Submission To Productivity Commission: Inquiry Into National Access Regime

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Executive Summary

The Energy Users Association of Australia (EUAA) welcomes the opportunity to make a submission to the Productivity Commission's Inquiry into the National Access Regime.

The Access Regimes – particularly the National Electricity Code and the National Gas Pipeline Access Code – have brought benefits to energy users and to the Australian economy. The international competitiveness of the Australian economy has improved and consumer welfare has been enhanced.

The EUAA notes that energy infrastructure owners are generally opposed to the current form of access regulation and have advanced arguments for less regulation, or even no regulation. This is unsurprising, as any form of mandatory access regime limits their ability to confer or deny access on such terms as they wish.

The EUAA's submission considers the key arguments advanced by energy infrastructure owners to roll-back regulation and examines the validity of their assertions about inadequate rates of return and the adverse impact on investments.

Experience with energy regulation in Australia clearly shows that energy infrastructure owners are enjoying good returns and investments in energy infrastructure have not diminished due to existing access regulation. However, regulators have allowed asset values for regulatory purposes to be set in excess of actual costs, preferring ones based on notional, replacement costs. As a result, significant elements of monopoly rent are embedded in network businesses.

Appeals for access regimes to be based on 'light-handed' regulation (or even no regulation) should be seen for what they are, simple rent seeking. The adverse consequences, should such appeals be met, are a lowering of the international competitiveness of Australia industry and the standards of living of Australians.

Our submission also sets out our specific responses to key parts of the PC's Position Paper.

The EUAA makes the following recommendations to the PC inquiry:

1. *The EUAA considers that the National Access Regime and the National Electricity and Gas Pipeline Codes should be maintained and strengthened along the lines suggested below in the interests of informed regulation.*
2. *The EUAA considers that effective Access Regimes need to have the following foundations: (1) strong primary legislation applying equally to all*

stakeholders without exception; (2) independent regulatory body; (3) credible and comprehensive administrative procedures and rules; (4) consistency of accounting regulation; (5) clear and fair pathways for judicial review of regulatory decisions; and (6) adequate and effective information disclosure provisions, symmetrical debate and access to the resources needed to ensure that there is symmetrical debate.

3. *The EUAA recommends the establishment of a single, well-resourced national regulator with responsibility for energy*
4. *The EUAA recommends that the PC should investigate whether the competition policy agreements, legislation and subordinate Codes should prohibit the setting of network charges based on notional costs (e.g. on replacement cost valuation) and should require regulators to include in the regulatory cost base, only costs which have been actually incurred.*
5. *The EUAA recommends that Part IIIA and industry-specific Codes provide for marginal cost pricing principles.*
6. *The EUAA recommends that the competition policy agreements, legislation and subordinate codes should prohibit the setting of user charges based on DORC.*
7. *The EUAA recommends that legislative guidance be inserted into Part IIIA to ensure ongoing efficient investments must be balanced by specific requirements that policy takes account of the need to remove monopoly rents (including through removal of the inappropriate replacement asset valuation method) and to have regard to the allocative efficiency of the economy.*
8. *The EUAA is cautions about the public benefits of Access Holidays, but would recommend consideration be given to development of contestable mechanisms (eg, allocation of franchises based on optimal tendered price and service offerings) to enable the public, or infrastructure users, to capture more of the potential monopoly rents for a specific time.*
9. *We recommend that the PC support the need for a broad-based end-user funding mechanism, based on user-pays, to apply to all aspects of energy regulation and reform, with the level of funding and allocations to be determined by an independent panel(s).*

Our responses to the PC Position Paper outlined above are also relevant to these recommendations.

The EUAA also suggests that a national program be established to monitor and publicly report on the performance of and research into possible future directions for monopoly regulation, including Total Factor Productivity and Data Envelopment Analysis. It considers that this would best be achieved through a PC research program and/or through the Regulators' Forum.

1. Introduction

The Energy Users Association of Australia (EUAA) welcomes the opportunity to provide its views to the Productivity Commission Inquiry into Access Regimes. The EUAA is a body dedicated to effectively representing the views of energy users and our submission covers only aspects of the PC review that relate to energy infrastructure.

Access to, and the adequacy of, competitively priced energy – -electricity and gas – -is essential for Australian industry if it is to survive and prosper in the modern globalised world economy.

To date, third party access regulation in Australia has been relatively successful in ensuring competition in the provision of services, thereby providing improved price and service quality benefits.

However, any form of mandatory access regime, which limits the infrastructure owner's ability to confer or deny access on such terms as the owner pleases must necessarily more or less limit the scope to maximise the extraction of monopoly rents. It is, therefore, not surprising that infrastructure owners would wish to advance arguments in favour of less regulation or even no regulation.

The EUAA strongly considers that 'light-handed' regulation of the kind energy infrastructure providers advocate (or no regulation) of monopoly infrastructure, in the face of information and resource asymmetries, is not likely to produce the benefits that access regimes should provide for energy consumers and industry. We consider that 'light-handed' regulation in the form advocated by infrastructure owners will allow the persistence of monopoly rents in the monopoly networks and lead to deadweight losses for the economy.

This submission warns against any proposal to adopt this kind of 'light-handed' regulation, based on the experiences in the U.K. since privatisation, and suggests the adoption of key foundations for good regulatory regimes. Also assessed is the validity of infrastructure owners' concerns with inadequate returns and the adverse impact on investments. The submission examines the need to enshrine in relevant legislation (to guide regulators) the explicit adoption of economically efficient pricing principles, the use of actual costs in the regulatory asset base, the removal of monopoly rents and considerations to enhance the allocative efficiency of the economy.

2. Effective and Informed Economic Regulation

2.1. 'Light-Handed' Regulation

The pricing and provision of natural monopoly infrastructure – such as electricity transmission and distribution networks and gas pipelines – are among the most important determinants of the international competitiveness of the Australian economy and Australian living standards. By providing access to monopoly infrastructure facilities, competition in upstream and downstream markets can mean lower prices, choice of service provider, more innovation and better quality services, and a more efficient utilisation of the infrastructure facilities.

Unlocking these benefits, however, importantly depend on the terms and conditions of access, including the price at which service providers are charged by monopoly infrastructure facilities owners. Effective and efficient access regimes based on informed economic regulation can deliver these benefits, by seeking to replicate competitive market outcomes.

However, there has been a vigorous debate over what constitutes effective and efficient regulation. Infrastructure facility owners have sought to roll-back regulation by complaining about 'over-regulation' or 'heavy-handed' regulation, whilst others have pejoratively referred to the current Australian regulatory approach as a 'command and control' system.[1] Thus, AusCID (2000, p 6) claims:

> "The supposed 'light-handed' approach promised at the time of asset sales and in the Hilmer report has been lost. Instead 'heavy-handed', intrusive, information intensive and expensive regulation has been delivered."

Whilst infrastructure facility owners have not been specific about what constitutes 'light-handed' regulation (a problem in itself), they appear to be urging the adoption of the CPI-X price-cap regulation approach, as originally proposed by Professor Stephen Littlechild (1983). At the time, this was envisaged to be a proposal for 'light-handed' regulation, which would be superior to the traditional USA regulatory practice.

As Carpenter and Lapuerta (1999 p 7) reported:-

[1] This debate is not unique to Australia, with infrastructure owners in overseas countries making similar claims. See for example, Littlechild, S. C., "Competition and Regulation in the UK Electricity Industry (With a Brief Look at California)", *Journal of Applied Corporate Finance* (forthcoming).

> "The Littlechild Report proposed a relatively simple alternative to lengthy regulatory proceedings. Average prices were to be set by a mathematical formula involving 'RPI minus X'. A reasonable benchmark price cap would be selected as the starting point for the regulated company, and would automatically be increased in each year to track inflation as measured by the retail price index ("RPI"). At the same time, the percentage increase in prices would be offset by a specified factor known as "X" selected by reference to a target level of efficiency improvement for the regulated company. The intention was to select an "X" factor that would provide consumers some share of the benefits anticipated from increased productivity. At the same time, investors would benefit if the regulated company's productivity improvements exceeded "X" percent per year."

