



***SUBMISSION
TO THE
PRODUCTIVITY COMMISSION***

THE NATIONAL ACCESS REGIME

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EXECUTIVE SUMMARY

ENERGEX Limited (ENERGEX) appreciates the opportunity to make a submission to this inquiry and looks forward to participating in the public hearings in 2001.

The inquiry is timely with concerns being raised about the pace and direction of infrastructure reform and regulation in all jurisdictions. To take some examples from government and regulators, a Senate Select Committee inquiry was sufficiently alarmed about the effectiveness of regulation of infrastructure services as to recommend the matter for "...priority discussion by CoAG" (Parliament, 2000). IPART, the NSW regulator has been critical of conventional regulatory approaches (IPART, 1999) and the Productivity Commission itself has raised concerns (eg Banks, 1999). Professor Fels (ACCC) has voiced reservations about developments, concluding that "*Utility regulation in Australia has reached a crucial point*" (Fels, 2000). Professor Hilmer, the architect of the reforms and regulatory regimes has noted the uncertainty being created by regulators and has reiterated his preference for pricing surveillance (eg Weekend Australian, 18-19 November 2000).

The implications of uncertainty from regulation for utility investment are evident from overseas. Thus, Federal Reserve Board Chairman, Dr Alan Greenspan, has argued that insufficient investment in the electric sector resulting from such uncertainty was of such significance that it could destabilise the US economy. Similarly, Dr Graham Shuttleworth of NERA (international advisers to regulators) has highlighted the lack of stability of the regimes in the UK as a prime cause of the failure to maintain investor confidence.

Recent access and price reviews in infrastructure industries in Australia have attracted many submissions from independent experts both here and overseas, as well as from stakeholders in the industries. These are also critical of the determinations made or proposed by regulatory authorities and the frameworks of the regimes.

What is attracting attention at the national level and in State jurisdictions is that the good outcomes that were expected from reform and regulation are being jeopardised. The sorts of problems identified include:

- contestable sectors are only being slowly developed and are being regulated or re-regulated;
- the access/price regimes being implemented are inappropriate and will result in low investment and productivity growth, lack of innovation and dynamic efficiency, and higher prices than otherwise over time;
 - reducing the competitiveness of user industries in other domestic and export markets;
- the regimes are not serving the long term interests of consumers, including an inflexibility to evolving customer needs and ignoring the stated preferences of community and consumer groups;
- there is duplication and overlap of regulation, with impediments to national operations, conflicting signals and high costs.

This inquiry's terms of reference and Issues Paper appear to be very broad, raising many questions and issues, and it is not clear where the limits will be drawn. This submission provides only a modest coverage, focussing on three areas in the Commission's ambit which appear to be the major matters of concern to regulated utility businesses:

- clarification of the objectives of access/price regimes;

- determining preferred options in light of those objectives;
- constructing governance and other arrangements to engender certainty, transparency and accountability in decision making processes, including the national versus jurisdictional regulator issue.

In essence, the submission argues for reliance on Section.46 of the TPA for access, the replacement of current price regulation by increasingly light handed incentive regulation, and a re-vamping of governance arrangements to ensure these outcomes are complied with.

Chapter 1 of the submission aims to identify the deficiencies in the current regulatory arrangements, particularly the form of regulation, drawing upon the contributions made by independent experts, including eminent economists and regulators, and the expressed views of stakeholders. With this background, Chapter 2 explores the underlying rationale for regulating utilities. The aim is to provide a way forward that conforms to the principles of good regulation and the original objectives of reform policy.

To provide for clearer direction and the need for developing dynamism in utilities, it is recommended that the following objectives be adopted by regimes:

- To promote long term economic efficiency, including dynamic efficiency, taking into account the desirability of fostering investment, innovation and productivity improvement, and taking precedence over other objectives;
- To prevent misuse of market power where this power means *'giving less and charging more'*;
 - (and, to the extent that command and control regimes will be continued):
- To facilitate entry into the relevant markets by setting prices based on the efficient cost and risk structures applicable to new entrants;
- To ensure the long-term interests of consumers are served from greater competition and economic efficiency, taking into account stated preferences and with fair sharing in the region of 50/50, and ensuring there are no price shocks.

Chapter 3 summarises the relative merits of four forms of regulation. This chapter also comments on the merits of the Prices Surveillance Act 1983, which are to be taken into account in this inquiry. Further, the chapter examines the potential of trade practices law as a regulatory form. It is recommended that:

- All forms of command and control regulation (cost of service/rate of return) are mandated for elimination as regulatory options;
- All jurisdictional regulators provide "road-maps" of intent in phasing out command and control and applying alternative forms of regulation;
- The Prices Surveillance Act 1983 be retained as a regulatory option.

It is concluded on access that, for the energy sector at least:

- There is no significant reason why an access regime is necessary beyond reliance on S.46 of the Trade Practices Act where ring fencing applies.
- Arbitration should be removed from the province of regulatory authorities and provided and paid for by the parties themselves. Appeals against the judgement of commercial arbitrators should be decided by the Australian Competition Tribunal.

- The criteria to be used in access arbitration should follow Section 44 X (1) of Part IIIA with the following amendment to part (b) and the elimination of (g).
 - the public interest in having economic efficiency, including dynamic efficiency, taking into account the desirability of fostering investment, innovation and productivity improvement.

Chapter 4 aims to identify the deficiencies in current regulatory governance arrangements, applying three tests proposed by the World Bank. On this foundation, Chapter 5 considers design options to overcome the deficiencies which have been highlighted. Taking into account the international experience, ENERGEX suggests that the following points be considered by the Commission in considering governance arrangements:

- There must be multi-person and not individual decision making for single or multiple regulated industries
 - ACCC two stage multi-person model may be superior;
- There must be a robust merit as well as a process appeals mechanism especially where privately owned companies are regulated
 - the Australian Competition Tribunal appears to be a superior model;
- There should be a sunset clause on regulatory bodies, with an associated provision for an external review by an independent body
 - the Productivity Commission has the necessary powers for review;
- There should be a separation between administrative functions and the decision making body with a Head of Office with the necessary powers of administration;
- Poorly financed residential customer groups need advocacy resources to effectively participate in reviews and to ensure that regulators can sit in the middle and avoid fulfilling that role themselves;
- The centralisation of regulation or the greater consistency of regulatory behaviour between jurisdictional regulators under command and control regimes reduces rather than enhances social welfare and should be avoided.

Chapter 5 also considers the relative merits of governance principles. These are extended beyond those noted in the Commission's terms of reference and it is recognised that there are potential tensions between several pairs of the proposed principles. However, this should pose no problems if applied in a fair and balanced way.

ENERGEX suggests that the following priorities (and rankings) apply:

“Prime” Principles: Accountability (1); Predicability (2); Comprehensiveness (3).

“Secondary” principles (unranked): Flexibility; Communications/Consultations; Transparency; Effectiveness/Efficiency; Independence; Resources/Expertise.

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1. IDENTIFYING THE DEFICIENCIES

1.1 INTRODUCTION

The Hilmer Committee intended that the regulation of access and that of prices should be implemented separately. In practice, however, they have been developed jointly. In addition, as the Issues Paper notes, the national access regime interlinks with State and Territory regulatory regimes. However, it is not clear from the paper where the inquiry will draw the line at these linkages, if at all.

ENERGEX consequently considers the issues of access and pricing and the associated regimes together in this submission and, in keeping with the Issues Paper, at a high level of generality in this first stage of the inquiry.

1.2 FORM OF REGULATION

The fundamental question to be addressed in deciding upon the arrangements for the economic regulation of any industry is the form of regulation to be applied. There are four general forms:

- Command and control (cost plus or cost of service/rate of return regulation)
 - including the so-called 'building block' model combined with a CPI-X mechanism where the X-factor is adjusted using rate of return criteria;
- 'True' incentive regulation (eg price based glide path with performance or yardstick benchmarking, total factor productivity, or franchise/competitive bidding regulation)
 - including price-based CPI-X where the X-factor reflects outside factors;
- Prices oversight (surveillance and formal/informal monitoring)
- Reliance on trade practices law

It is sometimes claimed that there is a continuum between the first two forms but this is incorrect. The first form is also sometimes called incentive regulation by regulators but this is not supported by the literature and only confuses the debate. It is important for clarity in this inquiry that a distinction is made between the two forms. This question of distinction is also likely to be the subject of a Supreme Court case in Victoria.

In brief, command and control mechanisms are essentially bottom-up from costs. What needs to be recognised is that there is always some element of 'incentive' in any command and control scheme, perverse or otherwise. Thus, the time lag in traditional United States regulation or the added on reward for reducing operating costs in other models may provide incentives. But this is quite different from 'true' incentive schemes which emulate the risks and rewards of real world markets.

True incentive regulation starts from the other end: it is top-down or price based. Prices are de-coupled from costs and the focus is on achieving economic efficiency, not cost and profit control. To the extent that costs enter the calculus at all, it is what costs ought to be as determined by outside factors such as international benchmarks, and not what the costs are for individual regulated firms.

The third form – prices oversight – is usually conducted in Australia under the Price Surveillance Act 1983. As Chapter 3 shows, the application of some price caps under this Act has been identical to ‘true’ incentive regulation. More generally, it is also based on prevailing prices and not costs but is often regarded as even more light-handed and less intrusive than the second form. It is the approach originally favoured by the Hilmer Committee and this preference has recently been reiterated by Professor Hilmer.

The fourth form – reliance on trade practices law for access and pricing – is very light handed and has been applied in New Zealand.

The remainder of this chapter describes the deficiencies identified by independent experts and stakeholders with the first form – command and control. This is the approach adopted most widely by regulators under the National Competition Policy reforms and has been the focus of most of the debate in access and price reviews.

1.3 VIEWS OF INDEPENDENT EXPERTS

The Australian access/price reviews have attracted many submissions from independent parties, including eminent economists, former regulators and advisers to governments on regulation, both here and overseas and international banks and credit rating agencies. These have expressed concerns about the form of regulations being applied at several levels:

- the regulatory approaches being implemented appear to abrogate the objectives of National Competition Policy and the individual regimes and, in Victoria, the explicit requirements of the Tariff Order;
- the cost of service/rate of return model will have adverse consequences for economic efficiency, investment, innovation and state development;
- the weighted average cost of capital (WACC) methodology used in the model contains some fundamental flaws, and there is contention over the values of key parameters. In any event, the WACC is not being developed and interpreted in a manner likely to satisfy regulatory policy.

In what follows, we provide examples of these concerns.

1.3.1 KPMG

KPMG have advised several jurisdictions in establishing regulatory regimes. However, they are now criticising how regimes are now being implemented, noting the approaches of regulators as:

“Examples of regulators who are clearly more comfortable with American style rate of return concepts than with incentive regulation which is explicitly required by the statutory instruments they are supposed to be following.”
[gholdaway@kpmg.com.au]

And concluding that the approach undermines the reforms of National Competition Policy to the National Electricity Market:

“The approaches that regulators are currently promoting involve a bias towards rate of return concepts that will stifle innovation and productivity growth.”

KPMG have produced a “report card” on performance of all regulators since the regimes were established against the objectives of policy and the legislative frameworks (KPMG, 2000). Paraphrasing the objectives, the report card includes the following comments.

Objective: Regulators to apply incentive based regimes:

“Regulators are undermining incentive and promoting rate of return type regulatory approaches”. “No one benefits from rate of return regulation”.

