

**PRODUCTIVITY COMMISSION REVIEW OF THE
GAS ACCESS REGIME**

SUBMISSION TO THE DRAFT REPORT

by the

DEPARTMENT OF INFRASTRUCTURE, VICTORIA

MARCH 2004

SECTION 1: INTRODUCTION

The Department of Infrastructure (DOI) welcomes the opportunity to make this second submission to the Commission's review of the Gas Access Regime ("the Regime").¹

As discussed in DOI's earlier submission,² energy and the natural gas industry in particular are essential to the continued growth of the Victorian economy and employment, as well as to the well-being of Victorian households. In 2002, the Government released its detailed policy for the energy sector in Victoria, *Energy for Victoria*.³ As part of this policy the Government identified its key objectives for energy policy as providing secure and sustainable energy services at efficient and affordable prices. Clearly, as the regulatory framework for the monopoly gas infrastructure all over Australia – including Victoria – the effective functioning of the Regime is critical to meeting the Government's objectives.

Most participants in the review process would agree that there is potential to improve the Regime, and the responses to the Issues Paper and at public hearings provided the Commission with an array of views about potential problems with the Regime and possible solutions. DOI's initial submission identified a number of areas where it considered that refinements to the regime were warranted. In our earlier submission, we emphasised that the importance of the Regime – and the obvious interests of the various stakeholders – made it essential for the Commission's assessment of the Regime to be based upon a careful and balanced analysis and of actual evidence of its operation, and that any changes the Commission recommends for the Regime be practicable.

Against this, DOI has concerns with many of the views expressed by the Commission in the Draft Report, and with its key findings and recommendations. In the Draft Report the Commission is highly critical of many aspects of the existing Regime, and has recommended a number of changes that are intended to change fundamentally its operation. However, DOI is not convinced that the analysis undertaken by the Commission has been sufficient or is sufficiently robust to justify the strong and unequivocal conclusions and recommendations it has reached.

In particular, a number of the Commission's findings are based upon a misunderstanding of the Regime and its practical operation, or upon analysis that is questionable. DOI also considers that the Commission has understated the benefits of the Regime, in particular, by ignoring the importance to governments of protecting customers from the misuse of market power in the supply of such an essential service. DOI also is particularly concerned that the application of price-cap regulation – which

¹ The Gas Access Regime ("Regime") comprises the Gas Access Pipelines Law (the "Law"), the National Third party Access Code for Natural Gas Pipeline Systems (the "Code") and the Inter-Government Natural Gas Pipelines Access Agreement (7 November 1997).

² Department of Infrastructure (Victoria) 2003, Productivity Commission Review of the Gas Access Regime: Submission to the Issues Paper, November.

³ Department of Natural Resources and Environment, *Energy for Victoria: A Statement by the Minister for Energy and Resources*, 2002, available at www.doi.vic.gov.au/doi/internet/energy.nsf.

is a key component of the current regime – is held out by the Commission as unusual or out-of-step, whereas it could only be considered as standard practice if the Commission were to survey the practice of energy sector regulation in other countries. DOI is also not convinced that the actual changes proposed by the Commission will necessarily achieve the outcomes it desires, and that rather than promoting greater certainty, the Commission’s proposed changes are likely to generate greater uncertainty for all stakeholders.

DOI is also concerned that the Commission’s focus on a narrow range of conceptual issues has led it to ignore a number of important practical issues associated with the application of the Regime as it presently stands. In our previous submission, we drew the Commission’s attention to a number of areas where changes would improve the effective functioning of the Regime – such as more flexibility for regulators to refine the application of price-cap regulation; removal of the barriers that were identified in the reference tariff principles for greenfields gas distribution projects, and simplification of the pricing principles more generally, none of which were addressed in the Commission’s Draft Report. These issues may be technical in nature, but the effective treatment of the technical issues is essential to the effective functioning of the Regime. Moreover, DOI considers that one of the most important of the policy issues – the treatment of greenfields transmission projects – has been given only a limited treatment by the Commission, and in particular, was contingent on the Commission’s proposed fundamental changes to the Regime being adopted.