2.2. Overseas Regulatory Experience To Date

Drawing on the experience of British gas regulation, Carpenter and Lapuerta (1999, p 1 and 2) concluded:

> "Although attractive in theory, the implementation of light-handed regulation in the United Kingdom has faced several problems. First, light-handed regulation has not worked as anticipated to avoid the need for lengthy regulatory proceedings. Second, light-handed regulation has unintentionally created inefficient incentives for regulated companies. Third, light-handed regulation has not successfully constrained the monopoly power of incumbents".

Moreover, Carpenter and Lapuerta (1999, p 22) noted that:

> "Regulators have had to confront issues related to the measurement of assets, depreciation, rates of return and cost projections... . Furthermore, light-handed regulation has exacerbated the information disadvantage of regulators, which has been exploited successfully by regulated companies".

Their comments are supported by, and are consistent with, the views of Beesley (dubbed the Austrian god-father of UK regulation) and Whittington, especially in regard to the need to supplement price cap regulation with "a larger set of information", including the regulated rate of return, the regulated asset base (Whittington, 1998 p 20) and information involving "attribution of costs and with joint costs, mark ups". (Beesley, 1997 p 5).

Thus Whittington (1998, p 1) stated:

> "Experience since privatisation has shown very clearly that price cap regulation does not avoid the need for calculating the rate of return, with its attendant difficulties. When the price cap is reviewed, projections are made of the prospective cash flows resulting from alternative price caps. In choosing an appropriate price cap, a critical factor will be whether the resulting cash flows available to shareholders are excessive, and one method of checking this is to look at the resulting rate of return on a measure for shareholders' funds, i.e. the regulatory asset base. This process has now become a routine aspect of regulation in telecoms, gas, water, electricity and airports."

The reality has been that:

> "RPI-X regulation as originally proposed is not sustainable without an analysis of costs (Carpenter and Lapuerta, p 9)…. RPI-X regulation in the United Kingdom has since evolved into a cost analysis quite similar to United States regulatory practice. Regulators assess the value of existing investments that should be recognised in the determination of prices. They also estimate a reasonable rate of return on this investment and project its depreciation over the 'control period', which refers to the number of years before the question of reasonable prices will be revisited. Projections of operating costs and capital expenditures for the control period are also involved. Prices are then set at levels which, when adjusted over the control period by RPI-X and accounting for projected change in volumes, will compensate for operating costs and a reasonable rate of return on investment". (Carpenter and Lapuerta, p 10).

The British regulatory regime described above is very similar to the Australian regulatory approach to electricity networks and gas pipelines. However, Carpenter and Lapuerta pointed to two major differences between the British (and Australian) approach and that of the United States.

Unlike traditional United States regulation, the British regulatory system determines compensation in advance for investments that are projected throughout the control period. But "regulated companies have an information advantage over the regulator, and have an incentive to distort the amount of capital expenditure that will be required over the control period. Once the regulator is persuaded of a company's projections and uses them to set prices, the company then has a financial incentive to abandon the initial plans and simply collect compensation for investments never undertaken". The extent of 'underspend' is illustrated in Box 1.

Box 1
Regulatory Gaming Under Light-Handed Regulation In The United Kingdom: Examples

The phenomenon of the 'underspend' can significantly adversely affect consumer interests. The National Grid Company had persuaded the regulator that the electricity transmission network required £1.6 billion in capital expenditures between the years 1993 and 1996. This forecast was incorporated into the RPI-X formula. Actual expenditures were only £900 million or roughly 45 percent less than forecast. Thus, over three years consumers of electricity effectively paid to finance £700 million in investments that were never made.

The 'underspend' for British Gas has also been dramatic. Between 1994 and 1996 British Gas actually spent only £2.1 million in capital expenditure compared with a projected amount of £3.1 billion (which was the basis for price setting).

Source: Carpenter and Lapuerta (1999, p 11).

Another difference between British (and Australian) and United States regulation, can be seen whereby, with the latter, gas pipeline companies, for example, are free to offer discounts to avoid the potential loss of customers, but the discount to any one set of customers does not allow the pipeline company to raise the rates on others. The British (and Australian) regulatory approach does not constrain the pipeline company's discretion over prices within the scope of the broad regulatory formula (although there are constraints in the case of electricity in Australia such as the side constraints adopted by most regulators on the maximum price increase per year). The adverse impact on customers can be seen in Box 2.

The EUAA notes, from the above discussion on the United Kingdom regulatory experience, that 'light-handed' regulation as initially adopted in the United Kingdom had disadvantaged consumer interests and created inefficient incentives. However, it is noteworthy that the United Kingdom regulatory approach has evolved from the initial RPI-X mechanism (as originally proposed by Littlechild) and is an approach that has been adopted in Australia in electricity networks and gas pipelines regulation. The distinction often drawn by regulated businesses between price cap regulation and rate of return regulation is a false one. There is no avoiding of the question of costs, cost allocations and rates of return, if abuses of monopoly position are to be avoided or reduced. It is also noteworthy that the regulatory deficiencies highlighted in Boxes 1 and 2 (the underspend and the inefficient incentives examples) potentially apply in the Australian regulatory context and would need to be addressed in the light of regulatory experience.

Box 2
Discounting And Reloading Within Price Caps

	Optional Commodity Tariff Customer (pence)	Other System Users (pence)	Average Large User Price Cap (pence)
1997 Rates	0.85	1.86	1.76
Case 2: No Bypass	0.49	2.15	1.48

In 1997 Transco, the pipeline subsidiary of British Gas proposed new tariffs on the assumption that additional volumes would reduce the average cap from 1.76 to 1.48 pence per therm. The average price for customers receiving the new tariff could fall from 0.85 to 0.49 pence per therm, which would allow Transco to raise the rate on other large users from 1.86 to 2.15 pence per therm, while complying with the new lower price cap.

British Gas's ability to charge different rates to different customers and still meet the average price cap creates inefficient incentives to encourage new volumes. These tariffs were approved by Ofgas.

Source: Carpenter and Lapuerta (1999, p18-21).

2.3. Australian Regulatory Experience

The EUAA, however, emphasises that notwithstanding some deficiencies in the Australia regulatory regime, it has in the short period to date, produced some useful benefits to consumers and to the Australian economy. There have been price reductions in network charges to remove some of the monopoly rent, and service quality and reliability have improved to some extent. Productivity is considerably higher, even where corporatised public utilities remain government-owned and, where they have been sold to private interests, the culture of formerly government-owned business has changed into one that is gradually becoming more customer-focused and oriented towards profit maximisation. Nevertheless, EUAA members have often experienced changes that are too slow and moderate.

However, we reject notions that the current regime is not a form of incentive regulation. The regime that is used relies on incentive mechanisms to give regulated businesses incentives to pursue greater efficiencies – they then get to keep these gains for several years before they are returned to end-users – and these incentives are designed to ensure that the businesses pursue them on an ongoing basis, regardless of the timing of regulatory resets, etc.

The position adopted by regulated energy businesses has recently been tested in the Supreme Court of Victoria in the appeal by TXU against the Regulator-General's electricity distribution price determination. TXU appealed on the basis that the regulator has exceeded its authority, not applying incentive-based price caps, but rather rate of return regulation. On 17th May, J. Gillard dismissed TXU's appeal, concluding that:

> "In my opinion, the price fixing methodology was incentive based and so was the result. It was not rate of return methodology" (p. 86)

This decision sets an important legal precedent on economic regulation in Australia and puts a 'stake in the ground' on the issue of incentive regulation and how to apply it. The PC should carefully note of the decision.

It is true that the existing approach involves some detailed or forensic assessments of aspects of business operations and the setting of a rate of return, but we would agree with regulators that this is necessary to make regulation effective and consistent with its 'incentive' objective. As noted above, the regulated return is itself set with incentives for the business to outperform it over the regulatory period. And the setting of somewhat detailed regulated parameters for the business is, we would argue, necessary at this early stage of energy network regulation in Australia as:

- There is no accepted and independent data on total factor productivity (TFP) for energy networks, let alone a historical time series or accepted means of forecasting TFP; and
- Costs have declined but it is generally agreed that there is scope for them to decline further and avoid the well-known tendency for regulated businesses to 'under-spend and keep the difference'. Regulators in Australia have not yet established robust means of ensuring that only efficient costs are passed-on to end-users, although improvements are clearly occurring.