“Regulators appear to be determined that successful firms will earn little more than a modest rate of return and that unsuccessful firms will be directed in how to mend their ways. This is rate of return regulation”.

“Australian regulators have shown a particular concern with the level of the rate of return – a concern far in advance of the attention paid to the level of tariffs that results from it. Setting the rate of return has become a determination process using the Capital Asset Pricing Model when, perhaps, CAPM should just be one of the inputs.”

“The focus is on controlling inputs – with the implication that a regulator knows best what inputs lead to the best outcomes. This is the antithesis of incentive regulation – which should be about defining outcomes and then allowing regulated businesses to determine the best and most efficient ways to deliver.”

*“Rather than using it (the building block approach) as one source of information about an outcome they turned have it into **the** outcome.”*

Objective: Prevention of monopoly rent

“What we are getting: determination to prevent the extraction of monopoly rents, - regression to rate of return concepts.”

“Characterising returns to efficiency gains as monopoly rents so quickly that incentive is compromised”.

Objective: Foster efficient level of investment (and innovation)

“Reforming governments in Victoria and South Australia have been vitally concerned about allowing regulated businesses the flexibility to jump to the next A curve (of innovation) – and to benefit from doing so if they succeed. These reforming governments have understood that a new S curve will lead inevitably to customer benefits – not the least of which is a lower real price.”

“The forms (of regulation) favoured by the regulators to date seem to the author at least, designed to anchor the industry in its existing paradigm. Cost tracking revenue controls and lack of the possibility of earning or retaining profits in excess of the assessed rate of return are the most damaging feature of Australian regulators preferred approaches”.

“Regulators have maintained a consistent downward pressure on allowed rates of return. A determination of ‘strip out’ returns to innovation too quickly

blunts the incentive to become more efficient. The pressure on rates of return continues with the current proposals for post tax WACCS.”

Objective: Promotion of competition

“Pro competitive rhetoric is getting lost in a rate of return like concern to closely track the costs incurred to prevent ‘inefficient’ bypass.”

Objective: Regulatory certainty and discretion

“Certainty has been largely sacrificed to the countervailing objective of regulatory discretion.”

1.3.2 Independent Pricing and Regulatory Tribunal of NSW (IPART)

IPART, the NSW regulator, has recognised the problems of command and control regulation:

“The history of intrusive cost-plus regulation is replete with examples of heavily regulated utilities that exhibit low levels of efficiency, poor investment practices and below average service performance. Both theory and experience indicate that repeated frequent confiscation of the benefits of efficiency improvements combined with uncertainty over future regulatory actions will lead to poor performance and welfare loss.” [IPART, 1999]

As IPART makes clear, incentive regulations should seek to emulate competitive processes and outcomes:

“The competitive process is dynamic and its specific outcomes are unforecastable. No regulator can accurately assess the levels of efficiency or service an industry is capable of over time. Hence, the regulatory framework should aim to create conditions which encourage the industry itself responding to the incentives it faces to move towards its continually shifting performance frontier.” [IPART, 1999]

IPART selects total factor productivity, or glide pathing and external benchmarking as superior forms of regulation and is undertaking their development. In another paper IPART supports its approach in the following terms:

“A glide path provides strong incentives for NSPs to pursue efficiency gains by allowing them to retain a proportion of any gains in the subsequent regulatory period without distinguishing between management-induced and windfall gains’, and “The glide path approach exemplifies the Tribunal’s current views in respect of the most appropriate regulatory approach to ‘benefit sharing’.”

1.3.3 Californian Public Utilities Commission

The former President of the Commission, Dr Dan Fessler, has urged Australian regulators not to adopt the ‘building block’ model which is said to be:

“...conceptually analogous to a traditional American style cost of service/rate of return proceeding”. [Fessler, 1999].

The dismal performance of traditional US regulation is well known and was applied in California at the time of Dr Fessler’s presidency. He has submitted that such regulation has performed poorly in California and was not in the long-term interests of consumers, citing weak and perverse incentives, rising costs, increasing intrusion, unpredictability and systemic failure. He has urged regulators to adopt the new forms of true incentive regulation.

The Commission has since switched to such regulation. In a recent decision it states:

“We have long considered incentive-based ratemaking superior to command-and-control regulation. PBR mechanisms (benchmarks) send the important message that minimising costs without sacrificing service quality and reliability can result in greater rewards with ‘less’ regulation than traditional cost-of-service regulation. In order to provide these incentives, we must necessarily break the link between rates and costs.”

Slightly further down, the report states:

“First, prices for electric services in California are simply too high. The shift to performance-based regulation can provide considerably stronger incentives for efficient utility operations and investment, lower rates and result in more reasonable, competitive prices for California’s consumers”.

It can be seen that the Commission recognises that the linking or tracking of costs and prices under traditional cost of service/rate of return regulation has not achieved the objectives of regulation. As will be argued later, it is only when this link is broken under true incentive regulation which replicates what happens in real world markets that the benefits of dynamic markets will eventuate. This is the crux of the debate in Australia.

Another notable feature of the Commission’s report is that all types of stakeholders signed up to the determination even though their self-interests differed widely. In short, while no doubt some groups required some time to be convinced of the benefits of reform, the prospect of better services at lower prices over the longer term from increased efficiency was recognised as being in their interests. That is a lesson we have yet to learn in Australia.

1.3.4 Emeritus Professor Brian Johns

Professor Johns is a former head of the Commonwealth’s BIE, Deputy Chairman of the TPC and Associate Commissioner of the ACCC. He has made a submission to the 2001 EDPR in Victoria criticising the Office of the Regulator-General’s (ORG) approach to regulation and arguing for a model that mimics the characteristics *“... to be found in the real-world competitive markets”* and points to the need to induce superior innovation through “Schumpeterian” effects. He quotes IPART (1999):

“Generally, incentives to pursue efficiency gains will be strongest where the Network Service Providers (NSP) retain the largest amount of revenue over the longest period of time”.

Professor Johns concludes that the cost of service 'building block' model has serious disadvantages, including effects on investment, efficiency and for consumers. For example:

"There is in fact a danger that the regulatory approach proposed by the ORG will lead to less capital expenditure in the Victorian electricity supply industry than would be efficient from the community viewpoint".

Johns also deals with the dangers of micro-management by the regulator under cost of service, a risk he sees as the *"Achilles heel of the cost-based form of regulation"*. He also refers to the principal-agent problem in such regulation, where the objectives of the government or the community at large (the principal) in setting up the regulatory framework are ignored and superseded by the objectives of the regulatory authority (the agent).

Professor Johns submits that incentive approaches such as full glide path and total factor productivity should be applied.

1.3.5 Other Australian Economists

Professor Stephen King (University of Melbourne) is an adviser to the ACCC and has published several commentaries on Australian regulation. In discussing the building block model, he speaks of *"intrusive hands-on regulation"* and argues that this approach *"disguised under a more acceptable name"* has involved *"reinventing the worst aspects of United States rate of return regulation"*. He concludes that this approach *"... has brought together the worst aspects of overseas experience to create a sterile framework that threatens to undermine the benefits of micro economic reform"*. [King, 2000]

Professors Joshua Gans and King (October 2000) investigated the precise differences between rate of return regulation and a CPI-X approach to incentive regulation in the context of the Victorian 2001 review of electricity distribution prices. It is concluded that the building block approach is rate of return and therefore in breach of the Victorian regulatory arrangements.

1.3.6 UK Regulators/Economists

Professors' Stephen Littlechild, Michael Beesley and Martin Cave are respected economists or former regulators who have made submissions or presentations to utility reviews in Australia. Each of their contributions echoes the points made above. For example, Professor Cave (Brunel University), on behalf of the Victorian Department of Treasury and Finance, has found that the building block model could have a major adverse effect on incentives for efficiency. The Department itself has also submitted that it does not believe that the building block model is consistent with light handed regulation and pointing out the merits of switching to external *"output orientated (sic)"* benchmarks.

The views of Littlechild and Beesley are discussed in the next chapter.

1.3.7 US Economists

Professors Sanford Berg (Florida) and Jerry Houseman (MIT) are also respected United States commentators on regulation who have made presentations or statements on Australian regulation during visits here. Again, their comments are much the same. For example, Professor Houseman in a presentation to the ACCC on the cost based regulation being applied here refers to the loss of dynamic efficiency (ACCC 15 July 1997):

“A cost based access fee would discourage dynamic efficiency for two reasons. First, a new entrant would not invest at efficient levels because cost based regulation does not reward risk taking for new services. Services which do not succeed never earn back their investment. However, services which do succeed only earn back their costs.

The second reason why cost based regulation decreases dynamic efficiency is that firms do not have the economic incentive to increase productivity and lower costs through time. If firms lower their costs it leads to a reduction in their permitted access charges. To the extent that if the regulator does its job correctly it will remove all incentive for productivity gain”.

In the same way, Professor Berg quoted at an ACCC conference (Melbourne, November 1997):

“...command and control mechanisms comprising cost of service regulation tools are at best blunt and crude, preventing the worst abuses, but not sharp enough to encourage anything better. An incentive approach promises more”.

1.3.8 Financial Sector

A number of finance academics, finance houses, investment groups and credit-rating agencies have also made submissions to price and access reviews or have published commentaries elsewhere. These have expressed concern about the interpretation of regulators of their objectives and the form of regulation being implemented, pointing to adverse consequences for investment and economic development in the jurisdiction concerned and for Australia. For example, Standard and Poor's (see Credit Focus, Feb 1999) notes the building block approach will increase regulating risk and the cost of capital and could result in the downgrading of credit ratings and inefficient hedging practices. As another example, SG Hambros, part of the world's fourth largest bank, predicted that there would be:

- “ - increased cost of equity capital;*
- increased cost of debt capital by potential credit agency changes to credit ratings and by more restrictive debt covenants; and*
- sovereign risk implications, which may diminish future investment by the private sector in regulated assets, in Victoria and Australia.” [SG Hambros, Submission to 2001 EDPR, p4.]*

Academics such as Associate Professor Stephen Gray (Queensland) and financial market players, including several of the major Australian and international banks, have made submissions or written directly to governments pointing to fundamental flaws in the CAPM approach and the WACC

methodology and have disputed the parameters of the WACC model being adopted by regulators. Professor Gray shows how the approach particularly discriminates against investment by utilities.

This is an involved technical debate, which is not reproduced here, but a flavour of those views can be taken from Hastings Funds Management's submission to the 2001 EDPR.

"We believe that there is a fundamental flaw in a regulatory rate of return which is based on the Capital Asset Pricing Model (CAPM). One of the key assumptions of the CAPM is that there are no transaction costs and the market has perfect liquidity. In the case of the regulated utilities in Australia, this is not true."

"The Office (ORG) does not appear to have reviewed the considerable body of academic work relating to ill-liquidity. It has ignored this premium in its calculation of the CAPM".

Hastings then go on to calculate a pre-tax real WACC using what they consider to be real-world parameters and find a WACC of 10.8 percent, substantially higher than regulators.

Other contributions point to a range of similar "flaws" including in the areas of: multi-period not single period CAPM; non-diversifiable risk; ex ante/ex post inflation problem; cost of debt and index linked bonds; higher total factor productivity in CPI problem; misinterpretation of gamma.