The narrow focus of the Commission’s analysis has led to it ignoring a number of other important issues that warrant attention. On the important issue of the incentives for investment, the Commission has focussed solely on pricing issues, to the exclusion of other potential barriers. An emerging issue for Victoria is whether the market is likely to generate the necessary pipeline augmentations when required, or whether there may be market or regulatory impediments that may restrict this. A related issue is whether there would be merit in some form of independent planner who would assist in ensuring that projects that have diffuse beneficiaries proceed. A second important issue is whether there may be other barriers to the greater development of markets to facilitate an expanded interstate trade in natural gas that the Regime usefully could perform a role in overcoming. One potential barrier that has emerged is the generally poor level of information generally available on both the physical quantities and capability of gas production and deliveries, as well as price disclosure regarding the value of gas at any point in time.

Lastly, one of the main objectives of the energy market reforms that are being pursued through the Ministerial Council on Energy (“MCE”) is to promote greater consistency across the regulation of electricity and gas in Australia, and a number of specific measures to promote this end have been announced. It is surprising, therefore, that the Commission has not addressed the current differences between the network regulatory arrangements for the electricity and gas industries, whether there are justifications for those differences, and commented upon what inefficiencies may result.

DOI recommends that the Commission reconsider its views on the operation of the Regime, acquainting itself with the operation of the detailed elements of the Regime, and informing itself independently on how the Regime has been applied in practice and how it has been interpreted by the courts and relevant appeal bodies. The

Commission should also draw on the actual practices and experiences of regulation in the energy sector overseas, and place greater weight on objective evidence, and commensurately less on conceptual analyses. Most importantly, the Commission should focus more specifically on recommendations that are practicable – that is, directed towards the refinement of the Regime as it stands, and which take account of the policy importance of the Regime. Lastly, the Commission should broaden its attention beyond the narrow ‘headline’ range of issues it has considered, and extend its attention to other factors that may affect matters like investment, as well as to the potential areas where the Regime could play a positive role in removing barriers to the free trade of gas between basins and across demand centres, and thus promoting the efficient growth of the industry.

The structure of the remainder of this submission is as follows. Section 2 summarises the key points in DOI’s earlier submission, emphasising again the importance of the regime, and repeating the refinements to the Regime that DOI proposed in its earlier submission. Section 3 then discusses further DOI’s concerns with the Commission’s key findings and recommendations. Section 4 then directs the Commission’s attention to a number of other issues that warrant consideration or further consideration by the Commission.

SECTION 2: VICTORIAN GAS INDUSTRY, POLICY AND OUR PREVIOUS SUBMISSION

The Draft Report appeared to place little weight on DOI's earlier submission to this process. Given the significance of the Victorian gas market and the significance of the gas market reforms that have been implemented in Victoria, this is disappointing. This section provides a summary of the key points that were made in DOI's earlier submission. We refer the Commission to that earlier submission for a more detailed discussion on these issues.

The gas industry in Victoria: a mature and important industry

Energy and the natural gas industry in particular are essential to the continued growth of the Victorian economy and employment, as well as to the well-being of Victorian households. Victoria has a relatively mature gas market with a high level of domestic and business use compared to other states. Growth is anticipated in the natural gas market in terms of primary and secondary demand and increases in the sources of off-shore supply. The natural gas industry is important in the economic development of the state and to individuals in their day-to-day lives. Thus, having an effective efficient natural gas industry is a high priority for Victorians and the Victorian Government.

Victoria's gas market structure

During the 1990s, the Victorian government engaged in a major reform process that substantially changed the structure and ownership of Victoria's natural gas market. The purpose of the reforms was to achieve improved efficiencies in the operation and development of the market. Key features of the existing Victorian gas market are:

- a number of gas producers, including long established and new producers;
- a wholesale spot-market for gas, administered by the Victorian Energy Networks Corporation (VENCorp);
- privately owned transmission and distribution networks and retailers;
- retail competition in gas, which has been effective for large users and is becoming increasingly effective for small users; and
- independent economic regulation by the now Essential Services Commission (ESC) and safety regulation by the Office of Gas Safety.