When applied overseas, so-called 'light-handed' regulation has exacerbated the information disadvantage of regulators/users, which has been exploited by regulated companies. In addition, experience to date in the UK and US suggests that attempts to apply 'light handed' regulation have failedThe EUAA considers that the Australian regulatory regime is evolving and that it needs to be encouraged to continue to do so. Regulators should address identified deficiencies as part of this process.

Indeed, the practice of regulating monopolies is not yet perfect and is itself evolving as experience is gained and skills are deepened. Australian regulators should be encouraged to contribute to this development and learn from overseas regulatory

experience. One possible direction for the future could be adopted from the Scandinavian countries, where regulators are seeking to adopt new techniques for incentive mechanisms (such as Data Envelope Analysis and Total Factor Productivity Analysis). More informed regulation utilising benchmarking, non-linear pricing, accelerated depreciation techniques, yard stick studies and the use of standardised regulatory charts of accounts are other possible directions.

Changes in market developments enhancing competition between gas and electricity (and gas on gas competition) and the advent of multi-utilities, will require regulators to adapt to the evolving market conditions and to adjust regulatory activities accordingly. In addition, regulators should be encouraging the use of competition and contestability in energy networks where this is possible, such as through network by-pass and in augmentation. They have shown some willingness to do so, but progress has been too slow. All of these challenges require informed, effective and efficient regulation.

The EUAA remains uncertain as to which (if any) of these emerging practices would offer superior outcomes to the existing Australian regulatory practice. We recognise that there are shortcomings in the existing regulatory approach and are certainly not opposed to change. However, we would want to be certain that any change involves improvements and caution the PC that it would be premature (and reckless) to abandon current practice without knowing more about the impacts of what would replace it. We are particularly concerned that the customers of regulated monopolies should be able to participate on equal terms in this debate, that too little is known about the performance of alternative regulatory regimes, that there are still considerable doubts about the efficiency of regulated costs and that there is insufficient data in Australia at this stage to enable application of techniques such as DEA and TFP. Nevertheless, work to examine and possibly overcome these deficiencies should be encouraged (perhaps through a PC research program and/or the Regulators' Forum).

As Stephen Littlechild (2001, p 21) states:-

> "The United Kingdom experience also illustrates how the regulator has needed to be constantly active, not only to control and provide incentives for the monopoly networks but also to promote competition into and across those networks, and to ensure that the competitive market works to the benefit of customers."

The EUAA would be very concerned if, in the light of United Kingdom regulatory experiences, the basic framework for the National Access Regime (and hence the legal and policy underpinnings for the Electricity and Gas Pipeline Codes) were to be eroded in the perhaps laudable, but sometimes impractical, pursuit of 'light-handed' regulation. The orchestrated efforts by network owners to roll-back regulation, under the guise of 'regulatory risks', investment 'strikes', etc, should be seen for what they are and what they represent – the special pleadings of the very

monopoly businesses being regulated. Regulatory gaming exists in Australia and can be seen in the submission from the Energy Markets Reform Forum, entitled "The Regulation Game -Third Party Access To AGL Gas Networks: A Case Study Of Regulatory Gaming".

Recommendation 1

The EUAA considers that the National Access Regime and the National Electricity and Gas Pipeline Codes should be maintained and strengthened in the interests of informed regulation.

2.4. Foundations of Good Regulation

Good regulation benefits both investors and consumers. Accordingly, the EUAA supports the following foundations for sound regulatory regimes (Makholm, 1999, p 11-14) and makes the following suggestions for improvements in the energy regulatory regimes:

1) Strong Primary Legislation
   Regulatory policies should be part of primary law, which reflects public interest, rather than special vested interests. This is essential as it provides "certainty, stability and the foundation for economical long-term financing" (Makholm, 1999, p 11). In the EUAA's view, State interventions have created distortions and reduced economic efficiency. There are far too many exemptions and derogations by the States from the National Electricity and National Gas Codes. The States have been able to enshrine a replacement costs asset valuation methodology - Deprival Value - in the National Electricity Code, which regulators have subsequently and inappropriately adopted as Depreciated Optimised Replacement Cost, or DORC. and They have consequently introduced significant pricing and broader economic distortions that have resulted in deadweight losses for the economy.

2) Independent Regulatory Body
   Accountability and the creditability of regulatory decisions and processes are essential. A professional and independent regulatory agency will provide confidence and certainty to all stakeholders regarding the creditability of the regulatory decisions. In the EUAA's view, however, State-based regulation detracts from this through inconsistency, overlap and limitations on regulatory independence.

3) Credible and Comprehensive Administrative Procedures and Rules

These are important to ensure transparency and a participatory process open to all stakeholders. However, there are concerns with some State-based regulatory processes, especially with regard to inadequate transparency, information disclosures, and impartiality. Some regulators, such as the NSW IPART in respect of gas, are not subject to administrative law appeals, whilst the appeal processes under the ORG Act in Victoria are fatally flawed[2] and this has affected perceptions about aspects of regulatory determinations.

4) Accounting Regulation

Consistency of regulatory accounting methodologies, systems and frameworks is essential for good regulation. This requirement is not enshrined in the Electricity and Gas Codes, nor have these issues been apparently addressed or resolved by the Regulators' Forum. Regulatory consistency is required in the treatment of key regulatory variables such as the asset valuation of easements, the treatment of depreciation and removing the opaqueness of the assumptions behind regulatory asset valuations.

5) Clear and Fair Pathways for Judicial Review of Regulatory Decisions

The EUAA believes that appeal rights are biased against consumers in both the National Electricity, Gas Pipelines Codes (see footnote 2) and the ORG Act (see comments above). This deficiency needs to be addressed to provide consumers with a balanced regulatory process.

6) Information Disclosures and Debate

Effective regulation also requires adequate information disclosure and symmetry in the ability of both sides (the regulated entity and its customers) to debate and participate equally. Whilst it is acknowledged that availability and disclosure of information is not costless, there is little sympathy for network owners' complaints against 'information intensity' (AGA, p 16). In the EUAA's view, this requirement should be added to Makholm's five foundations for effective regulatory regimes. In this regard, it is worth referring to Beesley (1997):

[2] These fundamental flaws were exposed following the final determination of the ORG on electricity distribution prices. Flaws include the undue haste with which appeals are heard and determined (within 14 days), the lack of competence of the appeals panel to hear complex legal and regulatory arguments, the ability of the regulated businesses to use the appeals process to 'claw back' significantly on the ORG decision (estimated by the EUAA to amount to $100m) and the decision of the panel not to permit representatives of end-users to participate in the appeal.

> "……..because I have been dubbed the "Austrian god-father" of United Kingdom regulation perhaps I should end by indicating where I think Austrian insights are essential to regulation, United Kingdom style. First, underpinning both sides of the regulatory tasks, price control and competition, is the Schumpeterian understanding of how profits are made and dispersed; and, particularly on the competitive side, the Hayekian insistence that it is competition (i.e. entry, in the current case) which creates the information which both regulators and regulated have to use. Marrying these two neo-classical views of what is meant by costs is the main intellectual challenge now facing regulators." (p 17)
>
> "Dearth of information about future choices is by no means confined to the 1993 report. It has been repeated in MMC publications in regulatory matters, as with all references. This raises acute problems of public interest. I think that the cloak of 'commercial confidence' is far too freely used. The problem has worsened over the years. In a natural monopoly context it is inconsistent with the increasing ability of the public to criticise both regulators' and firms' positions which I have noted as a major gain for privatisation.
>
> Moreover regulators have rightly become increasingly concerned, over the years that there should be informed debate, involving all interests, at a price review. The implication of any emphasis on the importance of forward looking estimates of expenditures is that disclosure of information during a review consultation period should go beyond predictions about possible effects on accounting rates of returns to the underlying projected expenditures. They should be given in sufficient detail to enable informed views to be taken and counter-views expressed. This is particularly important where competitors have a keen interest in how the computations affecting the future of competition over the pipelines and wires are to be made and so affect them and their integrated incumbent competitor." (p 13, 14)

In the EUAA's opinion, information disclosures problems have been a key element of regulatory gaming in Australia. They have been responsible for unreasonable delays in regulatory reviews and for poor regulatory outcomes (Energy Markets Reform Forum, 2000), consumers have been disadvantaged and competition benefits deterred. Some regulators have been unwilling to insist on information disclosures to assist with informed regulation.