1.4 VIEWS OF REGULATED BUSINESSES

The access and price reviews contain a considerable body of submissions from regulated businesses, both privately and publicly owned. The key deficiencies in the regulatory regimes being implemented – as argued in the submissions – appear to be as follows:

- The regimes represent heavy handed rate of return regulation of the most intrusive form, but without the checks and balances that such regulation requires, and are a major shift from the approaches foreshadowed by governments in their reform policies or promised where utilities were sold:
 - statutory requirements for light handed regulation are ignored;
 - the micro-management involved, by non-experts, raises risk and the issue of who is responsible when things go wrong;
 - one result is bloated bureaucratic costs that are ultimately borne by taxpayers/consumers.
- Efficiency and its twin—investment – are compromised by the lack of incentives, low returns and higher risks, as well as a lack of confidence in regulatory stability:
 - negative signals are sent to global capital markets;
 - the criteria by which prudent Boards judge investment projects are ignored;
 - there is not even certainty about any payment for investments in the networks necessary to meet customers' expectations or statutory objectives.
- The regimes are, however, creating perverse incentives, including with no provision for promoting innovation and the dynamic efficiency required by Government as being in the long term interests of consumers:

- they are unsustainable, with unsatisfied community and customer needs that are growing, but inducing a narrowing of the skill and technological resource bases that will be unable to respond in future;
 - there will be no take up of new technologies which have the potential to create virtuous circles, as there is only risk and no reward. This will stifle industrial development and limit the size of the 'cake' that can be shared with customers;
 - the industries will be condemned to 'poles and wires' or pipelines, with no enhanced services such as best practice supply reliability;
 - the change in culture that companies have strived to introduce into their businesses will be eroded by the regulation.
- The regimes contradict the statutory objectives by impeding rather than promoting new entry.

What the businesses in general appear to want from regulation may be summarised as follows:

- Strong incentives and rewards for delivering improved services to customers and greater efficiency and lower long term prices by mimicking real world markets (price not cost and profit control).
- Smooth adjustments to prices to reflect public policy principles on gradualism, recognising the adaptive capabilities of business and the social harm of price shocks.

1.5 VIEWS OF CONSUMERS

Relatively few of the submissions to reviews from user or customer groups have focussed on the form of regulation to be preferred. However, a number have complained about the way in which regulation is being implemented through review processes.¹ They complain about the credibility of procedures, arguing that they are being led through a process which is neither transparent nor understood, where options are not evaluated and where it is not explained which arguments find favour or not, and why, nor how decisions are reached. The good practices applied in other countries are suggested as models.

The views of residential consumers in what they want from regulation is evident from several surveys conducted by independent consultants as part of the reviews. For example, a survey conducted in the 2001 EDPR on behalf of one of the businesses showed that 3 out of 4 consumers preferred the enhanced services (undergrounding, higher reliability, hardship policies, environmental measures, etc) to the regulator's approach of focussing on short-term price cuts. Another showed that about 3 out of 4 preferred slowing transitioning prices to price shocks even if the shock worked in their favour the first time.

¹ Summaries of complaints can be found in submissions to the 2001 EDPR in Victoria by Co-operative Energy Ltd, including its submission as the form of price control (Consultation Paper 3) on the website of the ORG.

2. A WAY FORWARD – THE REGULATORY OBJECTIVES

2.1 INTRODUCTION

In making determinations on access/pricing matters, regulators face the fundamental questions of:

- which form of regulation to apply;
- how that form should be implemented to achieve the objectives of the statutory framework; and
- how to link regulatory forms being applied now with evolving best practice regulation so there is a seamless transition to the next regulatory period, taking into account the position in other jurisdictions.

What is striking from the evidence in Chapter 1 are the profound differences of opinion between the regulators and their critics on such fundamental issues as the purpose of regulation and its objectives, the role of regulators and even how markets and firms actually operate in the real world. Each side would therefore come to quite different positions on the above questions.

To help point a way forward, this chapter attempts to resolve the areas of contention.

2.2 UNDERLYING RATIONALE

The origins of reforming and regulating utilities can be traced to inquiries in the late 1980s and early 1990s by the Productivity Commission (in earlier guises) and the work of the Council of Australian Governments (CoAG) and the Independent Committee of Inquiry into National Competition Policy (Hilmer). These origins can be traced even further back to debates on structural adjustment both here and at the OECD in the 1980s. Developments in State jurisdictions were subsets of the national effort, culminating in National Competition Policy (NCP).

While NCP sometimes deviates from some particular recommendations of Hilmer and the Commission, it nevertheless stands on the general principles expressed in those reports. Those principles relate to economic and social welfare theories, as well as theories relating to contestability and those found in Industrial Organisation economics, including effective competition in imperfect markets. These linkages are not always clear as different words are used by policy-makers.

The general approach of NCP and the jurisdictional subsets to regulating utilities once industries have been structurally reformed has been to focus on:

- enhancing competitive processes and commercial incentives as the preferred means of achieving increased economic efficiency, fair prices and safe and reliable supply; where
- regulation is only to apply where industries cannot be further structurally separated into contestable sectors; and
- regulation should seek to emulate competitive processes and be light handed, incentive driven and non-intrusive.

This general approach is also specifically reflected in jurisdictional frameworks. For example, the Victorian Government stated its objectives during the restructuring and privatisation processes in several publications and statements and these remain in the current framework. These emphasised the need to:

- minimise the need for direct regulatory intervention including through developing self-regulation;
- develop light-handed regulation which provides an unambiguous framework which maximises the scope for commercially negotiated outcomes avoiding onerous restrictions;
- provide strong incentives to improve performance; and
- ensure phased reductions in prices to reflect and encourage delivery of sustainable benefits to consumers over the longer term.

It should be noted that the Regulatory Contract which emerged from the Government's statements in 1995 and a letter from the Regulator dated 20 July 1995 is a matter of high contention in the wake of the ORG's recent determination on electricity distribution prices which the privatised companies claim has broken the contract. This is now the subject of legal challenge. It should also be noted that the current Victorian Government is undertaking to re-vamp the objectives and governance arrangements of regulation with the formation of the Essential Services Commission.

It is not altogether easy to identify precise purposes and objectives from the various statutory frameworks, second reading speeches and so on; but, as noted, are very much related to economic and social welfare theories.

For example, telecommunications regulation refers to the long term interests of consumers, whereas the Hilmer Report states that regulators should aim for:

"...the promotion of long-term economic efficiency, taking into account the desirability of fostering investment, innovation, and productivity improvement, and the desirability of discouraging a person who has a substantial degree of power in a market from using that power to set prices above efficient levels" (p279)

Economic efficiency contains three elements (productive, allocative and dynamic efficiency). The last, promoting dynamic change in industries, was seen as critical by governments. As KPMG, advisers to several governments in setting up regulatory regimes, puts it:

...We have National Competition Policy specifically because our utilities have failed to innovate and become more productive. They have been stuck on one S curve without the need or motivation to move. It is competition that normally drives the transition from one S curve to another. With a national monopoly different mechanisms must be used and one of the most important of these mechanisms is the form of regulation applied". [2000, p9]

This emphasis on dynamism is also evident in the statements of governments in setting up their regimes. For instance, the Victorian Government has noted that in formulating its regulatory framework the priority was to *"...encourage the development of a dynamic, efficient and sustainable electricity industry that would continue to deliver benefits to Victorian consumers into the future."* Moreover, the Government was *"...adamant that it*

should contain strong incentives for ongoing improvements in efficiency...” and that “... the regulatory environment was intended to be stable and predictable while avoiding unduly onerous and costly reporting requirements.”

As noted in Chapter 1, KPMG are strongly criticising the cost of service models that some regulators are applying as “...*the antithesis of incentive regulation*” [KPMG, 2000, P6]. It is concluded that such regulators with a narrow view of their role drawn from the neoclassical model are threatening to undermine the reforms in response to Hilmer [p11].

What lies at the heart of this issue, and what is being debated in the current appeal and legal challenge to the ORG’s Determination in Victoria, is whether the form of regulation being applied promotes dynamism. This is now briefly explained.

In the view of the critics, what the regulators are applying is a corporate finance version of the perfect competition model of neoclassical economics in which prices match or track costs. By definition there is no innovation or dynamic efficiency from this model where “non-real world’ assumptions and short term conditions rule.

In opposition, the eminent economists and other experts referred to in Chapter 1 consider that regulators should be attempting, rather, to emulate effective competition in imperfect (Schumpeterian) markets if there is to be dynamism. For instance, Professor Steven Littlechild and Michael Beesley are recognised as the founders of true incentive regulation and have acted as regulators. As Beesley notes:

“...The competition which is being ‘mimicked’ is not neo-classical competition but Schumpeterian. The Regulator is playing both the role of creating the possibility of earning innovatory gains and that of the ‘perennial gale’ of competition which tends to blow them away over time”. [Beesley, 1996, p213]

Professor Littlechild reaffirmed the need for such a model on a recent visit to Australia, and Professor Johns argues the case for the Schumpeterian model in his submission [Johns, 1999, p1]. Indeed, Professor Hilmer noted at a Treasury seminar in 1995 that the Committee’s ideas had grown out of the ideas of Schumpeter and Michael Porter (Harvard).

While there is a danger of over-simplifying the arguments involved for the sake of brevity, what the critics of recent regulatory decisions in Australia are saying is that there will be no dynamic efficiency or technical progress in the regulators’ model. It is only the opportunity of higher returns that will induce firms to undertake risky and uncertain investment and innovational activities that offer the prospects of enhanced services to customers at lower prices than otherwise, and it is the surplus from past earnings above the perfectly competitive rate that are a necessary pre-condition for firms to react to this incentive.

2.3 PURPOSE OF REGULATION

The fundamental purpose of regulatory policy must be to maximise social welfare or, as policy makers have put it, to maximise the long-term interests of consumers. Long-term interests clearly include those derived from the encouragement of growth, innovation and diversity of choice. The role of the regulator should be to foster those processes and outcomes, but not determining market structures, investment levels, technological choices or what should be supplied to consumers. Nor should they seek short-term maximisation of consumer interests, which will adversely affect long-term interests.

The desirable features of any regulatory scheme aimed at satisfying the long term interests of consumers would consequently include:

- the maximisation of both consumer and producer surpluses, creating the largest possible 'cake' that can be fairly divided. This would align consumer and producer interests;
- reliance on simulating competitive processes to determine profits and to induce improved performances;
- reliance on consumer preferences as expressed through willingness to pay (eg market prices and surveys), including preferences on the quality – price trade-off;
- the minimisation of regulatory intervention or direction in business decision making, low cost of administration and minimal regulatory risk;
- a cooperative relationship between stakeholders in which mutual advantage is recognised.

2.4 APPROPRIATE OBJECTIVES

The Principal-Agent problem refers to regulators (agents) having the discretion to supplant the objectives of governments as the representatives of the community at large (the principal) for their own. ENERGEX considers that regulators must be constrained to focussing on serving the long-term interests of consumers by the formulation of specific objectives to which they must have regard, the more precise specification of the form of regulation to be applied and, as back up, strong governance arrangements.

Objective: Incentives for long-term economic efficiency, investment and innovation

The key element for the long-term interests of consumers is maximising economic efficiency, or making the 'cake' as large as possible for subsequent sharing. The Commission is expert on this matter but non-economists, because of the language used, do not always understand what is being argued.

In brief, it means that the form of regulation should induce a firm (some inefficient utility) to take steps to maximise the three elements of economic efficiency: productive, allocative dynamic. First, incentives should induce a firm to move towards what IPART (1999) calls the efficiency frontier by investing in best practice techniques in production, improving work practices and so on. Secondly, the firm should shift along this frontier by changing the quality and mix of services to suit consumer preferences (allocative efficiency or hitting the appropriate consumer indifference curve). Thirdly, the firm should be induced to undertake activities such as developing new processes and services to help expand the frontier (dynamic efficiency or achieving higher indifference curves).