Victoria's energy policy and the importance of the Regime

In 2002, the Government released its detailed policy for the energy sector in Victoria, *Energy for Victoria*.⁴ As part of this policy the Government identified its key

⁴ Department of Natural Resources and Environment, *Energy for Victoria: A Statement by the Minister for Energy and Resources*, 2002, available at www.dnr.gov.au/doi/internet/energy.nsf.

objectives for energy policy being to provide secure and sustainable energy services at efficient and affordable prices. More specifically, its energy policy objectives are to:⁵

- Ensure an efficient and secure energy system.
 - This requires ongoing investment in both supplies and the efficient use of those supplies. We need to provide for the state's economic and social well being as cost-effectively as possible.
- Ensure those supplies are delivered reliably and safely.
 - The reliable distribution of energy – particularly electricity, which cannot be stored on a significant scale – is an ongoing challenge. Fossil fuels and electricity are inherently hazardous, so they must be distributed and used safely.
- Ensure consumers can access energy at affordable prices.
 - The Government is committed to ensuring all consumers, especially low income earners, can access essential energy services at affordable prices.
- Ensure our energy supplies and the way we use them are environmentally sustainable – and in particular less greenhouse intensive.
 - Achieving sustainability is a key challenge for Victoria. We generate most of our low cost electricity from brown coal, which brings major economic benefits but also contributes about half of our greenhouse gas emissions. We have to find ways to ensure our mix of energy sources and our use of them minimises damage to the environment and economy and in particular reduce the intensity of our greenhouse emissions.

As a result of industry reform undertaken in the early 1990s discussed above, the provision of secure and efficiently priced energy depends largely on the successful operation of energy markets, continued private sector investment in essential infrastructure and the effective regulation of the monopoly elements in the relevant industry.

Importance and role of the Regime and areas for refinement

Clearly, as the Regime is intended to be the regulatory framework for the monopoly gas infrastructure all over Australia – including Victoria – the effective functioning of the Regime is critical to meeting the objectives set out above. In its earlier submission, DOI noted that there are three particular requirements of the Regime for Victoria, which were as follows.

⁵ Department of Natural Resources and Environment, *Energy for Victoria: A Statement by the Minister for Energy and Resources*, 2002, p. 5, available at www.doi.vic.gov.au/doi/internet/energy.nsf.

- *Providing a robust regulatory regime for the monopoly elements of the industry* – which is essential for the promotion of competition in the upstream and downstream sectors, and for ensuring that customers are protected from the potential for the misuse of market power (while also continuing to attract the investment required to provide reliable energy supplies over the long term);
- *Facilitate the construction of ‘greenfields’ transmission pipelines* – gas supplies from either or both the remote north or north west of Australia are likely to be required to meet Victoria’s energy needs over the medium to long term. It is imperative that the Regime not impede projects to connect these resources to the south east Australian gas network when the connection of such supplies would be efficient; and
- *Facilitate the extension of natural gas into Victorian country towns* – the Government’s objective is to ensure a reliable and affordable supply of energy to all Victorians, including residents in regional and rural Victoria. It is important that the Regime not impede the extension of gas supply to areas not currently served where such projects are commercially viable. It is also important that the Regime facilitate governments to support the extension of natural gas networks to towns that may not be commercially viable, but where a government considers that wider benefits may flow from such a project, and justify government assistance.

A summary of the views expressed previously on the extent to which the Regime is meeting these requirements, and the refinements that were proposed, is provided below. These views reflect DOI’s practical experience with the operation of the Regime in Victoria and observations of the operation of the Regime in other jurisdictions.

Does it provide a robust regulatory regime for the monopoly elements of the industry?

As advised in its initial submission, DOI’s view is that the form of regulation applied under the Regime and its application to the mature Victorian gas distribution and transmission systems has been very effective in meeting the Government’s objectives of promoting competition in the supply and retailing of gas, ensuring that the customers served by these networks have access to gas at affordable prices, and in promoting growth in energy dependent industries.

In particular, setting prices with reference to cost is appropriate for the entities that are in a position to exercise substantial market power, given an objective of maximising growth in related industries and protecting customers, while also ensuring that sufficient incentive exists for the investment required in the industry to continue to provide a highly reliable gas supply over the long term. In addition, DOI does not consider that either the level of detail of the regulators’ examinations of matters presented to them, or the resources consumed in these regulatory processes, have been out of proportion to the significance of the issues to both the owners of the privatised businesses and to Victorian gas consumers and industry.