It is also an unfortunate fact that end-users are not able to participate as effectively as regulated businesses in the regulatory process. All classes of customer are severely disadvantaged by a combination of factors including a far more limited knowledge of the issues, the fact that they represent a very disparate range of interests (who often do not fully appreciate or understand what is at stake), far more limited access to information (and the ability to assess it) and a lack of resources.[3] This situation is made worse because, built into the costs of every regulated business, are the costs of complying with the regulatory regime.[4] It is offensive to customers that, not only can they not participate effectively in regulatory processes themselves, but they must also pay for the costs of regulated businesses to participate out of the regulated charges levied on customers.

It is important to understand that good regulatory practice requires the regulator to act as an 'impartial umpire' and make determinations in the public interest. Good information is one key ingredient and the equal participation of both regulated entities and customers in a public process is another important way for the regulator to perform this function. If the regulator cannot do this and is forced by the dominance of the regulated entities to make up for the deficiencies of the other side, there are more likely to be accusations of "customer bias" levelled against the regulator, increasing the likelihood that the process will loose credibility in the eyes of all parties. This situation, which we believe is a form of market failure, exists in Australia and is evident in the response of regulated businesses to this inquiry.

Recommendation 2

The EUAA considers that effective Access Regimes need to have the following foundations: (1) strong primary legislation applying equally to all stakeholders without exception; (2) independent regulatory body; (3) credible and comprehensive administrative procedures and rules; (4) consistency of accounting regulation; (5) clear and fair pathways for judicial review of regulatory decisions; (6) adequate and effective information disclosure provisions, symmetrical debate and the resources to ensure that there is symmetrical debate.

[3] This fact has recently been recognised by NECA in respect of the NEM. NECA has recently issued a report (and proposed draft Code changes to the ACCC) that supports the need for end-user advocacy and proposes to fund it though NEM charges. However, one of the shortcomings of the proposals is that they would not apply to distribution pricing (a significant component of electricity customer charges) because these remain as State responsibilities and the States have put in place Code derogations.

[4] For example, the Victorian electricity distributors were permitted some $67 million in aggregate over the period 2001-05 for regulatory purposes. Customers were not granted one cent, but are required to fund the distributors' regulatory efforts.

3. Regulatory Performance

A number of submissions have made comments about the performance of regulators in Australia. The EUAA's comments on this are provided under several headings below.

3.1. Regulatory Independence

There are suggestions that the ACCC is not an independent regulator, as it is "perceived by business and investors to be a consumer focused organisation" (AusCID 2000, p 15). Whilst the EUAA would not always agree with the ACCC's determinations or actions, there has never been any doubt about its independence (with respect to energy regulation), although there are concerns that its tendency is to err on the side of the interests of network service providers given the regulatory approach adopted (see King 2000, p 7). Its regulatory processes are generally transparent, and in the main, the Commission has sought to ensure that all stakeholders have opportunity to participate in regulatory reviews in an informed way.

A strong attribute of the ACCC is its generally good governance structures, an attribute lacking in some of the less established regulatory or quasi-regulatory institutions. The EUAA generally accepts the independence of the ACCC; anchored as it is, under strong primary legislation, with relatively clear pathways for adjudicating disputes and appeals.

The EUAA is, however, less comfortable with some other regulatory institutions. There is evidence of State parochialism, with its attendant difficulties with respect to the regulatory treatment of State owned assets. The tendency for certain State Governments, Treasuries and Premiers to intervene in regulatory cases involving State-owned enterprises, and their power to influence regulatory outcomes are a major cause for concern. Examples include the acceptance by the State-based regulatory bodies of the Treasury-sponsored regulatory asset bases (eg the NSW IPART 1999 Final Decision on Distribution Network Prices), and the generous treatment recently given to Energy Australia in the extended time frame allowed for refunding very substantial amounts of revenues over-recovered from consumers (identified as $213 million, or over 20% of its annual revenue).

3.2. Number of Regulators and Regulatory Consistency

The EUAA has much empathy with submissions expressing concerns with the number of regulators (eg BHP Petroleum 2001, p 73 and Stanwell Corporation

2000, p2). In addition to the direct costs of funding the various regulators (10 electricity and gas regulators) plus two quasi-regulators, there are also very substantial indirect costs, arising from regulatory inconsistencies, inadequate accountability and overlap. In the electricity sector, in addition to the ACCC and State regulators, there are two other bodies with quasi-regulatory functions – NEMMCO and NECA. Stakeholder accountability remains inadequate and a jurisdictional–sponsored governance review, initiated more than 2 years ago with recommendations for better governance arrangements and accountability, has not yet had any of its key governance recommendations implemented.

Regulatory inconsistencies in a number of significant areas are a major cause of concern: valuation treatment of easements, depreciation, regulatory assumptions in asset valuation calculations, and distribution network pricing principles are just some of the important areas. Standardised regulatory charts of accounts are yet to surface.

3.3. Resourcing of Regulator

A well-resourced and focused regulator of national energy issues can deal with many of the concerns express by regulated businesses with respect to regulator performance and delays in completing regulatory reviews (AGA 2000, p 17, 19) and the perception of a conflict of interest regarding the ACCC's role as a regulator and as a 'consumer advocate' (APIA 2000, p 10-12). It can also avoid being involved in day-to-day issues that have political dimensions or avoid being distracted by the need to respond to political masters.

In 1998/99, the New South Wales Independent Pricing and Regulatory Tribunal cost $5.3 million to operate. For that funding, the Tribunal performed a very wide range of regulatory activities involving the energy sectors and other sectors, including: -

- A major electricity pricing review;
- A final gas distribution access arrangement for Great Southern Networks;
- Investigated access arrangements for Albury Gas Company and AGL Gas Networks;
- A review of NSW Health;
- A review or the Taxicab and Hire Car Industries
- Two reports on aspects of development control fees; and
- Reports in aspects of rail and on rail safety.

However, the EUAA recognises that, to be effective, regulators also require high quality resources, that dispersing available resources among multiple State regulators is wasteful and inefficient, and that regulators must be independent and transparent.

Recommendation 3

The EUAA recommends the establishment of a single, well-resourced national energy regulator with responsibility for electricity and gas. This could be either the ACCC (with additional powers to deal with the issues at hand), or a separate body, with the ACCC having a competition oversight function (along the lines of the Ofgem/Competition Commission model in the United Kingdom).

4. Inadequate Returns and Impact on Investments

Many regulated businesses and their representatives have expressed a view to this inquiry that investment in infrastructure is being threatened by intrusive regulation. For example:

> "In AusCID's opinion there is no doubt that the attractiveness of Australia as an investment destination has suffered due to the recent series of decisions by Australian regulators both directly (investments in infrastructure) and indirectly (lack of investments leading to increased cost of doing business in Australia and perceived sovereign risk issues)." (AusCID 2000, p 7)

> "Speaking at AusCID's annual conference in Melbourne this year the head of infrastructure investment at AMP Henderson, Mr Danny Latham, said that "AMP has not invested in Australian infrastructure for two years because of perceptions that the sector was over-regulated." (AusCID 2000, p7)

The EUAA would make two comments in relation to concerns expressed over inadequate regulated returns and their deterrence of infrastructure investments.