This is what the Hilmer Report, KPMG and the rest quoted in Chapter 1 and Section 2.2 are referring to. It is argued in Chapter 3 that true incentive regulation that is well designed will achieve such purposes automatically, where firms are induced and driven towards best practice by the mechanics of the system. Any benefits from their activities, investments and risk taking innovation, however, will be "blown away" to consumers over time, emulating what Schumpeter calls the "perennial gale of competition".

To specify this objective in regulatory regimes, as derived from the Hilmer Report (p 279), and to accord it the highest priority over other "objectives" in NCP, we suggest:

To promote long term economic efficiency, including dynamic efficiency, taking into account the desirability of fostering investment, innovation and productivity improvement, taking precedence over other objectives.

Objective: Prevent abuse of market power

It is evident from the submissions to access price reviews by independent experts that the only objective that can be clearly identified that regulators have regard to is the prevention of abuse of market power. But apart from failing to take account of other objectives, it is also interpreted as a 'stock' concept rather than as a 'flow', and this is not the way it is viewed by the ACCC and the Federal Court in trade practices cases.

To define the term, 'market power' is given practical sense by the ACCC and the Federal Court as the extent to which a firm can *'give less and charge more'* without losing market position. That is, for instance, there can be no abuse if a firm is *'giving more and charging less'*. This is the antithesis of market power and the emulation of competition. There is a considerable body of case history to support this 'flow' concept.

Indeed, a very recent case under European Union Competition law raises the possibility that there should be no regulation of prices if there is no evidence of such abuse of a dominant position. Such an intervention is, in itself, seen as anti competitive. As National Competition Policy here uses much the same law as the European Union in this area, and as utilities, in many cases, have been 'giving more and charging less' with higher quality and lower prices, it is debateable whether regulation should apply.

Furthermore, the submissions to the review have also argued not only that the 'no abuse' objective is being incorrectly applied, but also that regulators have been going well beyond what is meant by the words and the underlying rationale even if this was the only objective of regulation. Essentially, this refers to comments about stripping out any savings that give rise to profits above the perfectly competitive rate too quickly and to the choice of weighted average cost of capital (WACC) returns well below the top of the plausible range that independent experts could agree on. By definition, there can be no abuse if a rate of return is plausible. That is, regulators are adopting their own objectives and not those of the Principal, and are using the command and control approach and the WACC as a profit control mechanism, a means that successive governments of all persuasions have been anxious to avoid, as witness the history of the Prices Surveillance Act where all calls for profit control powers were rejected.

The misuse or abuse of market power has a clear and precise meaning in court cases under the Trade Practices Act 1974 and in competition policy here and overseas. We suggest the objective in regulatory regimes is made more precise as follows:

To prevent misuse of monopoly or market power where this power means *'giving less and charging more'*.

Objective: Facilitate entry into the relevant market

In principle, this objective requires prices to exceed long run average costs. In practice, the regulator would need to set a price at a ceiling based on the efficient cost and risk structures applicable to new entrants and not those of the incumbent. Too low a price would shelter the incumbent from new entry and investment could be distorted. Too high a price may encourage inefficient new entry.

In reality, all regulators appear to ignore this objective, driving prices down well below the levels attractive to potential entrants and extinguishing all prospects of developing competitive markets. ENERGEX considers that this objective is almost impossible to apply

under present regulatory arrangements and the command and control approach. What is needed is a shift to approaches that emulate markets. That said, it would be useful to specify the objective as part of the process of transition.

To facilitate entry into the relevant market by setting prices based on the efficient cost and risk structures applicable to new entrants.

Objective: Ensuring that consumers benefit from efficiency and competition

Under command and control regimes, this objective appears to imply a fair sharing in the region of 50/50 and an absence of price shocks. A regulatory system that requires unexpected and sometimes severe changes in prices in either direction is inefficient and unfair to both investors and consumers. The Senate Select Committee on the Socio-Economic Consequences of the National Competition Policy considered this issue and was concerned with the adverse impacts on low-income groups and low or negative savers, particularly in regional and rural Australia [Parliament, 2000]

Nor can it be said that making single adjustments for the accumulated changes over four or five years is emulating markets – no market works like that. True incentive models again achieve this objective automatically.

To the extent that command and control regimes will be continued in transition, ENERGEX suggests:

To ensure that the long term interests of consumers are served from greater competition and economic efficiency, with a fair sharing in the region of 50/50 and that there are no price shocks.

3. FORM OF REGULATION

3.1 INTRODUCTION

This chapter addresses the question of which form of regulation best achieves the objectives of policy and the principles of good regulation.

The options considered are:

- command and control
- 'true' incentive regulation
- prices oversight
- Trade Practices law.

3.2 COMMAND AND CONTROL

Cost of service/rate of return regulation has been the traditional approach adopted in the United States for over 50 years. It has little support from economic theory and the empirical record has been dismal (although rather better in several States that applied more light handed approaches – see United Energy, 1999).

The disadvantages are well known, including the creation of perverse incentives for firms to inflate rather than reduce costs, for excessive or inadequate service quality, for over or under-investment and to cross-subsidise. It also has anti-competitive effects from increasing barriers to entry.

The possibility of over-investment, including 'gold plating' effects, arises because increasing the asset base increases total profits. This is well known as the AJ effect after Averch and Johnson (1962). The possibility of under-investment may be surprising, but Caves (1991) notes this has been a significant risk in the US energy sector as a result of opportunistic pricing decisions by regulators, and the recent warning by Alan Greenspan referred to in the Executive Summary appears to bear this out to the extent that the US economy could be destabilised. (It is understood that regulatory opportunism has now been declared illegal but that the Courts have difficulty in enforcement).

The 'building block' approach to regulation adopted by Australian regulators is cost of service/rate of return regulation. Chapter 1 lists the views of independent experts on this matter and, as Professor King notes, the building block model is simply "*...reinventing the worst aspects of United States rate of return regulation*" but "*disguised under a more acceptable name.*"

How this 'disguise' works is explained by Professor King and Gans (October, 2000) but was also argued in submissions to regulatory reviews by other commentators and stakeholders. The Commission is also referred to the transcript of proceedings from the Court Recording Services in Victoria for 11 October 2000 where the US consultants from NERA who have advised jurisdictions in Australia and the UK on the form of regulation defend their approach.

As will be evident from Chapter 1 and the literature, the building block approach fails all the objectives of regulation other than the 'abuse of market power' objective. As the Bureau of

Industry Economics (BIE, 1995) has pointed out, the efficiency losses that can arise from rate of return may outweigh the benefits to the community of eliminating monopoly prices. (No doubt this is related to the Harberger thesis – see Harberger 1954). It also fails to achieve the principles of good regulation as it is high cost, raises regulatory risk, and maximises the opportunity for regulatory micro-management. Rather than building a cooperative relationship, it results in contention, acrimony and litigation.

ENERGEX recommends that:

All forms of command and control regulation, including ‘building blocks’, are mandated for elimination as regulatory options.

3.3 ‘TRUE INCENTIVE REGULATION’

‘True’ incentive regulation contains several options but an essential feature is that they are price and not cost based. To the extent possible, they attempt to ‘mimic’ effective or workable competition in imperfect markets, simulating market pressures to cut costs and incentives to foster the possibility of firms earning innovative gains. Overtime, the system should ensure that all the benefits utilities are reaping from their endeavours are steadily passed to consumers replicating the persistent Schumpeterian ‘gales’. Such regulation should support the accurate reporting of information to the regulator.

Price caps, with the strong proviso that they are properly applied, can be a useful form of true incentive regulation when the X in CPI-X is properly determined and they are totally divorced from the total costs of the firm (see Braeutigam and Panzer, 1989). The X is usually determined as the expected productivity of the individual firm. IPART (1999A) refers to a variation suggested by United Energy to IPART and ORG reviews, based on work by Laurits. R. Christensen Associates (Christensen, 1997). Here, existing prices are indexed in a way linked to the long term trend rate of productivity growth for the industry, relative to that of the economy generally (called the total factor productivity – TFP – model here).

The TFP model has distinct advantages over simple price caps, using industry rather than individual firm productivity. IPART notes the Canadian Radio- Television and Telecommunications Commission (CRTC) as commenting in its 1997 regulatory decision that:

“...an X factor should be based on data that are independent of the actions of any one individual company...the use of an industry-wide X-factor has major benefits to consumers and the general economy as it will enhance companies’ incentives to increase their efficiency. Further, the Commission notes that the use of an industry-wide X-factor rewards those companies that have achieved above-average productivity gains in the past and provides an appropriate incentive to those companies that have had below-average productivity in the past.”

As IPART reports, the arguments in favour of the approach are:

- “it has clear, unambiguous and powerful incentive effects;
- it has a theoretical foundation and applies objective measures that are transparently based on external data rather than regulatory judgements; and
- it creates minimal regulatory risk and has low transaction costs, and low administration costs” [p16]

IPART also notes that:

“The focus on industry wide measures removes most, if not all, of the direct scrutiny of individual company costs. In theory, price reviews become an overview in updating TFP estimates in accordance with agreed methodology and data, with perhaps some consideration of external efficiency benchmarks. No detailed analysis of projection of individual company costs or profits occurs. Questions of cost allocation, differential treatment of operating and capital expenditure, the treatment of windfall gains and loses, and the identification of management controlled savings do not arise” [p15].

As noted by IPART, TFP regulation has been used extensively in the United States in telecommunication networks, where it is the dominant form, in railways and post and is now becoming more widely used in electricity and gas (see Kaufmann and Lowry 1998).

Kaufmann considers that the TFP approach offers strong prospects of achieving all of the regulatory objectives, with lower regulatory risk and minimal administrative costs. Much stronger pressures and incentives apply for improving performance, with managers focussing on what they should be concerned with – cost containment, product development, customer service and appropriate investment – and not on the regulator. Efficiency should also improve through economies of scale and of scope and greater technological change. Superior performances will benefit both customers and investors through lower prices than under command and control and with higher profits and dividends.

A third form also suggested by United Energy is “glide path” regulation encompassing external benchmarking. It involves transitioning from prevailing prices to targets based on domestic or international best practice. The time profile of the glide needs to be of sufficient duration to ensure that potential gains from innovation and efficiency improvements are realised, and recognising that best practice is itself a moving target.

Several distribution companies attempted to persuade the Utility Regulators Forum comprising all Australian regulators to jointly develop international targets or benchmarks, but without success. These companies then commissioned Kaufmann and Lowry to develop benchmarks relevant to their networks from international data. This work was highly successful, allowing a precise measurement of the relative efficiency of Australian firms against foreign counterparts. Such benchmarks could be used as glide path targets or in conjunction with other true incentive options. It seems a great pity that an opportunity to cooperatively develop superior forms of regulation for Australia was let go.

The claimed advantages of glide path include:

- It is simple, symmetrical and certain, with low costs of administration to companies and taxpayers;
- It provides strong incentives for continuous efficiency and innovatory gains from both directions (carrot and the stick of having to achieve best practice) and there are no perverse incentives. This reduces prices in the longer term;
- It has a solid theoretical foundation, mimicking effective competition in imperfect markets.
- It only includes the extraction of proven efficiencies (proven in the sense that they have already been achieved by overseas firms when the international benchmark is set);
- Firms are induced to manage all risks over the transition period from all exogenous variables (other than force majeure);
- It avoids price shocks for consumers and revenue shocks for investors, resulting in higher credit ratings and a lower cost of capital;

- It solves the fundamental regulatory problem of information asymmetry.
- It avoids asymmetry between regulated companies and for individual companies over time and any perceived unfairness in regulatory decisions. It helps guarantee regulatory stability and eliminates gaming; and
- It can accommodate changing consumer preferences.