However, a number of potential areas of refinement were identified, which were as follows:

- to remove any barriers that may exist within the Regime to regulators applying best-practice incentive regulation, including the existing barrier against the use of trends in total factor productivity to set the X factor in a price cap plans, should this prove superior to existing approaches;
- to simplify more generally the Code's pricing principles, provided that the more important constraints on both regulators and service providers are retained (such as the methodology for updating regulatory asset values); and
- to insert an unambiguous primary objective in the Regime that was consistent with the Government's energy policy objectives and current regulatory thinking, and noted that the 'long term interests of customers' objective – together with facilitating objectives – currently contained in the *Essential Services Commission Act 2001 (Vic)* is the most appropriate.

Does it facilitate construction of 'greenfields' transmission pipelines?

DOI noted that substantial new investment in regulated infrastructure has been installed or committed to under the Regime as currently drafted, and that notwithstanding the general criticisms of the Regime as having an adverse impact on investment, little in the way of direct evidence of an impact on investment has been presented. That said, DOI noted that the facilitation of future greenfields investment is sufficiently important to warrant the Commission in its current inquiry considering any refinements to the Regime that may be appropriate to accommodate the specific features of substantial greenfields gas projects.

DOI supports the adoption of the Parer Review recommendations for greenfields projects, namely clarifying or ensuring that an upfront (pre-construction) regulatory approval of an access arrangement is permitted; permitting an access holiday if specified conditions are met, provided that certainty is provided as to how the regulatory value for the asset will be set should it be covered at the end of the holiday; and permitting the National Competition Council to issue a binding ruling on whether a pipeline would pass the coverage test in the future, prior to the pipeline being constructed.

Does it facilitate the extension of natural gas into country towns?

In Victoria in the past, there have been a number of instances where certain towns have expressed interest in having the gas distribution network extended but those extensions have not proceeded. While a number of parties have claimed that the regulatory regime may have provided an impediment to such projects proceeding, it is also clear that a reason for a number of projects not proceeding has been that they have not been assessed as commercially viable from a business perspective. DOI noted that, in its last review of the access arrangements for the three Victorian gas distributors, the ESC addressed the issue of potential regulatory barriers to these projects at some length, and accepted the distributors' proposals to alleviate these potential regulatory barriers.

As advised in its earlier submission, the Victorian Government has recognised that there are broader social benefits of access to natural gas that are not included in companies' commercial assessments, such as reduced energy costs, greenhouse

emissions and social benefits of more affordable energy. In recognition of these wider benefits associated with the extension of reticulated natural gas into country Victoria, the Government has committed \$70 million to assist such projects.

DOI also noted that, while the Regime as presently drafted has not prevented the Government from offering support to gas extensions to towns currently unserved with natural gas, changes to the Regime would be desirable to reduce further the potential for the regulatory regime to become a barrier to greenfields distribution projects proceeding. Clearly, it is important to remove barriers to commercial projects proceeding. A key recommendation was to consider a number of amendments to the pricing principles in section 8 of the Code in order to make it easier for regulators to provide regulatory certainty for these projects. While these proposed amendments were quite technical in nature, they are nevertheless important.

It should be noted that, in its Draft Report, the Commission has provided a misleading impression of the nature of the changes to the Code that were discussed above. In particular, the impression to be gained from the Draft Report is the DOI had advocated changing the Regime to encourage the towns currently not supplied with natural gas to be cross-subsidised by existing customers. The Commission omitted to mention that the Government has committed \$70 million to subsidise these projects directly – that is, through a transparent, budget-funded measure. The changes proposed to the Code would merely make it easier for the Regime to accommodate such transparent, budget-funded measures. DOI would appreciate the Commission correcting the record in its Final Report.