Firstly, the EUAA would endorse the following statement by the ACCC Chairman, Professor Alan Fels, in December 2000 (quoted in a recent exchange of correspondence with Pipeline Industry representatives and reported in the *Australian Financial Review*):

> "The numbers of the rate of return which have been used in recent ACCC decisions do not seem ungenerous. They are above the average return on shareholder funds for Australian business and at the high end of international regulatory benchmarks. Pipeline operators nevertheless have the opportunity to demonstrate that investments may be deterred and the ACCC will take this into consideration.
>
> For example, in Australia the return on equity for gas transmission for Victorian gas was determined by the ACCC in October 1998 at 13.2 percent. Other ACCC determinations were Central West Pipeline 15.4 percent (June 2000) and Moomba-Adelaide 13.0 percent (August 2000).
>
> This compares favourably with the Australian superannuation funds' pooled three year average return of 10.4 percent or the

> Australian Stock Exchange's return on equity over ten years of 11.3 percent. Further recent international energy decisions compare favourably. In the United States, gas and electricity returns in California were 10.6 percent and 11.6 percent (1998, 2000) and in the United Kingdom, Ofgem struck a rate of 6.0 and 6.5 percent for electricity transmission and distribution in 1998 and 2000.
>
> Moreover, the ACCC values assets on a replacement cost basis, again an approach not likely to deter investments.
>
> Finally, Mr Beasley is right in saying that the returns above are not guaranteed. However, he conveniently fails to mention that, in practice, returns may well prove to be higher than the project suggests because 'incentive price mechanisms' are used." (quoted in AGA 2000, p 24).

The rate of return numbers provided by Professor Fels show that Australian regulated returns are clearly higher than overseas returns and comparable returns in alternative Australian investments. However, not only are returns higher, they are based, for regulatory proposes on inflated asset values (i.e. the regulatory asset base) because of the use of the replacement cost asset valuation methodology. In other words, users of the services provided by regulated businesses have to accept a double jeopardy. DORC valuations, which generate rates of return on capital invested in excess of competitive market rates of return, as well as rates of return that are above what would be expected for assets in very low risk mature energy networks.

In a recent study, NERA compared regulated rates of return for electricity, gas and water utilities across the US, Canada, UK and Australia concluding that:

> "The average declared 'Vanilla' WACC in Australia is significantly higher than those surveyed from the UK and slightly higher than in North America. … (This) suggests that Australian regulated businesses are not under-compensated compared to their international counterparts."
> (Greg Houston, NERA, presentation to ACCC, *Regulation & Investment* Conference, Manly, 26-27 March 2001)

The results of this survey show that 'vanilla' WACCs averaged 5.6% in the UK, 6.6% in North America and 6.8% in Australia.

Also, it is well known that mature energy networks are operating in low risk sectors and should earn commensurately lower returns than firms operating in competitive markets. Yet this is clearly not the case. Professor Fels' comments make clear that they are earning well above normal rates of return for Australian business. International benchmarking studies also show that energy utilities in

Australia are being set rates of return that are well above those of their UK counterparts.[5]

Secondly, the 'inadequate returns" do not seem to have adversely influenced investors' perceptions of the 'regulatory risks' visited upon regulated businesses (see Box 3). In this regard, it is interesting that the response of financial markets to the recent ORG electricity price determination in Victoria was one of 'business as usual'. There was no panic and several ratings agencies maintained existing credit ratings for the utilities, a key objective of the ORG determination. Nor have the returns provided deterred investments (see Box 4 and 5). In Victoria, the ORG has permitted the distribution businesses capital expenditure programs of $2 billion over the next five years, based on assessing their requirements and independently developed benchmarks. This level of expenditure is sufficient to allow the businesses to undertake substantial capital programs and deliver improved service to customers.

There is also evidence of significant future pipeline investment in Australia, with proposals for pipelines across Bass Straight to Tasmania, from south-western Victoria to South Australia and also a south-eastern Australian 'loop'.

The recent decision of the Australian Competition Tribunal, revoking coverage of the Eastern Gas Pipeline, is also an indication of the continuing development of pipeline regulation in Australia. However, the subsequent application by Eastern Australian Pipeline Ltd to also seek revocation of the Moomba-Sydney pipeline from its coverage by an access regime raises important and possibly threatening issues for gas users.

The EUAA further observes that provided utilities are allowed to earn a market based return that is commensurate with risk, funds for new investment will be forthcoming. In fact, as pointed out earlier, Australian regulators have allowed utilities to commence recovering the cost of new investments before they actually need to spend the money during the price control period, thereby providing a rather generous treatment to utilities, which customers pay for before they get any service from the assets. There are no companies operating in competitive markets that can get their customers to subsidise/underwrite their investment or funding requirements through regulated prices.

The ACCC has also signalled some difference in approach as between mature networks and greenfields projects, with the latter receiving higher risk/potential rewards. This was the case in regard to the Central West Pipeline referred to by Professor Fels (see above), where the regulated rate of return was considerably higher than for mature gas pipelines (although not as high as that sought by the access arrangement applicant).

[5] See for example, Greg Houston, NERA, presentation to ACCC, *Regulation & Investment* Conference, Manly, 26-27 March 2001.

Box 3
Utilities Carry Traders' Hopes

Mark Todd finds that dull, safe haven stocks are beating the All Ords index.

Utilities were hardly the most sought after property on the Monopoly board but in the real world investors have made some handsome gains from the sector in the past three months.

In fact, according to investment bank Salomon Smith Barney, the infrastructure and Utilities index has beaten the All Ords by 25 percent in 2000.

The implosion of technology stocks has bolstered the utilities' reputation as a haven in times of sharemarket strife.

SSB notes the emergence of two distinct groups which would tend to suggest some utilities are safer than others.

Those operating in regulated poles and wires and pipes businesses, normally regarded as low-growth, low-return stocks, have on the whole outperformed their higher-risk counterparts, the ones beavering away in non-regulated energy markets.

Taking that line, it is a choice between Australian Pipeline Trust, Envestra, and to a lesser extent AlintaGas in one corner and AGL, United Energy and Orgin Energy in the other.

One interesting point, SSB found, is the traditional, regulated utilities are trading above their valuations, while so-called growth-oriented utilities trade at a discount.

Plugging into the Energy Action

	Share Price	% Yield 2001*	SSB Valuation Range
AGL	$11.76	4.4	$11.27-$11.80
Australian Pipeline	$2.55	8.0	$2.13-$2.15
AtintaGas	$2.82	6.4	$1.45-$2.58
Envestra	$0.92	10.3	$0.77-$0.79
Origin	$2.05	6.1	$2.14-$2.31
United Energy	$3.29	5.3	$3.72-$4.17

*Forecast Source: Salomon Smith Barney

Source: Australian Financial Review, 9 November 2000

Box 4
Investments in regulated networks

QNI Transmission	Regulated transmission	QLD/NSW	500/1000 MW
TransGrid	Other regulated transmission	NSW	$800m+
Powerlink	Other regulated transmission	QLD	$700m+
NSW DNP's	Regulated capital expenditure	NSW	$2,000m+
VIC DNP's	Regulated capital expenditure	VIC	$2,000m+

Source: Australian Co-generation Association

The use of Mr Latham's comments in the AusCID submission is quite misleading (see above). There is a huge difference between declining to purchase shares in companies enjoying capitalised monopoly rents and declining to invest in new projects involving infrastructure investment. No doubt prudent investors declined to invest in slaves in the United States from the late 1850s on, but this does not demonstrate that the abolition of slavery was inefficient from an economic point of view. The word "investment" in the popular sense connotes buying anything that yields profits, but investment in the economic sense means the formation of new physical capital.

Wasteful rent seeking activities occur precisely when monopoly rents are awarded as regulated profits. Allowing infrastructure investors to capture monopoly rents is likely, one way or another, to induce excessive or inefficient investment.

Losses from complete non provision of infrastructure may exceed losses from over priced infrastructure, as argued by some bodies representing the infrastructure industry (NECG 2001, p 3, 20-24) and accepted in the PC's Issues Paper. But this does not extend by logic to the argument that economic losses associated with under investment are likely to outweigh losses associated with above cost pricing, which has a curious degree of asymmetry about it. In fact, neither situation is desirable or sustainable for users.