The setting of benchmarks has been widely debated in the literature, with different consulting groups designing different methods such as translog analysis, data envelopment analysis and stochastic frontier analysis. Some regulators have adopted the glide path concept in a minor way but only applied this to their cost of service/rate of return approach. While this may reduce the disadvantages of 'pure' rate of return, it has none of the advantages of a 'true' incentive approach.

In many respects, true incentive regulation incorporating international benchmarks answers the question the Productivity Commission has been puzzling over for many years: how to ensure that non-tradeable sectors face the pressures to be expected from international markets.

We refer the Commission to Kaufmann and Lowry for greater detail about benchmarking for incentive regulation (1999) and, in particular, how such benchmarks were established for Australian networks. One of the reasons given for failing to take up the offer of joint development was, reportedly, that it would take too long. Yet such benchmarks were in fact constructed in only a few months.

3.4 PRICES OVERSIGHT

Prices oversight in Australia is usually conducted under the Prices Surveillance Act 1983 for companies who hold substantial market power in substantial markets or are in transition.

When a company is declared by the Minister for 'surveillance', the regulator is required to have regard to a number of matters, including the need to maintain investment and employment, to discourage excessive cost increases from wage increases and to discourage a company abusing market power. What usually occurs is that the starting point is prevailing prices, with price increases limited to unit cost increases subject to the above matters and certain Ministerial Directions.

Major companies (about 70 at one point) operated successfully under surveillance and almost all have now been 'de-declared' because they are now pricing efficiently or contestability has improved. When a company is under surveillance, it tends to focus on driving costs down by increasing efficiency. The regulator applies publicly stated "fair and efficient pricing principles" but does not fix profits or attempts to drive prices down to (more efficient) costs in the short term. Indeed, as previously noted, successive governments from both sides have been scrupulous to ensure that there is no question of controlling profits under the Act.

Price caps are also possible under surveillance and are, in fact, identical to true incentive regulation when properly applied. For example, the wholesale price of petroleum products in Australia was capped under the Act at international benchmark prices, with an allowance for distribution costs at 'best practice' rates. Australian wholesale prices consequently averaged around the third lowest in western countries either before or after tax, despite the small size of markets within Australia and the limited economies of scale.

Moreover, price caps for beer and cigarettes have been simple and effective with minimal costs of regulation and compliance. Prevailing market prices were taken as the starting point and an X was subtracted to reflect potential efficiency gains. This had the effect of driving real prices down even as cost pressures were increasing from declining demand. However, firms had the flexibility to price individual products in line with changing consumer preferences and to keep all profits earned below the X. This was a strong incentive to increase efficiency. Similarly, both interconnect and price controls operated under the Act for Australia Post.

Monitoring (either formal under the Act or informal) has also been applied to a range of companies and industries in transition (eg glass bottles), where reports are made to the Minister on the progress made by a company in emulating the outcomes of effective competition in imperfectly competitive markets. There is no regulatory involvement on prices, but the Minister holds the power to impose surveillance if necessary.

Monitoring relies on public exposure and the threat of surveillance being introduced. The BIE [1995] has argued that such oversight may be preferable to all other forms in inducing efficient and fair prices by creating pressures of transparency and public scrutiny.

The Hilmer Committee was strongly of the view that only prices oversight (especially monitoring) would be necessary once the structural reforms had been implemented. Professor Fred Hilmer is still of that view (see *Weekend Australian*, 18-19 November 2000), stating that, if implemented, all the "...arguments will stop" on parameters developed by the various regulatory bodies.

3.5 TRADE PRACTICES LAW

There are differing views on the effectiveness of relying on trade practices law for access and pricing. The United States relies to some degree on general competition law through the "essential facilities doctrine" under Section 2 of the Sherman Act. But the great weight of regulatory control is exercised through industry specific regulation imposed by each State. As discussed, until recently much of this was through command and control (especially rate of return) regulation.

New Zealand relied solely on its trade practices legislation for access and pricing until recently. While the early cases under Section 36 of the Commerce Act 1986 appeared to be successful in dealing with national monopolies, the case of Clear Communications Ltd versus Telecom Corporation of New Zealand in 1992 and, on appeal, 1993, became internationally famous for revealing a potential flaw in this approach with respect to pricing (see Court of Appeal, C.A. 25/93).

The Commission's Issues Paper calls for views on the Efficient Components Pricing Rule (ECPR). One thing the Clear case demonstrated, we believe, is that ECPR (called the Baumol-Willig rule is the Clear case) has only limited applicability, and appears to have little use where downstream markets are becoming contestable, as in Australia.

New Zealand's S.36 is similar to Section 46 of Australia's Trade Practices Act 1974. The decision of the High Court in *Queensland Wire versus BHP* demonstrates that S.46 covers refusal to supply but there has been debate on whether it embodies an essential facilities doctrine. Critics argue that there is also the difficulty of demonstrating a proscribed 'purpose' under S.46, and of the courts deciding appropriate terms and conditions. While S.87 [2] provides the power to vary prices, the courts, it is argued, have little history of decision making in this area.

New Zealand appears to be adding back a few teeth from a position of no direct price regulation to prices oversight. In December 1998, the Ministry of Commerce announced a

monitoring regime for electricity distribution *businesses* "... *intended to mimic the pressures on companies in competitive markets.*" The performance of companies against targets is to be publicly released every six months, with the prospect of surveillance or price control if performance is unsatisfactory. Such threats are arguable unnecessary as the history of the Prices Surveillance Act shows that all companies fully complied with PSA decisions even though its powers of enforcement were virtually non-existent. That is, firms obey the wishes of governments as expressed through their agencies.

3.6 ACCESS

ENERGEX is concerned that far too much is being made of the access problem and that regulation, in a search for an undiscoverable solution, is reducing rather than enhancing efficiency, investment and welfare.

The "essential facility" concept is said to refer to situations where there is a refusal to supply or provide access where the aim of the firm is to extend market power into other markets (usually downstream). Australia does not have much of a history of entrants encountering any difficulty in gaining access to the facilities owned by a monopoly, the Queensland Wire Industries (QWI) versus BHP case being an early, notable and rare example.

Part of the explanation for this lack of any history of problems is that it is not in the interests of monopolists to foreclose. If a monopolist is a profit maximiser (cost minimiser), it can be shown that no regulation is necessary as the price of entry will be set at the technically efficient level, so that efficient entry will be promoted. Of course, the monopolist still has market power but this is a separate 'problem' to that of access. The case for regulation (or some other intervention) therefore rests on the possibility that monopolists are, in a sense, acting against their own interests, something that they are not prone to do.

Part of the reason must also be the risk of abrogating Section 46 of the Trade Practices Act 1974. Section 46 [1] states that a corporation that has a substantial degree of power in a market shall not take advantage of that power for the purpose of:

- *eliminating or substantially damaging a competitor... in that or any other market;*
- *preventing the entry of a person into that or any other market; or*
- *detering or preventing a person from engaging in competitive conduct in that or any other market.*

Is there any doubt S.46 does not cover the waterfront of potential access problems? The High Court ruled BHP had taken advantage of its power to prevent the access of QWI to the 'essential facility' of Y-bar it needed to compete with a subsidiary of BHP in the downstream fencing market. Indeed, the official noting of the case (ATPR, 40, 925) remarks that the judgement means that "...*there would be no case for Australia to adopt a version of the US 'essential facilities' doctrine, with all its uncertainties*". The Hilmer Report (p.243), recognised that S.46 is applicable as the owner will always have substantial market power, and there should be little difficulty in establishing that a refusal constitutes 'taking advantage', given that in the absence of the power, access would be available. Of course, it is not just refusing that is the problem but the price. Indeed that was the whole point of QWI with the price that was offered being deemed to be unreasonably high [Deane J, 50, 002]. This is overlooked in all the commentary we have seen on QWI and undermines the critics' claim that Courts cannot judge prices. Courts have access to expert opinion, as indeed regulators have, and we can see no special difficulty, particularly as average prices in other markets can be used as benchmarks.

Is S.46 deficient in some other way? Hanks and Williams [1990] have argued that the High Court only found it easier to reach its decision because BHP did not use efficiency arguments. They reach this view by focussing on the 'take advantage of' test, and Brunt (1993) notes that the 'purpose' element could be used as an alternative. Others, such as Ergas (1995), in discussing New Zealand's equivalent S.36 and the Clear case, consider that trade practices law is too slow to bite or otherwise too weak.

In reviewing both the QWI and Clear cases, Charles Sweeney, QC (3 November 1993), dismisses the efficiency argument as a *'false test that travels too far from the language of the legislation'* and dismisses the efficient component pricing rule. He argues that the Clear case would have been a simple one but for the invention of the rule (see also Kahn, 1993). While Sweeney considers that reliance on the law raises a bit of danger because it has a flavour of 'antibigness', he nevertheless supports its application, noting that it applies anyway even if there is a regulator. Sweeney considers that both QWI and Clear have resolved much of the difficulties of S.46, seeing the cases as the 'end of the beginning'. David Shavin, QC (10 July 1997) argues that S.46 is more powerful than first believed.

ENERGEX notes that the penalties for breaches have been increased substantially in Australia and that companies are now aware of the dangers of such conduct and of precedent in court cases. Proposals have been made to improve the coverage and effectiveness of S.46. We cannot speak to the relative merits of those but assume that judicious changes to wording or powers could cover any deficiencies. For example, the ACCC could be given the power to issue 'cease and desist orders', which would strengthen the speed and power of enforcement. In short, there should be no reason why S.46 is potentially any slower or weaker than any other form of regulation and note that reviews by regulators cannot be described as 'speedy' by comparison.

Is any further intervention beyond S.46 necessary? The Issues Paper notes that Hilmer concluded that the owners of natural monopolies which do not compete in other markets have 'little incentive' to deny access. As may be shown technically, there is in fact no incentive at all, but there is a disincentive. In relation to utilities, where there is structural separation or ring fencing, it is in no one's interest to foreclose. It is our view that ring-fencing arrangements today are so effective that they are equivalent to full separation, and any claims to the contrary should be scrutinised very carefully.

The extensive literature on access often avoids key preliminary questions such as whether there is any underlying rationale for regulating access in the relevant market, and whether there is, even, a natural monopoly in the cases in question, and whether ring-fencing applies. Rather, a need for regulation across a range of industries is simply presumed and the focus is then on the task of designing such intervention. Several points need to be made in this respect.

First, Professor Maddock (1995) has shown that the approach adopted by Hilmer and National Competition Policy of structural separation and applying an access regime is likely to result, where double marginalisation conditions apply, in prices higher and sales and social welfare lower than otherwise. Maddock argues that price regulation in the final product market is all that is needed. ENERGEX notes that as such regulation already exists or is being contemplated by jurisdictions, the need for a regime even where there is vertical integration may be questioned.