SECTION 3: THE COMMISSION'S MAIN CONCLUSIONS

Justification for the Commission's Main Conclusions

As discussed in section 1, the impression to be gained from the Draft Report is that the Regime is failing substantially – and that regulators are performing poorly – and so fundamental change is required. The Commission's most substantial proposed change is to alter the criteria for coverage of a pipeline, with the intention of raising substantially the hurdle for any regulation in the industry (whether the Commission's proposals actually have this effect is discussed below). It has also proposed an alternative form of regulation – price monitoring – which the Commission would appear to envisage replacing the use of price cap regulation as the dominant form of regulation of the transmission and distribution systems (in the Commission's own words, price cap regulation would only remain for 'the more extreme circumstances'⁶). For the cases where a pipeline is to be subject to price cap regulation, the Commission has also proposed a new set of pricing principles to replace the current section 8.1 objectives of the Code.

The nature of the changes the Commission has proposed raise substantial policy issues for Governments, particularly given the importance of the Regime, the fact that it has only been in place for around five years, and because the Regime was developed originally through a process that involved all stakeholders. Moreover, while the Regime has been in place for around five years, the courts and relevant appeal bodies have only had the opportunity to express their views on the Regime in the last two or so years. Major changes to the Regime at this time is likely to render those decisions otiose, which may lead to a further (possibly substantial) period of uncertainty until the courts and appeal bodies have the opportunity to consider and express their views on the re-written Regime.

It would be expected, therefore, that changes of such substance would only be proposed if supported by detailed, independent analysis of the actual operation of the Regime and evidence of its failings, as well as reference to world-best practice on such issues. It would also be expected that any changes to the form of regulation under the Regime would reflect well-tested approaches in the regulation of the energy sector. However, the analysis in the Draft Report and the changes proposed by the Commission do not meet this standard.

Most of the justification for the Commission's recommendations is sourced from an uncritical reading of the stakeholder submissions, conceptual analyses of regulation, and the Commission or Commission staff's own publications. The Commission does not appear to have undertaken its own analysis of the actual decisions of Australian regulators, and has not examined approaches to regulation in the energy sector overseas, and drawn out lessons for Australia. The Commission has also not undertaken a careful analysis of the decisions of courts and other relevant appeal bodies, which an analysis is now essential to understanding the operation of the Regime. Indeed, the discussion in the Commission's Draft Report would suggest that the approach to regulation in the Regime – and as practiced by the relevant regulators

⁶ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra p. 261.

– is somehow unusual and out-of-step. In contrast, however, even a cursory examination of regulatory approaches to energy overseas would show that the form of regulation that is given effect under the Regime is anything but unusual.

In addition, where the Commission has undertaken analysis, DOI is also concerned that many of the Commission’s observations on the Regime are questionable, and has lead it to accept an exaggerated view of the costs associated with the Regime. DOI also considers that the Commission has understated the benefits of the Regime, in particular, by failing to take account of the importance of the protection of customers from the misuse of market power for such an essential service. Lastly, DOI is particularly concerned that the Commission could have concluded that its light-handed form of regulation is superior to price cap regulation in the absence of any demonstration that its proposed model has been applied and shown to be superior in the regulation of the energy sector.

DOI considers that it is beyond dispute that there are substantial costs associated with regulation, and as a consequence, regulation should only be applied where the benefits outweigh the costs. However, the decision on at which point regulation is justified needs to proceed from a balanced and robust assessment of the costs and benefits – but such an assessment is missing from the Commission’s Draft Report. DOI recommends that the Commission reconsider its views on the operation of the Regime, acquainting itself with the operation of the detailed elements of the Regime, and informing itself independently on how the Regime has been applied in practice. The Commission should also draw on the actual practices and experiences of regulation in the energy sector overseas, and place greater weight on objective evidence, and commensurately less on conceptual analyses.

DOI’s more detailed comments on the analysis that led to the Commission’s main findings – in particular, on the costs and benefits of regulation and the Commission’s model for ‘light-handed’ regulation – are discussed in turn below.

Analysis of the Costs of Regulation

Regarding the *costs* of regulation, the Commission has made a number of observations that show little appreciation of the key developments in the application of price regulation over the past decade or two, observations that show little understanding of the application of the Regime, as well as observations that are based upon questionable analysis.

By way of example, the way in which the Commission has characterised the task of regulators includes the following.⁷

Regulators aim to determine ‘efficient’ prices which is a problematic approach that is unlikely to achieve the outcome of a competitive market

and:⁸

⁷ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra p. 82.