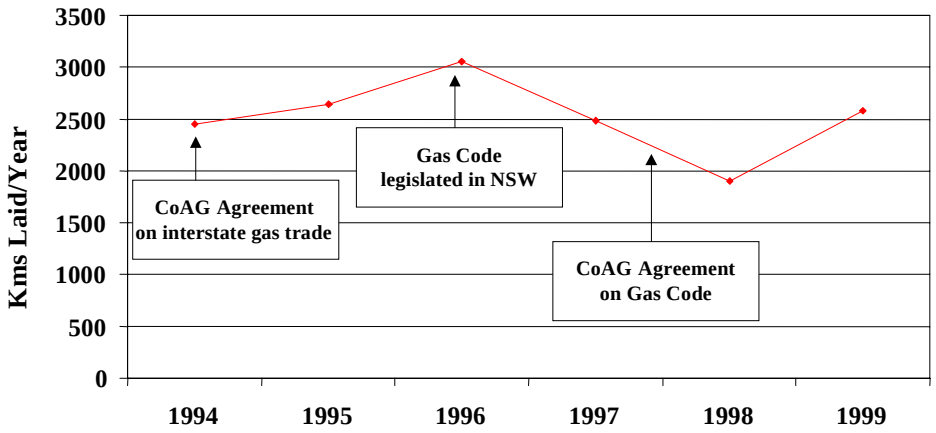
Clearly, the deadweight loss involved in infinitely high pricing exceeds the deadweight loss associated with excessively high pricing. In dealing with a monopoly supplier of infrastructure, whether the public is clearly better placed if it has some infrastructure needs to be kept in perspective. It assumes that no other infrastructure investor would supply infrastructure on reasonable terms if invited to tender for a franchise by the Crown. Ultimately, the monopoly element lies in the capital invested in the Crown's control of rights of way and easements. The argument that the public should accept any price charged by an infrastructure provider as better than nothing is like an argument that the Crown should give away Crown land for nothing on the basis that it is necessary to do so to persuade anyone to build on it.

Box 5

Impact of Access on Pipeline Investment

The natural gas pipeline access code (the Code) was substantially completed by 1996, and NSW passed legislation in 1996 to apply the then draft Code. This enabled access to proceed in that State without delay while the Code was finalised. CoAG agreed to adopt the Code in November 1997. Thus the policy environment for new pipelines (transmission and distribution) investment has been known for some 3-4 years. BHP has seen no evidence that investment in pipelines is being deterred by the Code. This is borne out by the graph below, which shows a continuing strong level of gas pipeline construction (although it should be borne in mind that pipeline investments can be lumpy):

New Gas Pipelines in Australia



Source: AGA

Indeed, there is some new pipeline investment that is directly attributable to the introduction of access. BHP developed the Eastern Gas Pipeline project on the basis that access would be available to the existing NSW gas distribution system. The pipeline would not have been built without access. Thus the Eastern Gas Pipeline is a $450 m project that has been directly facilitated by the Code.

The fact that access has had no negative impact on pipeline investment in Australia should be no surprise. This is consistent with experience in the USA and in Canada, where pipeline investment has thrived notwithstanding a rigorous and sometimes onerous regulatory environment.

Source: BHP Petroleum, 2001

Overall, the EUAA suggests that insufficient information has been advanced to substantiate claims of inadequate regulated returns and their deterrence of investments. On the contrary, the evidence is that new investments in existing businesses and in greenfields projects are occurring. The introduction of access regimes has also resulted in new investments benefiting competition in downstream markets. If anything, regulated returns appear to be for too generous, as they are based on inflated asset values and rates of return. The regulators' adoption of replacement cost asset values risks embedding monopoly rents in the network infrastructure, perpetually condemning users to high network charges. In fact, inefficient price signals can be set, which attract over investment in 'safe' regulated networks. There have been several cases of network owners seeking regulatory approval for network augmentation proposals without exploring least-cost options, such as demand side management or co-generation options (eg the present Sydney CBD augmentation) and the problem was also apparent during the recent ORG review of Victorian distribution charges, until end-users forced ORG to accept some proposals to force the distributors to take account of competitive options to network investment.

Recommendation 4

The EUAA recommends that the PC should investigate whether the competition policy agreements, legislation and subordinate Codes should prohibit the setting of network charges based on notional costs (e.g. on replacement cost valuation) and should require regulators to include in the regulatory cost base, only costs which have been actually incurred.

5. Pricing Principles

Pricing is critical to the access decision and the development of pricing principles is fundamental to an effective access regime:

> "Given the critical importance of decisions such as the type of access pricing methodology to be utilised and the relative importance to be given to monopoly rent control versus ensuring investment incentives, it is a matter of some concern that Part IIIA provides almost no practical guidance on these issues." (NECQ 2001, p 25).

The NECQ submission (2001, p 27) also goes on to include certain criteria for setting regulated prices:

i. Would not have deterred investments in the asset actually being used to provide the services at issue, had those prices been known to investors prior to their commitment;
ii. Will not compromise the prospects of efficient investments, including in the maintenance of existing plant, being made in the future;
iii. Regulatory forbearance for new and dynamically growing markets; and
iv. Price regulation should facilitate least-cost investment options, e.g. through less frequent review periods.

The EUAA has no objection to the establishment of principles that promote efficient investment, and in the broad, has no difficulty with the criteria proposed above. However, the EUAA considers that the first best optimum for pricing infrastructure is to set price at short run marginal costs. It is also recognised that where fixed capital costs need to be serviced, infrastructure owners should be entitled to a return on reasonable actual investment. But where capital costs have already been written off, or where there are external beneficiaries from the infrastructure who can contribute towards the cost, short run marginal cost pricing remains the ideal. If access charges are reduced closer to marginal cost, there are efficiency gains as more use is made of the infrastructure

When economic deregulation first took place in the United States airline industry, Alfred Kahn argued that planes were simply "marginal costs with wings." The object of deregulation was to ensure that the public gained the benefits of efficient marginal cost pricing. Unfortunately, marginal cost pricing principles are not provided in Part IIIA or in industry-specific codes. Instead, there appears to be a misconception that economic efficiency requires full cost recovery of inflated,

often arbitrary, asset values through charges that are well in excess of (efficient) marginal costs.

Recommendation 5

The EUAA recommends that Part IIIA and industry-specific Codes provide for marginal cost pricing principles.

Of even more concern is that, not only is marginal cost pricing not mandated by the competition policy agreements, but Part IIIA and the codes which have arisen under it allow for cost recovery pricing on the basis of inflated costs.

A central problem under the codes, e.g. for electricity and gas pipelines, is that valuations have been allowed as proxies for costs. However, a value does not necessarily represent real or true costs. In many cases, public assets, which have been corporatised, have been either paid for through taxation or loans charged to consolidated revenue funds. It is simply double dipping for the public to be expected to pay a user charge based on valuations for such infrastructure when the infrastructure has already been paid for, or they are left carrying the debt for it.

Sometimes there is an attempt to justify user charging on the basis of current cost replacement valuations through an appeal to economic theory. It is asserted that unless capital is charged for on its current replacement cost there will be a misallocation of resources. This is not a correct application of economic theory in the case of sunk or immobile capital assets, which have assumed a fixed physical form and cannot be turned to alternative uses. Both the original cost and replacement cost of such assets are irrelevant to correct pricing, which remains marginal cost pricing.

Not only does DORC (as used by the regulators) suffer from the objections stated above, but DORC allows a systemic overcharging above actual cost by infrastructure providers. An inflation premium representing the increased cost of replacing assets is built into network charges regardless of whether that replacement cost ever was – or ever will be – actually incurred.

DORC does not result in competitive market outcomes for natural monopoly infrastructure pricing. In competitive markets, prices are driven towards actual costs and replacement costs are only relevant to pricing as new investments actually occurs and these costs become actual costs. The emphasis on DORC has seen the entrenchment of monopoly rents rather than their elimination.