Secondly, once regulatory intervention in access issues is admitted it is near impossible to hem it in. The notion of an essential facility is equivalent to what Professor Ergas (1995) refers to as 'essentially contested concepts' that, once set in motion, become self-perpetuating invasions of property rights and a *'...sure-fire recipe'* for reducing investment and consumer choice. Areeda et al (1988, 1992 and 1993) have documented how this has occurred in practice.

Thirdly, economic theory offers no unique solution to what access prices should be. Nor, indeed, is there even a clear preference between any of the many second-best alternatives across different market conditions. The literature abounds in the search for the undiscoverable with technical debates about the relative merits of alternatives (eg various cost based methods, Ramsey-Boitaux pricing, Damus adjustments, efficient component pricing and the Baumol-Willig rule, non-linear pricing, auction systems) as well as complicating issues such as bundling, congestion, discrimination, externalities, and information asymmetry. Most papers end up putting the authors' views (including providing a 'leg-up' to entrants) or referring to 'principles' on which regulatory decisions should be based, and calling for more information, more powers to demand information or 'incentives' for firms to provide such information. Some papers admit that getting the design of the rule wrong in application to different industries in different circumstances can be welfare reducing but induce little confidence that their design is 'correct'. Moreover, as utilities, in our experience, have already swamped regulators with about all the information they have, the opportunities for further understanding seem limited.

Fourthly, while much of the literature focuses on optimising the use of existing facilities, few writers recognise the need for investment and dynamic efficiency in the first place. Unless provision is made along the Schumpeterian lines referred to earlier there will be little infrastructure for which access may be demanded. That is, policy makers will have confused ends with means, to the detriment of the ends (efficiency, investment, and growth).

Finally, some writers have acknowledged the thrust of the previous points and go on to design light handed regimes based on regulation by negotiation but where regulatory authorities still play a role, arbitrating in disputes and applying rules to 'optimise' investment. However, much of this appears to ignore the history of successful negotiations over access conducted by industry and the existence of experienced commercial arbitrators.

ENERGEX cannot speak to the particular situations in industries outside of energy but is not aware of any reason why governments or their agencies should be involved at all in access beyond the provisions of Section 46. This company has conducted such negotiations in a way that provides for access and on-going investment, and with an eye to potential bypass, in the same way as any other commercial agreement between competing interests is reached. For our sector at least, and noting the points about good regulation in Section 2.2, ENERGEX suggests:

There is no significant reason why an access regime is necessary where ring fencing applies beyond reliance on S.46 of the Trade Practices' Act.

Arbitration should be removed from the province of regulatory authorities and provided for and paid for by the parties themselves. Any appeals against the judgement of commercial arbitrators should be to the Australian Competition Tribunal.

The criteria to be used in access arbitrations should follow Section 44X(1) of Part IIIA with the following amendment to part (b) and the elimination of (g).

- the public interest in having economic efficiency including dynamic efficiency, taking into account the desirability of fostering investment, innovation and productivity improvement.

Such changes would remove much of the justification for the various industry Codes which apply. ENERGEX will focus on the particular implications for Code changes in a subsequent submission.

3.7 CONCLUSIONS

It has been demonstrated that command and control regimes in all their forms, including the 'building block' approach adopted in Australia (and in some areas of the UK) are unlikely to satisfy any of the objectives of policy other than to prevent abuse of market power. In practice, in this respect, they go significantly further than that implied by the no abuse concept. Australian regulators have simply replaced the objectives of NCP and the community at large with their own. This includes the control of profits, something governments have been at pains to avoid.

All forms of command and control regulation, including 'building blocks' should be eliminated as regulatory options.

The remaining three options are likely to satisfy all of the objectives and to achieve the principles of good regulation. As a first step, 'true' incentive regulation should be transitioned in in forthcoming jurisdictional reviews.

However, where regulators are reluctant to apply such regulation, then a next best option is prices oversight. ENERGEX would urge that prices oversight is implemented by the NCC where any jurisdictional regulator is reluctant to adopt 'true' incentive approaches. This requires that:

The Prices Surveillance Act 1983 is retained as a regulatory option.

Reliance on trade practices law may be the future for both access and pricing regulation. To focus the attention of regulators and government on deregulation, we suggest:

All jurisdictional regulators provide "road-maps" of intent in applying alternative forms of light-handed regulation.

4. GOVERNANCE ARRANGEMENTS – IDENTIFYING THE DEFICIENCIES

4.1 INTRODUCTION

The World Bank has proposed three tests for assessing the appropriateness of regulatory structures:

- legitimacy with customers and other stakeholders
- credibility with investors
- enhancement of economic efficiency.

Thus,

“If regulators are to be a success, they must establish credibility with investors and legitimacy with consumers and other stakeholders and they must produce results that enhance efficiency for the economy as a whole. Failure to meet these tests can have dire consequences. Concerns about political interference create risks for investors that will be reflected in reduced investment at higher prices. Concerns about capture by regulated firms or other interests can lead to discrediting of privatisation reforms and pressures to intensify state control and serious errors in either direction can threaten the sustainability of privatised infrastructure reforms.”
[Gray, 1998]

How do the access/pricing regimes established under NCP stand up against these tests? A reading of the many submissions to access/price reviews and to the inquiry into the establishment of the proposal Essential Services Commission would indicate some serious deficiencies. The preceding chapters have shown that the access/price regimes do not satisfy the third test, where economic efficiency is more likely to be compromised than enhanced. This chapter focuses on the first two tests, although elements of economic efficiency are interwoven here. Much of the evidence relates to Victoria and New South Wales as these States have operated regimes longer than most and have undertaken major reviews.

4.2 LEGITIMACY WITH CUSTOMERS/STAKEHOLDERS

In a summary of customer and community interest group views to the Essential Services Commission inquiry, United Energy (September 2000) notes:

“...there is a climate of disquiet among stakeholders with respect to the balance, fairness, natural justice and other ‘due process’ elements in the current regulatory arrangements. For example, Cooperative Energy Ltd has detailed complaints from consumer and user groups about the credibility of procedures, complaining that they are being led through a process which is neither transparent nor understood, where options are not evaluated and where it is not explained which arguments find favour or not, and why, nor how decisions are reached. The good practices applied in the United States in jurisdictions such as California and Idaho are suggested as models.”

A submission to the same inquiry by ACIL Consulting comes to much the same conclusion.

The United Energy submission goes on to argue that regulatory options specifically designed to satisfy the expressed preferences of customers and community groups, which were subsequently justified by independent surveys, were rejected without explanation by the regulator, and in contradiction of its own guidelines.

Similarly, in a summary of the submissions from regulated distribution companies to the Victorian review, United Energy (September 2000) concludes that the businesses are:

“...anxious because they can see little inherent procedural fairness, and predict ongoing disputation and legal challenge. There are none of the checks and balances necessary to ensure fair and efficient outcomes, no flexibility to cater for the evolving needs of customers and no constraints on the precipitive behaviour of the Office in changing the rules. The submissions argue that, in effect, the regulator acts as the gatherer of evidence, as advocate and as expert witness to itself, and as judge and jury, safe in the knowledge that there is no prospect of meaningful appeal or review. If the rules applied are not achieving the aim, the goal posts are simply shifted through the game.

Notably, the former President of the Californian Public Utilities Commission described the Victorian arrangements on a visit here as “appalling” from the view of due process. And Dr Graham Shuttleworth, a one-time adviser to the Office, has stressed the importance of getting processes right, noting that the failure of UK regulation was largely attributable to this cause.

Both California and the UK have recently reformed their governance arrangements from positions that were already in advance of those in Victoria.”

4.3 CREDIBILITY WITH INVESTORS

Submissions from finance houses, investment groups and banks to access/price reviews, and in letters direct to governments all point to high regulatory risk from the regimes and to adverse consequences for investment and economic development.

ENERGEX defines regulatory risk as the risk that the rules surrounding the regulation of business will vary from those prevailing at the time of investment, or are interpreted by the regulator in a different way.

According to the Regulated Businesses Forum:

“An examination of the record of regulation internationally and in Victoria demonstrates that regulatory risk is a function of the underlying regulatory regime, the surrounding institutional protections and behaviours or conduct associated with a regulator. Regulatory risk manifests itself most clearly when regulatory contracts are broken or the regime encourages or allows regulators to ‘intervene’ to achieve selective outcomes, generally short term price reductions for customers.” [RBF, October 2000]

The Australian Council for Infrastructure Development (Aus II, September 2000) notes:

“One of the major risks an investor in any utility considers prior to investing is regulatory risk.”

Both papers refer to Victoria:

“In Victoria, the most blatant example of regulatory risk has been the breaking of the regulatory contract...” (RBF)

“Such a statement (by the Victorian regulator) leaves investors with no certainty...no confidence that investments made in improving efficiency and innovation will be adequately rewarded in the future to compensate for the risks incurred.” (Aus CID)

The key risks appear to be as follows:

4.3.1 Decisions of Regulators

Many of the problems of regulatory risk derive from regulators shifting away from what was originally intended and pursuing their own objectives, and the inadequacy of the governance arrangements to contain them. ENERGEN identifies nine such risks:

i) Reneging on regulatory contract within regulatory period

Regulatory opportunism within a scheduled period is a major issue for investors. Perhaps the most famous case is where the UK electricity regulator, Professor Littlechild, wiped about half of the value off companies with a sudden price drop. The Economist (March 11, 1995) remarked:

“If Mr (sic) Littlechild, its architect, can behave so erratically, why should providers expect other regulators to be any more reliable?”

Regulatory opportunism has been declared illegal in the United States but Australian regulators are independent from direct control by governments and the influence of stakeholders. Professor Littlechild was called to the bar of Parliament (about the second since Cromwellian times) to answer for his actions but no other restraints applied in the UK at that time.

ii) Reneging on regulatory contract at review

Regulators usually commit to an approach to be taken at future reviews but may then act differently, or a newly appointed regulator may change direction.

This is currently a major issue in Victoria. The Regulator Businesses Forum has noted:

“In Victoria the most blatant example of regulatory risk has been the breaking of the regulatory contract made with the privatised electricity distribution businesses. In spite of clearly documented assurances and policy representations from the Government of the day and the first Regulator-General, the second and current Regulator-General has chosen to adopt methodologies which are inconsistent with the reasonable expectations of the new owners. This has led to a significant value transfer from business to customers, ie customers have been rewarded twice”. (RBF, October 2000)

Similarly, SG Hambros has noted that honouring regulatory contracts is critical, as companies will not invest if they fear not getting their money back:

“We see the regulatory contract entered into during the sales process as a very fragile concept which the regulator needs to nurture to ensure that the original objectives of the electricity reform and privatisation process are

achieved. This fragility is reflected in the fact that investors in the DBs (distribution businesses) require a level of confidence in revenue streams of periods of up to forty years to recover investments made in long term assets. This fragility is heightened considering the discretionary powers that the ORG has in determining regulated prices and therefore the DB's revenue.

Our issue with the regulatory contract is more than a retrospective argument about fairness and equity. It has policy implications for the incentive for the new owners to seek out a wide range of expansion and business improvements necessary to support the development of the State's energy resources and provide certainty of supply." (SG Hambros, 1999)

This change in direction first came to notice in the ACCC/ORG gas decision when sharp falls in the listed values of electricity distribution companies occurred (United Energy – 16%, AGL – 14%). Other falls happened later during stages of the review.

The legal position on the alleged breach of such commitments is unclear, although there appears to be a precedent of a successful action against a regulator in the fishing industry.

