by a joint consultative process under the auspices of ANZMEC and GRIG.

Other possible measures to foster competition in production include:

- State policy initiatives to liberalise the allocation of acreage to new entrants, and to thereby create future opportunities for competition within the gas basin concerned;
- the development of independent marketing where practicable by members of production joint ventures; and
- measures to foster the development of financial instruments for trade in pipeline capacity and gas, thereby encouraging swap and secondary market activity to complement contractual sales.

## ELECTRICITY

The ACCC has concerns about the potential for anti-competitive behaviour that may result from the operation of the National Electricity Market, particularly arising from the concentrated supply-side (generation) structure of NEM, from rebidding practices, and from the disclosure of market information.

- If a concentrated market structure gave rise to the manipulation of pool prices, that would be a substantial detriment to the public.
- Subject to conditions set out in the Code, generators may rebid their submissions of available generating capacity right up to the time of dispatch. Rebidding could be used in conjunction with market power to gain higher spot-price outcomes in timeframes in which competing generators and market customers are unable to respond. For example, a last-minute withdrawal of capacity could force on higher-priced quick-response

generation, increasing the spot price in a timeframe in which lower-priced generation and the demand side were unable to respond.

- While the compilation and release of information by NEMMCO will facilitate efficient and informed market responses as well as maintain system security, the ACCC is concerned that this information may be used to facilitate strategic behaviour to manipulate spot market outcomes.

In response to the market structure concern, the ACCC has urged participating jurisdictions to restructure their generation sectors so as to minimise the potential for generation businesses to exercise market power. In its authorisation decision on the Code, the ACCC allowed the provisions for rebidding and information disclosure, subject to strict monitoring and review. The ACCC made it a condition of authorisation that NECA monitor market outcomes, and provide public quarterly reports thereon. To enhance transparency and self-policing, the ACCC required the Code to explicitly allow information available to Code participants to be available to non-participants on a non-differentiated, cost-reflective basis.

## A WAY FORWARD

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.

## NOTES

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6. What the economists call 'welfare' benefits or gains.
7. Australia, Trade Practices Regulations (Amendment) 1997, regulation 2, inserting new regulation 6J in the Trade Practices Regulations.
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(This paper was prepared by ACCC staff working under the direction of Mr Asher.)

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