Recommendation 6

The EUAA recommends that the competition policy agreements, legislation and subordinate codes should prohibit the setting of user charges based on initial DORC asset values.

6. Rate of Return Regulation

King (2000, p 7 and 8) describes the problems and limitations of rate-of-return regulation as:

- distorting firms' production choices, as the regulator is almost certain to over-estimate the true cost of capital;
- giving firms little incentive to minimise cost;
- firms have incentives to increase the regulated asset base and the problems are exacerbated by the use of replacement valuations of assets; and
- in the longer term, firms will not invest efficiently

King also suggests supplementary measures to aid regulation, including the use of benchmarks and yard-stick comparisons (2000, p 12).

The EUAA agrees that there are deficiencies in the use of rate of return regulation, reflecting the information and resource asymmetry problems which are compounded by the adoption of the DORC asset valuation methodology, and by the reluctance of some regulators to insist on adequate information disclosures (see BHP Petroleum 2001, p 70).

In particular, the EUAA shares the concerns that Australian regulation may "undermine the benefits of microeconomic reform" (King 2000, p 13) if the problems of replacement cost asset valuation and information asymmetries are not properly addressed. In this regard, proposals for 'light-handed' regulation and for legislated guidance to be inserted into Part IIIA to preserve "incentives to invest and innovate" (NECG 2001, p 25 and 29) should be examined in the light of overseas (see earlier) and Australian experiences. It is notable that submissions from asset owners have consistently omitted to recognise that Australian regulation does provide incentives for network service providers. Regarding Australian experiences it is pointed out that Australian regulatory approaches have permitted:-

- a degree of flexible pricing by network providers within revenue caps and side constraints;
- efficiency gains greater than the X-factor to be captured by network service providers;
- efficiency carry-over mechanisms into the next regulatory control period;
- trigger mechanisms to allow for revisions to access arrangements due to specific uncontrollable events; and

- increasing use of incentives to promote improved levels of service.

Recommendation 7

The EUAA recommends that legislative guidance be inserted into Part IIIA to ensure ongoing efficient investments must be balanced by specific requirements that policy takes account of the need to remove monopoly rents (including through removing the use of the inappropriate replacement asset valuation method) and to have regard to the allocative efficiency of the economy.

7. Greenfield and Competing Energy Networks

EUAA is vitally interested in ensuring the continuing development of our energy supplies and infrastructure. New investments in networks can play a key role in facilitating trade in energy supply and encouraging greater competition in upstream and downstream markets. This is critical to the operations of our members. It applies to both gas and electricity.

ACCC has recognised the need for 'greenfields' pipelines to earn higher returns when they can involve higher risks and less certain demand by permitting higher returns for such facilities. We support this, but would argue that the inflated WACCs and asset values applied by regulators to mature energy networks already provide higher than necessary returns. Nevertheless, we recognise that an approach to regulating mature networks may not be well suited to Greenfield investments and believe that this matter needs further investigation. The ACT's recent decision on coverage of the EGP is an example of the development of regulatory approaches to new pipeline projects and seems to have encouraged a range of new pipeline projects, although the delivery of competing gas at competitive prices remains to be seen.

In electricity, the development of merchant interconnectors has been a spur to changes in the National Electricity Code access and wholesale market arrangements that facilitate such links. Whilst they are not without risks to customers compared to regulated interconnectors (eg less than optimal size and possible market power), we recognise that such links can play a useful role in the NEM. On the other hand, there have been major problems with the approval and development of regulated interconnectors under the NEM due to a combination of poor rules, flaws in the test being applied (including the current one), delays in decision-making, procrastination by parties, jurisdictional interference and some evidence of asymmetrical treatment as between merchant and regulated links.

As a consequence, the NEM has failed to deliver any new regulated links, despite the crying need for them and the benefits they could bring to end-users in terms of increased trade and competition. The original objective of a national electricity grid has not been delivered yet, although there are promising signs that parties recognise this failure and the need to urgently address it.

7.1. Access Holidays

Some submissions to the Inquiry (e.g. AGA 2001, p 15) have supported providing access holidays "to foster more marginal yet nationally significant projects." This is similar to the suggestion that the adverse impact of access regimes on the

timing of new investments might be ameliorated if the infrastructure provider can appropriate a greater share of the rents created by the investment. Regulation can trade off competition with timely investments in much the same way as patent policy necessarily encourages inefficient use of an investment in the hope of raising the returns to private research and development (Gans and Williams 1999). Infrastructure providers are, thus, induced to invest by being the first to claim the prize of monopoly rents.

The EUAA recognises that society can be better off if an investment or a new technology can be encouraged and that conferring exclusive property rights has long been seen as a means of providing an incentive to investors and inventors. However, there is also economic literature, which argues that granting such exclusive rights can be an inefficient form of encouraging innovation by:

- over-rewarding monopolies;
- stifling innovation and potential competition; and
- being open to abuse by the monopolists.

Against that background, the EUAA would like to suggest that consideration be given to the auctioning of monopoly franchises or access to the bidder offering users the lowest prices for a certain service, so that the public or infrastructure users can obtain some benefits from the awarding of monopoly rights. Such franchises would need to be for a specific time after which they would be re-auctioned or open to wider entry. In this way, society is better off: the infrastructure investment is undertaken and society or infrastructure users capture some benefits from the monopoly rents.

Recommendation 8

The EUAA is cautions about the public benefits of Access Holidays, but would recommend consideration be given to development of auction mechanisms that allocate franchises to the bidder offering users the lowest price and/or best service to enable the public or infrastructure users to capture some of the potential monopoly rents.

8. Tariff Implementation Issues

EUAA members have experienced problems with the implementation of tariffs after regulatory reviews. We are supportive of a degree of flexibility in tariffs within overall price caps and so-called side constraints, as this permits greater innovation in pricing, the possibility of discounts and price-service offerings more attuned to members' needs. However, this is a two-edged sword for end-users, as it can also lead to the exercise of inefficient monopoly price discrimination.

For example, TXU and United Energy, two Victorian electricity distributors, have implemented new tariffs following the recent Victorian distribution price review that disadvantage larger sites, including in regional areas. In the case of United, the tariffs have been introduced with the intension of providing better signals for peak demand use of the network. However, they have been implemented in such a way as to charge large flat loads higher prices. This is a flawed approach, as it imposes higher peak demand charges on customers who do not cause the problem and can do little to correct it, whilst providing price reductions to consumers with domestic air conditioning load, the very cause of higher demands on the network. Surely a most inefficient outcome.

In New South Wales, IPART's approach to price regulation leads to regular over and under charging by distributors. As mentioned above, in the case of Energy Australia, this has created an over-payments account of $213 million, equal to more than 20% of annual distribution revenue. IPART has recently decided to change its approach to returning these overpayments from one where rebates were provided to retailers to pass on to end-users (or face IPART powers under NSW licensing laws), to one where only part of the overpayments will be returned and then only as a reduction in network charges. The remainder is to be spent by Energy Australia in augmenting its network!

9. 'Pro-Consumer' Regulators & End-User Participation

End-users have a legitimate right to participate in regulatory price reviews given that it is they that must pay these charges. But they are not able to participate as effectively as regulated businesses. Representatives of all classes of customer are disadvantaged by factors such as a far more limited knowledge of the issues, the fact that they represent a very disparate range of interests (who often do not fully appreciate or understand what is at stake), have more limited access to information (and the ability to assess it) and generally lack resources.

This situation is made worse because the costs of regulatory compliance for every regulated business are paid for by customers out of regulated charges. This threatens the credibility of the regulatory process and leads to situations where regulators are forced to become *de facto* 'consumer advocates', leading to frequent accusations of "consumer bias" by regulated businesses.

9.1. Consumer Funding

EUAA supports the need to fund participation by all consumers in access and monopoly regulation, especially given the obstacles faced by end-users and the existence of information asymmetry and 'free rider' problems on the demand-side of energy regulation.