Regulators may also abrogate their own guidelines for reviews, changing the principles (shifting the goal posts) as it suits, with regulated companies caught out in terms of commitments made. As noted earlier, this has occurred with respect to consumer preferences.

iii) Regulatory uncertainty and investment

Responsibility for the success or failure of capital expenditure should rest with the regulated company but regulators are becoming increasingly involved in influencing such decisions. There is also talk of regulators seeking powers to oblige regulated companies to correct for 'under' investment. Such powers would have significant implications.

iv) Risk of price shocks

Price volatility under command and control regimes diminishes the certainty of expected returns and makes managing consistent earnings difficult. The regimes being implemented in Australia go beyond traditional cost of service/rate of return by introducing a down side where businesses are penalised if they don't achieve targets set by the regulator. In addition, higher standards are being set but only at cost and ignoring risk-price-quality trade-offs.

Price shocks also reduce the social welfare of low income and low or negative saving groups.

v) Debt management and rate-reset day

The potential for a substantial price adjustment under current regimes can imply a business having to burden itself with interest rate exposure if it enters into hedging beyond the next re-set date. However, a debt portfolio of less than our or five years is sub-optimal, and the process of striking a rate on a fixed date encourages a fattening up of margins against regulated companies as happened with GPU. Regulators are also imposing benchmark costs of debt which are regarded by major market participants as 'unreal', and are advocating how debt should be financed, what the level of gearing should be, and so on.

vi) Risk of methodological changes

There is a strong trend among Australian regulators to refine the rate of return (WACC) methodology with the effect of always reducing company returns. This has been called a 'race to the bottom' by regulated companies. Such refinements also include a greater intrusion into the taxation affairs of companies.

All this results in debates at a theoretical level that very few people, including experts, understand. As an economist at a hearing on a Ports Review, lamented:

"The whole thrust of this review appears to be very academic, and even though I hold an economics degree some of the points put forward are beyond my comprehension, and I suspect, that of many of the players in this issue." [Mr John Asome, Victoria, 19 May 2000]

Similarly, consultants to regulated companies have remarked in public forums that even they do not understand what the regulators are up to in some areas, including so-called efficiency carry-over mechanisms. If the experts do not understand, then it is unlikely that people at the operational level in regulated businesses can hope to make decisions and take actions that comply with or are appropriate to the regulators' models.

Regulated businesses fear that not only are regulators not implementing the appropriate form of regulation, but the form they are applying has fundamental flaws even within its own context, and that regulators are making changes the consequences of which are unknown. ENERGEX notes that this is being now recognised in the UK by OXERA, *"it has finally dawned on investors that the regulators have got the cost of capital wrong"*, with disastrous results for share prices.

vii) Risk of micro-management

Micro-management under current Australian regulation ranges from the regulator 'managing' capital outlays as already noted down to the most forensic scrutiny of every aspect of a firm's activities and attempting to direct actions. IPART, the NSW regulator, has eschewed micro-management but elsewhere the trend is strong. The Productivity Commission has itself expressed concern at the trend, with regulators telling companies *"...not only what but how to do things"* (Banks, 1999).

Hay and Morris (1991) have listed many examples of the adverse effects of micro-management on investment, quality, service and efficiency. They call it the 'tar-baby' effect with *"...the most trivial minutiae of a firm's behaviour being strictly controlled..."*. Regulated companies in Australia have called it the 'HB pencil' effect where the regulator misses the big picture by focussing on counting the pencils and telling firms how many they should have. An example of the risks involved is the case of Yorkshire Water in the UK where the regulator was blamed for low reserves during a drought because of interference in investment decision-making. This raises another issue of who ultimately holds responsibility when things go wrong when regulators intervene – the regulator, the Government or the company?

viii) Asymmetric risk; force majeure

As Professor Bob Officer has noted, asymmetric risk is inherent in the regimes being implemented as one end of returns (he refers to the WACC) is truncated while the other is open. But there is a range of such risks and, while some provision was provided in earlier determinations, there is little or none now. For example, the ACCC/ORG decision on gas provided 1.05 per cent for such risks but recent determinations provide no allowance. Nor are rare but substantial risks to networks clearly provided for, such as the costs of an Auckland, a Longford or an Ontario disaster. Some determinations appear to imply that large unanticipated expenditures can be passed on to consumers while others imply otherwise.

ix) Risk of technical change

The major part of new generation technologies emerging across a spectrum of the economy depends on a high level of reliability in electricity supply to function satisfactorily. There could be positive feedback effects as a number of the new technologies can themselves be applied to improve reliability in the electricity sector.

Yet the regulation being applied in Australia is stifling technological change in the sector (Stamm 1999) turning a potential virtuous circle into a vicious one. While this will have obvious adverse effects on the international competitiveness of Australian user industries, it also raises risk for electricity companies from ossified technologies, including from substitution by alternative power sources such as fuel cells.

4.3.2 Regulatory Structures

Regulatory risk also arises from the structure of regulation in the following sorts of ways:

i) Multiple regulators and layering

In electricity alone, the ESAA has identified some 20 regulatory bodies with costs of regulation about \$200m a year. The Senate inquiry into NCP (Parliament 2000) identified the problem of 'silo' effects where conflicting or contradictory directions are apparent between regulators. As a practical example, the costs of higher safety standards imposed by a technical regulator were not compensated for by the price regulator, who claimed the matter was not its responsibility. This simply reduced further the regulated rate of return.

The multiplicity and conflicting nature of regulation also raises the risk of inadvertent non-compliance and companies incurring significant penalties and other adverse effects. Regulation can also act as an impediment to expansion and competition, such as different licensing rules between jurisdictions, additional restrictions on mergers to those of the TPA 1974, and differences between gas and electricity regulations.

ii) Regulator behaviour

Typical behaviours identified by the Regulated Business Forum (RBF, 2000) include inconsistency, subjective judgements, cherry picking methodologies, use of false benchmarks and asymmetrical approaches that cannot be consistently

maintained into the future (eg company specific post-tax measures of the cost of capital). All such behaviours raise regulatory risk.

iii) Changes in legislation

The propensity of governments to intervene with new legislation can raise risks. For example, many companies incurred costs in preparing for full retail contestability but not only was the introduction delayed against the original agreement, governments have or are planning to introduce price controls and other restrictions. Moreover, additional costs can be incurred in other ways, such as when the incumbent is deemed to be 'retailer of last resort'. Other examples include new environmental legislation and changes to the operations of national markets. In the UK, a 'special' tax was levied on regulated companies.

iv) Other effects

Regulatory risk can also increase from the regulatory models being applied. For example, under the WACC approach, inflation risk is the risk that the cost of debt is tied to expected inflation (ex ante) while revenue is tied to actual inflation (ex post). As the former is consistently higher, profit is reduced. In addition a higher economy wide productivity element in measured CPI can work against regulated companies under present regulatory models, and such productivity in Australia is now much higher. Revenue capping also raises a series of risks.

5. REGULATORY GOVERNANCE

5.1 INTRODUCTION

KPMG Consulting, which advised several Australian jurisdictions on setting up regimes, has, at in-house seminars, noted that regulatory decisions are not delivering the good outcomes that were expected and posed the question of whether it is the regulatory framework that needs fixing or the way it is being implemented. In the UK, there have been substantial changes made to the structure of utility regulation, and the policies underlying regulation, from positions that were already, arguably, well ahead of those here.

ENERGEX considers that the issue of the appropriate governance arrangements to overcome the deficiencies previously identified is one of the more important and difficult facing this inquiry. This chapter considers options for key elements of good regulatory design and makes recommendations. However, there are some areas in which ENERGEX has yet to form a view. The chapter also considers the principles to be applied in regulating utilities.

5.2 INDIVIDUAL OR MULTI-PERSON DECISION MAKING

In comparing the experience of regulatory arrangements in the United States and the United Kingdom, Irwin Stelzer (1996) concluded that one of the fundamental errors of the latter was the choice of a single person as regulator. Professor Cosmo Graham of the UK Centre for Utility Consumer Law, on a recent visit to Australia, was of much the same view. The criticism is that a single person has simply too much power, resulting in the personalisation of regulatory processes and the inevitable deterioration of working relationships.

In 1998, the new UK Government embarked on the radical reform of regulation in electricity, gas, water and telecommunications. While this process has yet to be completed, one of the early actions was to replace individual named regulators in energy by three member boards or Authorities. Other changes to curb powers have been introduced.

While some countries appoint individual regulators for single industries, multi-person boards are usually preferred for regulating multiple industries. As the World Bank notes:

“Many countries entrust a decision-making authority to a commission or board of three to five members; others prefer a single individual. Each approach has its strengths and weaknesses, and choice often depends on a country’s traditions and conditions. Agencies responsible for several industries usually choose a commission.” (Smith, 1997)

From a review of the literature by United Energy (2000), the main advantages of the multi-person approach are:

- Multi-person can more readily provide expertise, experience across a range of industries.
- Multi-person with staggered appointments creates continuity, improving credibility with companies and confidence of staff.

- Multi-person has greater credibility with investors, as decisions are more likely to be based on a broader perspective, and has more certainty that commitments will be honoured.
- Multi-person has much less risk of unbalanced outcomes, which have potentially serious consequences.
- Multi-person can avoid personalisation and perceived erratic behaviour leading to loss of confidence and blunting of investment.
- Accountability on a single person places a heavy burden on an individual and risks discontinuity's when person is indisposed.
- Multi-person has much less risk of being perceived as subject to undue influence.

At the ACCC, the process for energy appears to involve two steps: consideration by the Energy Division and then the Full Commission.

ENERGEX considers that:

Multi-person decision making is to be always preferred to individual decision making and is critical for the regulation of multiple industries.

- ACCC two-stage multi-person approach may be superior.

5.3 MERIT APPEALS MECHANISM

ENERGEX is of the view that a robust appeals mechanism based on merit or the 'correctness' of determinations is an essential pre-requisite for any regulatory regime in Australia, ensuring the accountability of regulators and providing for greater stability in regulatory decisions.

Robust appeals mechanisms have been applied overseas. In the UK, certain utilities can have regulators' decisions referred to the Competition Commission, an expert body that considers the merits of the case and can recommend changes. For industries other than rail and water, a regulator need only have regard to the Commission's findings, although there is a court action in electricity and gas attempting to force implementation of the findings. While there are some ambiguities in the draft Competition Act, including with respect to the position in Northern Ireland, it is understood that the regulator is required to adopt the Commission's findings in rail but that there is no appeal in water.

The checks and balances in US regulatory processes are very full, ensuring due process and natural justice. This is seen as essential where rate of return regulation is applied, and is linked with some fundamental principles of democracy. As noted, Dr Dan Fessler, the former head of the Californian Public Utilities Commission, has described the due process arrangements in Victoria where rate of return regulation is being applied as "...*appalling*". California has now introduced new-style 'true' incentive regulation and what is notable from its first determination is that it was endorsed by all parties even though there were conflicting interests.

The US approach is often seen as overly litigious but that is, in our view, the fault of the form of regulation being applied and not the governance arrangements. Where good regulation is applied the prospect of agreement without appeal is high.

The appeals systems in Australia seem very mixed. At a base level, it appears that, in the absence of specific legislative provisions to the contrary, judicial review (a common law

principle) can apply to decisions by regulators. However, as judicial review only gives the courts power to ensure that decisions were made in a procedurally proper manner and that statutory powers were not exceeded, it is of no use to parties who consider that the decision is unfair or deficient in some way.