⁸ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra p. 252.

In essence, regulators are placed in the difficult position of being expected to act as omniscient central planners

The notion that the application of price cap regulation of necessity requires regulators to focus on *determining* what would be an efficient price or act as *central planners* ignores the substantial innovations to the practice of price regulation over the recent decades, and in particular, the development of incentive compatible approaches to regulation. The key driver for incentive regulation was an acceptance that regulators would never have the information required to *determine* efficient prices, with the focus changing instead to putting in place incentives for regulated entities to act efficiently – whether it be to minimise cost, set efficient prices, or provide efficient service levels. It is widely accepted that incentive regulation offers the prospect to substantially decrease the cost associated with price regulation.

A separate question is whether the Australian energy regulators are making full use of incentive compatible approaches to regulation to reduce the cost – and increase the effectiveness – of price regulation. DOI notes, however, that while this is an important issue – and especially important to the findings and recommendations made by the Commission – the Commission has not undertaken the analysis of the decisions of the Australian energy regulators necessary to permit it to make a balanced assessment.

In DOI's view, such an assessment is likely to show that the extent to which incentive compatible approaches to regulation have been adopted in substance varies across the Australian energy regulators, which is not surprising given that the application of price cap regulation is a very recent development in Australia. However, it is also likely to show that there is a strong recognition of both the practice and benefits of incentive compatible approaches to regulation in some quarters. By way of example, some of the statements relevant to this matter by the Victorian Essential Services Commission during its recent review of the access arrangements for the three Victorian gas distributors were as follows.⁹

[In relation to capital expenditure] the Office has noted that there are at least two approaches that it could adopt to form an opinion as to whether these requirements [ie for capital expenditure to be prudent and satisfy the 'roll-in' test] have been satisfied. One option would be for the Office to obtain information on the projects that have been undertaken, and to form its own view as to whether such projects are adequately justified and reflect efficient technologies and practices. It would then perform its own financial analysis to form a view as to whether the projects meet the requirements of the economic feasibility test.

An alternative option would be to analyse the commercial incentives that may have influenced distributors' expenditure decisions over the regulatory period, and to infer the efficiency of their investment decisions from the operation of these incentives.

In *Consultation Paper No. 1*, the Office discussed the commercial incentives that may have influenced distributors' expenditure decisions over the current regulatory period. These incentives – and the inferences that they would permit to be drawn – included the following:

- *the incentive to minimise expenditure* – under a price cap regime, lower expenditure implies higher profits. In turn, this suggests that a distributor would be likely to adopt a least-cost approach; and
- *the incentive to charge surcharges where a project would be uneconomic* – higher surcharges increase profit, and so distributors would have an incentive to levy surcharges where

⁹ Essential Services Commission (then the Office of the Regulator-General) 2001, Position Paper, Melbourne, pp. 29-30, 50-51.

permitted. As distributors are permitted to levy a surcharge for the share of the cost of a project that would not pass the economic feasibility test, it is possible to infer that the remaining expenditure (ie. that proposed to be included in the capital base) would pass the economic feasibility test.

Accordingly, the Office observed that it may not be unreasonable to infer that the distributors' capital expenditure over the period has met the Gas Code's requirements, and sought comments on this approach. ... At this stage, the Office is of the view that the incentives under the regulatory regime were reasonably clear and it has no reason to consider that the regime may have given rise to perverse incentives. As a result, it is reasonable to infer that the distributors' actual capital expenditure meets the Gas Code's requirements, although such an inference could be overturned by persuasive evidence to the contrary.

...

In establishing the operating expenditure benchmarks, a key issue is whether the Office should attempt to estimate an efficient level of operating expenditure for each distributor, based upon benchmarks of the cost of the various distribution functions, and adjusted for differences in operating environments between the sample of firms. The alternative approach is to observe that distributors have a commercial incentive (as a consequence of the existing price cap regime and carryover of gains) to minimise cost (subject to meeting the relevant supply obligations), and to infer that their existing expenditure levels are efficient. ... The Office considers that the most appropriate approach to establishing the starting point for distributors' operating expenditure benchmarks for the next regulatory period is to rely upon the observation that distributors have a commercial incentive to minimise their expenditure levels (subject to meeting supply obligations), and so use their actual expenditure level for this purpose. Accordingly, the Office agrees with the views expressed both by the AGA and the joint industry submission to the Productivity Commission's review of the National Access Regime that this approach is less resource intensive, and will also reduce substantially any risk associated with determining the new operating expenditure benchmark.