NECA has recently recognised this in relation to the NEM, with a proposal for end-user advocacy and funding using an independent assessment panel and NEM fees now before the ACCC for authorisation, but no similar arrangements exist or are currently proposed in non-NEM electricity[6] or in gas matters. We strongly urge the PC to address this matter in its final report and recognise the considerable difficulties faced by representatives of all classes of energy end-users and the need to fund their participation in all areas of electricity and gas reform and regulation. We support the use of regulated charges and other user-pays mechanisms to achieve this. In the area of regulated charges, this would provide funding by the same means as are used to support the regulatory activities of network businesses. If the PC does not do this, it should recommend that their shareholders fund the regulatory activities of energy networks.

We also support the use of independent mechanisms to determine end-user funding and its allocation.

[6] There is a proposal to create a Consumer Advocate as part of the establishment of the Essential Services Commission in Victoria.

Recommendation 9

We recommend that the PC support establishment of a broad-based end-user funding mechanism, based on user-pays, to apply to all aspects of energy regulation and reform, with levels and allocations to be determined by an independent panel(s).

10. PC Position Paper: EUAA Response

We support the PC position that there is a clear need for a National Access Regime and that alternative mechanisms are not effective. We also support the need to improve the existing arrangements where this would be effective.

Our response to specific proposals put by the PC in its Position Paper follows.

- We agree that a clear objects clause should be included in the National Access Regime and that a generic access framework is important for disciplining industry- (and State-) specific regimes
    - We can also see value in the inclusion of an economic efficiency objective, but believe that this needs to emphasise that competition is normally the best way to ensure greater efficiency and would not want to see the importance of competition diminished.
- We endorse the coverage of both vertically integrated and non-integrated facilities.
- We support the continued focus on monopoly power issues and the need to have additional powers applying to industry specific regimes where market power is a particular problem
- We agree with the need to include pricing principles, so long as they are effective, but offer the following comments on the points included in the PC Paper about this:
    - For the most part, we have no difficulty with the paper, especially the need for facilities to meet efficient long-run costs, earn a return commensurate with risk, for prices not to be so far above costs as to detract from efficient use, to facilitate the use of multi-part tariffs and efficiency promoting prices and not to permit price discrimination in favour of vertically integrated operations
    - But, there must remain no scope to extract monopoly rents or to practice monopoly price discrimination, which will require well framed and tight guidelines, plus some monitoring and enforcement mechanisms (examples referred to earlier demonstrate how monopoly price discrimination can easily be practiced).

- We can see worth in using a "substantial increase in competition" test and an "uneconomic for anyone to develop a second facility" test for declarations
    - However, the PC should ensure that the legal interpretation of the word "substantial competition" is appropriate for access and care is needed to ensure that cosy infrastructure duopolies do not develop inadvertently out of such concepts
- We strongly endorse the PC's proposal that access seekers be given sufficient information to engage in effective negotiations (guidelines will be needed).
- We generally agree with the proposals on negotiate-arbitrate arrangements
    - However, we are concerned that a provision specifying that the aim of arbitration "is to promote the efficient use of, and investment in" infrastructure not be open to gaming by facility owners.
- EUAA supports the inclusion of principles for assessing effectiveness of access regimes along the lines outlined in the PC Paper, but suggests
    - That appeal and enforcement must be "effective" in terms of outcomes and process, as well as "cost-effective"
    - That there should be a requirement for consistency across States, unless good reasons to the contrary can be established and substantiated.
- For reasons explained elsewhere, we are not convinced that there should be any move towards productivity-based price caps at this stage, even for intra-period adjustments.
- We support the proposals to remove Ministers from decision-making and to assign a single regulator with responsibility for Part IIIA. It should be the ACCC.
- We also support full merit reviews by the ACT.
- We support the proposals to increase transparency in Part IIIA, but suggest that the PC clarify that all applications will be public, unless they can be shown to be commercially sensitive.

11. Conclusions

Experience with energy regulation in Australia clearly shows that energy infrastructure owners are enjoying good returns and investments in energy infrastructure have not been deterred. However, regulators have allowed asset values for regulatory purposes to be set in excess of actual costs and based on notional, replacement costs. As a result, significant elements of monopoly rent remain embedded in energy network businesses, even after the application of national competition policy, the national access regime and related energy-specific reforms.

Appeals for access regimes to be based on 'light-handed' regulation (or even no regulation) should be seen for what they are, simply rent seeking. The adverse consequences should such appeals be met are a lowering of the international competitiveness of Australia industry and the standards of living of Australians.

The EUAA sees access to essential infrastructure as economic welfare enhancing, rather than transfer payments as claimed by some, for two basic reasons:

- The monopoly, or near monopoly, provision of energy networks means that users are very exposed to the extraction of monopoly rents or denial of access
- Combined with this, energy networks are among the most important determinants of the international competitiveness of the Australian economy and Australian living standards, and engendering competition in upstream and downstream markets means lower prices, choice of provider, more innovation, better quality services and a more efficient utilisation of infrastructure.

Unlocking these benefits depends critically on the terms and conditions of access, including the price charged by facility owners. An effective and efficient access regime can deliver these benefits by seeking to replicate a competitive market.

We are pleased to see a clear recognition of these factors in the PC Position Paper and urge the PC not to resile from these positions in its final report.

In addition, the national access regime has been in place for only a relatively short time and covers areas where capital is usually long-lived and investment decisions have long-term horizons:

- To make a major change without compelling evidence after only 3-4 years of operation and without a full-cycle upon which to base decisions would be reckless and needlessly jeopardise the gains made to date

- In particular, we believe that caution is needed in terms of any proposal for a radical departure from the existing national access regime at this time.
- We are pleased that the PC has recognised this in its Position Paper and steered away from radical change.

11.1. Consolidated Recommendations

The EUAA makes the following recommendations:

1. *The EUAA considers that the National Access Regime and the National Electricity and Gas Pipeline Codes should be maintained and strengthened in the interests of effective and informed regulation.*
2. *The EUAA considers that effective Access Regimes need to have the following foundations: (1) strong primary legislation applying equally to all stakeholders without exception; (2) independent regulatory body; (3) credible and comprehensive administrative procedures and rules; (4) consistency of accounting regulation; (5) clear and fair pathways for judicial review of regulatory decisions; (6) adequate and effective information disclosure provisions, symmetrical debate and the resources to ensure that there is symmetrical debate.*
3. *The EUAA recommends the establishment of a single, well-resourced national energy regulator with responsibility for energy, based either on the ACCC with enhanced powers or the Ofgem/Competition Commission model.*
4. *The EUAA recommends that the PC should investigate whether the competition policy agreements, legislation and subordinate Codes should prohibit the setting of network charges base on notional costs (e.g. on replacement cost valuation) and should require regulators to include in the regulatory cost base only costs which have been actually incurred.*
5. *The EUAA recommends that Part IIIA and industry-specific Codes provide for marginal cost pricing principles.*
6. *The EUAA recommends that the competition policy agreements, legislation and subordinate codes should prohibit the setting of user charges based on use of DORC in setting initial set values.*
7. *The EUAA recommends that legislative guidance be inserted into Part IIIA to ensure ongoing efficient investments must be balanced by specific requirements that policy takes account of the need to remove monopoly rents (including through removal of the inappropriate replacement asset valuation method) and to have regard to the allocative efficiency of the economy.*
8. *The EUAA is cautions about the public benefits of Access Holidays, but would recommend consideration be given to development of auction mechanisms to enable the public or infrastructure users to capture some of the potential monopoly rents for a specific time, say by allocating franchises to infrastructure providers who offer customers the lowest price and/or best service.*

9. *We recommend that the PC support the establishment of a broad-based end-user funding mechanism, based on user-pays, to apply to all aspects of energy regulation and reform, with levels and allocations to be determined by an independent panel(s).*

Our responses to the PC Position Paper outlined above are also relevant to these recommendations.

The EUAA also suggests that a national program be established to monitor and publicly report on the performance of and research into possible future directions for monopoly regulation, including Total Factor Productivity and Data Envelopment Analysis. It considers that this would best be achieved through a PC research program and/or through the Regulators' Forum.

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