The ORG Act in Victoria purports to exclude these common law rights subject to two narrow grounds but this exclusion is claimed to be ineffective because of a drafting error or a potential breach of the Constitution. There is an appeal mechanism under the Act but this is limited to procedural matters (bias or misinterpretation of facts). Similarly, an appeal may be made to the Supreme Court under the Administrative Law Act but this appears to be limited to whether the regulator acted beyond its powers or had denied natural justice.

Clearly, it is extremely difficult or impossible for aggrieved parties to seek relief on the merits of their case where avenues are strictly limited to procedural matters. Nonetheless, four of the five electricity distribution companies in Victoria appealed on some 15 grounds in October 2000, and one of those companies is now reportedly approaching the Supreme Court.

For the ACCC, a number of its decisions are subject to review by an expert body, the Australian Competition Tribunal (ACT). The ACT reviews the merits of the ACCC's decisions and it has all the functions and powers that the ACCC would have in respect of the original decision.

In NSW, government owned utilities are covered by the IPART Act while the privately owned gas industry is governed by the Gas Supply Act. Only the latter has an appeal mechanism. It is understood that in NSW and where the ACCC is the relevant regulator, the appeals body is the ACT.

ENERGEX concludes that:

There must be robust merit as well as process appeals mechanisms, especially for privately owned companies

- The Australian Competition Tribunal appears to be a superior model.

5.4 REVIEW OF REGULATORS

In addition to the above, the World Bank notes that:

“Another useful step is to make the regulatory authority subject to occasional oversight through an independent review. Such oversight raises the risk, though, that the regulated firms become overly politicised – perhaps by elected officials. There are three ways to improve the monitoring process:

- *Employ independent reviews of regulatory agency performance by non-political organisations.*
- *Elected officials should change their oversight responsibilities from time to time so that they do not linger long enough to form coalitions with regulators that would erode the public interest.*
- *The regulator should have administrative procedures which guarantee due process to affected parties.”* [Smith, 1997]

Good public policy suggests that regulators would benefit from knowing that their performance would be subject to external review. Such reviews could be activated by sunset provisions for regulators of, say, five years. If the Productivity Commission was

nominated as the review body, the public interest would also be served by its powers to hold public hearings, seek information and so on.

There should be a sunset clause on regulatory bodies, with an associated provision for review by an independent body

- The Productivity Commission has the necessary powers.

5.5 SEPARATION OF FUNCTIONS

As previously noted, regulators tend to be viewed by regulated companies as the gatherers of evidence, advocates to themselves, prosecutors, judge and jury and, even, hangman. Justice needs to be seen to be done, and it may be useful to separate the administrative from the decision-making functions. The ACCC and the Productivity Commission have Heads of Office. Such positions in regulators, with the necessary powers, would provide greater freedom for regulators to float ideas, enter public debate and issue draft determinations without binding or compromising the decision making function. There could be a 180-degree change in direction from such determinations without loss of credibility.

There should be a separation between administrative functions and the decision making body with a Head of Office with the necessary powers of administration.

5.6 ROLE OF CONSUMERS

The World Bank has noted that:

“To ensure that a regulatory agency makes decision that are well informed and accepted as fair and legitimate, consumers, regulated firms and other stakeholders must have the opportunity to present their views...”

Some countries have created special consultative or advisory bodies, usually organised on an industry specific basis to advise the regulator and other public bodies. These bodies are usually part time and comprise of representatives of consumers, utilities and industry experts. Special consumer councils can be especially important in countries that lack effective advocacy of consumer interest.”
[Makholm and Smith, 1997]

In the UK, the role of consumer bodies is quite different between regulated industries, with perhaps the closest relationship occurring in electricity. Moreover, those roles have changed with the recent institutional changes and in light of the draft competition bill. While the situation is not altogether clear, we understand that an ‘Energy Watch’ council has been established to advise the new Authorities and there is a change in the relative ranking of objectives to which Authorities must have regard. Under the previous arrangements with single person regulators, ‘promoting consumer interests’ was ranked among the objectives of secondary order importance. [That said, the objective of ‘promoting competition’ was ranked in the first order and this implies that consumer interests are being served]. The objective now, is ‘promoting the interests of consumers wherever possible by increasing competition’. This is now placed at the top of the first order list.

The role of consumer bodies is also central in US regulation both in traditional rate of return and ‘true’ incentive schemes. Such bodies have the resources to conduct themselves in a highly professional manner.

In Australia, there is very little formal recognition of consumer groups, although the ORG established a customer consultative committee in 1995. Some regulated companies also operate such committees, in addition to less formal consultative mechanisms.

The problem interest groups face is lack of funding and professional advocacy during review processes. This is particularly true for residential customers and the disadvantaged. The Commission may consider arrangements by which such groups could be funded – at arms length. One important advantage of such funding is that regulatory bodies would not need to interpret their position as acting as advocate and could sit in the middle in decision making. At the same time, ENERGEX suggests that it is incumbent on regulated companies to ensure that the concerns of such groups are properly addressed.

Funding should be provided for residential and disadvantaged groups during reviews so that their cases can be made.

ENERGEX notes that the research literature on S.46 of the TPA recognises that the ultimate purpose of protecting the interests of consumers is inherent in the wording.

5.7 REGULATORY SYSTEMS

A fundamental decision about regulatory systems is whether they should be centralised or decentralised. A number of submissions from government agencies to the Hilmer Committee advocated a centralised approach. Similarly, a recent report by the Business Council of Australia calls for the creation of single national economic regulator for electricity and gas covering pricing and associated matters (BCA, 2000), but that this regulator should not be the ACCC.

Professor Rodney Maddock, however, has argued in favour of decentralisation, noting that there would be little sensitivity to the needs of individual industries and that a centralised body could be captured by 'professional fads' and consistency, he considered, could be dangerous in that climate (see the Australian, July 26, 1995).

ENERGEX sees merit in Professor Maddock's views. The Utility Regulators' Forum was initiated several years ago with the stated aim of facilitating coordination between regulators. There is also an apparent movement in Federal and State government departments towards greater centralisation in regulatory affairs with calls for 'consistency' and so on. It has to be said that regulated companies may view these developments with trepidation.

The facts are that regulators are implementing ever more intrusive command and control regimes with, as some submissions have noted, an apparent race to deliver ever-lower rates of return. Efforts to develop superior forms of regulation have been re-buffed. The one defence regulated companies have is to invest elsewhere and that is what is already being contemplated. What is heard now from some quarters is that powers should be extended to enforce investment.

In ENERGEX's view, all moves to centralisation and consistency will have negative effects under command and control regimes. What is required is competition not cooperation in these circumstances.

The Productivity Commission has previously argued (Banks, 1999) that competition between the States should, eventually, mean good regulation driving out the bad. That is not happening at the moment but is something that should be promoted.

A related issue here is the choice of regulators. Stelzer (1996) makes the good point that, in the regulatory game, people matter, and their biases, intellects and so on can affect the regulatory process in important ways. He stresses that those chosen to work in a multi-person commission should have a penchant for “economically sensible pricing” and fair-mindedness. Central planners – he stresses – “need not apply”.

The centralisation of regulation or greater consistency of regulatory behaviour between jurisdictional regulators under command and control regimes will reduce rather than enhance social welfare and should be avoided.

5.8 REGULATORY PRINCIPLES

The Commission’s Issues Paper identified three principles to be applied in regulating utilities: certainty, transparency and accountability. Elsewhere, the paper also speaks of the need for administrative efficiency, flexibility and simplicity. The Utility Regulators’ Forum, representing all Australian regulators, has proposed nine such principles [July 1999] and the Green Paper issued by the Victorian Government on the proposal Essential Services Commission identifies ten.

While all such principles may be regarded as good or useful ones, there can be tensions between pairs (eg predictability and flexibility). There is also the problem that if the range is too large or is not prioritised; regulators will simply act with little regard for the important principles. The UK has listed objectives and principles into those of primary and secondary consideration, and has ranked those in the primary category. ENERGEX has adopted that approach here.

Accountability (Prime, Rank 1)

Accountability is the quid pro quo of regulators (agents) enjoying independence from government and community control (the principals). Regulators must be held accountable for the considerable powers they yield over the revenues, costs and profits of companies, well beyond those ever contemplated by taxation authorities.

This is why the system in the United States embodies such strong checks and balances and why regulatory opportunism has been declared illegal. After all, the War of Independence was, arguably, fought on a similar issue. The Thatcher Government and its adviser, A A Walters, were anxious about this matter in setting up the UK regulatory system. As subsequent events showed, both in respect of the Professor Littlechild episode and to the ‘special’ levy imposed later, that anxiety had some justification.

ENERGEX considers that the full application of the governance arrangements proposed above will go some way to ensuring accountability, with emphasis on robust appeals mechanisms based on merit.

Predictability (Prime, Rank 2)

Section 4.3.1 made the point that predictability or certainty of regulatory regimes is essential in utility industries where investments can be for up to 40 years. As Dr Graham Shuttleworth (UK NERA) has acknowledged, the unpredictability of UK regimes is a prime cause of the poor outcomes there. His view, expressed at a forum in Australia is that good practice regulation is about inducing long-term efficiencies through investment and that stability over a significant number of regulatory periods (multiples of up to five years) is necessary for this to be achieved.

Comprehensiveness (Prime, Rank 3)

Comprehensiveness refers to the need for regulators to take account of aspects of utility services that are important to government, the community in general and the regulated companies and their customers in particular. Such aspects include economic, equity and environmental objectives.

What is so disappointing about current regulatory approaches is that they seem incapable of emulating what happens in real world competitive markets. In such markets, firms seek to identify the preferences of customers, to build relationships with them and to satisfy those preferences at least cost. Customers and the community at large do not focus on price but on a range of services that utilities can provide, including improved reliability, an uncluttered and safe environment (eg undergrounding power lines), relief for hardship cases in the provision of essential services and so on. When utilities have offered such 'packages', fully supported by independent surveys, they have been ignored by regulators, as they do not fit inside their command and control 'box'.

Flexibility (Secondary)

There is no tension between regulatory predictability and flexibility when the principles are applied with fairness and balance. Predictability requires the recognition that regulated companies have made investments on the expected returns determined by the rules at the time. This is not to say that change cannot be transitioned in over time to avoid shocks. The Commission itself established the good public policy principles involved in transitioning change in the tariff case over the 1970s and 1980s. Regulators should apply those same principles.

The flexibility principle is also related to the comprehensiveness point that regulatory systems need to continually adapt to the evolving needs of customers and the community.

Communications and Consultations (Secondary)

It is important that all stakeholders consider that they have had the opportunity to properly participate in reviews. This should be covered by ENERGEX's recommendation in Section 5.6.

Effectiveness, Efficiency (Secondary)

Such principles lose much of their meaning in the context of current regulatory approaches which are inherently heavy-handed and neither effective nor efficient. Nor are they particularly necessary under true incentive schemes where both are likely to be satisfied automatically at a low cost of administration.

Transparency (Secondary)

Similarly, transparency in decision making loses much of its meaning when regulators are fixed on achieving an outcome before a review is conducted and are not to be persuaded by what is submitted. What is required is openness of mind and this cannot be legislated for.

Independence (Secondary)

Independence from the influence of all parties in decision making is important but the power of implementation needs to be circumscribed by a sound framework of governance arrangements.

Resources, Expertise (Secondary)

Light-handed regulation requires substantially fewer resources and quite different skills. Governments should only provide resources to regulators sufficient to implement the appropriate form of regulation. A significant element in true incentive regulation would be the establishment of external benchmarks, requiring specialised consultancies.

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