Similarly, the Commission's observations about the constraints on price structures if the building block approach is used would have led it to overstate the costs of regulation. By way of example, the Commission made the following observation.¹⁰

The Gas Access Regime's current cost-based building block approach appears to make pricing inflexible. While the regime allows service providers and access seekers to negotiate access prices that differ from the reference tariff, in practice the regime is a form of cost-based price regulation with most access seekers relying on the reference tariff. As a result, more efficient pricing methods – such as varying prices to reflect customer differences, or raising prices to reflect congestion costs and the need to build new facilities – are constrained.

A cursory look at the application of price cap regulation in Victoria would have told the Commission that these observations are false. The 'building block approach' only provides the target for revenue across all customers; it does not dictate how individual prices are to be determined. The Victorian gas distributors' prices are controlled by a 'tariff basket' control, which caps only the *weighted average* price and provides the distributors with flexibility about how they design their individual prices. Multi-part pricing and congestion pricing is not precluded (subject to meeting the overall cap) – indeed, the Victorian Essential Service Commission promoted the 'tariff basket' form of price control because it provides incentives for regulated entities to adopt efficient price structures. Moreover, all of the Victorian gas businesses actually have adopted non-linear prices (more particularly, declining block tariffs, with seasonal differences in the size of the components).

In addition, much of the Commission's analysis of the costs of regulation is centred on the incentives for investment, which led to the Commission's black-and-white view of the impact of regulation on investment generally.¹¹

¹⁰ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra p. 206.

The Gas Access Regime deters and distorts investment, possibly altering the nature and timing of pipeline projects. Pipeline construction might be delayed, for example, or pipelines might be built 'fit for purpose'. Such alterations can delay the emergence of competition in upstream and downstream markets.

As is clear from its earlier submission, DOI is concerned about the potential impact of the Regime on greenfields investment, and has highlighted that the Regime's application to such projects is an important issue for the Commission's review. However, DOI would question whether the Commission's observations about the effect of regulation on investment apply equally to mature systems. In particular, the Commission seems to have ignored the fact that the classic criticism of traditional-US 'rate of return' regulation is that when prices are set closely with reference to cost, over-investment (or 'gold-plating') is likely. Indeed, a principle driver for the development of price-cap regulation was a concern to avoid over-inflated costs, included through over-investment.

DOI also has concerns about the Commission's analysis of the potential for truncation of returns – and in particular, its relevance to mature systems. DOI considers that the impact of the Regime on greenfields projects is an important issue, and that truncation concerns may be very relevant in that regard. However, DOI is not convinced that the lessons for greenfields pipelines extend generally.

In particular, the Commission's analysis has assumed that truncation of returns arises because regulators will always reduce prices at a review if prices are above cost, but not permit a rise in prices if prices are below cost. However, such action – and hence, this source of 'truncation' – is highly unlikely. Under the Code, regulators would be immediately challenged if they sought to preclude a price rise where it was cost-justified. Such actions are also inconsistent with what regulators have done in practice, as the Victorian Essential Services Commission permitted reference tariffs that would imply average price rises over the regulatory period for two of the three gas distributors in its most recent review. A more balanced assessment would find that significant truncation is only likely to arise where the market itself imposes a limit on the returns that a pipeline can earn – which is very unlikely to be the case for mature networks.

Analysis of the Benefits of Regulation

Regarding the *benefits* of regulation, while the Commission has acknowledged that effective regulation may permit greater investment, growth and employment in upstream and downstream activities, its discussion would suggest that it has placed very little weight on the protection of customers from the misuse of market power. In its discussion of the issue, the Commission commented as follows:¹²

Finally, higher prices (or the benefits to the service provider from the denial of access) mean a transfer of income from users to service providers. This is not an efficiency loss or an overall loss to the community (provided the transfer occurs between Australian residents). Nonetheless, any impact on the distribution of income might be a concern, especially given the essential nature of gas pipeline service.

¹¹ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra p. 109.

¹² Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra pp. 74-75.

The Commission considers, however, that using access regulation to redistribute income would be inefficient ... Other policies generally target income distribution more effectively.

The Commission did not elaborate what the ‘first-best’ policy or mechanism may be if the intention is to reverse the effects of a general rise in prices for an essential service that has come about through the misuse of market power, nor propose to introduce such a mechanism as part of the changes it has proposed to the Regime. Indeed, where the policy concern is that the provider of an essential service is charging all customers substantially more than required to ensure the continued supply of the service, the ‘first-best’ response may be to apply a price cap to prevent the misuse of market power in the first place.

More generally, DOI considers that the Commission’s lack of concern for the impact on customers serves to illustrate the lack of practicality in the Commission’s advice. Clearly, the Regime needs to provide the conditions under which investors will continue to invest in the industry in the long term. However, the implication in the Commission’s discussion that Governments should be indifferent to the pricing of such an essential commodity to customers is naïve. As pointed out above, a key objective of the Government is to protect customers from the potential for misuse of market power in the supply of this essential service, which is the role that the Regime is intended to perform. Indeed, establishing robust regulatory arrangements for the monopoly elements of the Victorian gas industry was a precondition to their privatisation, reflecting the importance of natural gas to Victorian customers and industry. DOI suggests that the Commission take greater heed of its Terms of Reference, which direct it to take into consideration, amongst other things:¹³

The need to maintain an appropriate balance between investor, asset operator, gas producer and current and future gas consumer interests

In a similar vein, DOI also does not support the overarching objective that the Commission has proposed for the Regime, namely the reference only to certain aspects of economic efficiency.

As commented in our previous submission, DOI considers that the primary objective set out in the ESC Act – to ‘protect the long term interests of Victorian consumers with regard to the price, quality and reliability of essential services’ – suitably modified would be the most appropriate objective for the Regime. The requirement to focus on the *long term* interests of customers would not ensure that regulators were dissuaded from favouring short term price reductions at the expense of a reduction in ongoing investment by requiring consideration of the full implications of regulatory decisions, including the impact on investment and consequently on long term reliability and security of supply. However, this objective would also signal to regulators that the ultimate beneficiaries of regulation are intended to be the customers.

In addition, such an objective would be consistent with the overriding objective for a number of the UK economic regulators, as well the primary objective for the Australian telecommunications regulatory regime. Most importantly, an objective that is based upon the ‘long term interests of customers’ would also be consistent with the

¹³ Costello, P. 2003, Terms of Reference for the Gas Access Review, para. V(3).

statement by the Ministerial Council on Energy (MCE) in the report to COAG of 11 December 2003 on Reform of Energy Markets that the proposed Australian Energy Market Commission (AEMC) would be required to apply a net benefits test based on the achievement of the market objectives, including the long term interests of consumers, in deciding whether to approve a rule change¹⁴.

The Commission's Model for Light-Handed Regulation

DOI is concerned with the Commission's recommendation that the current form of regulation under the Regime – price cap regulation – be replaced with a largely undefined and untested alternative.

While price cap regulation has many precedents in the energy sector around the world, the Commission has not produced any evidence of a price monitoring model working effectively to constrain the misuse of market power in energy sector regulation overseas. Given the importance of the current Regime, any replacement to the current form of regulation should be demonstrated to have provided superior results in practice, including non diminution in the level of protection afforded to customers, none of which features in the Commission's Draft Report.

In addition, the Commission's model for light-handed regulation is not fully developed, and as such, many of the Commission's assertions about its superiority cannot be justified.

By way of example, the Commission has explained how profit changes can be decomposed into changes in input costs, pure price increases as well as productivity changes – but gives no indication about how long the regulated entity should expect to be permitted to retain the benefits of the latter (productivity growth). It is relevant that the key difference between price cap regulation and the traditional US-style rate of return regulation is that entities have certainty over how long the benefits from efficiency gains may be retained, which is what provides the incentive to achieve those gains. Given the lack of certainty over the treatment of efficiency gains, the Commission's proposed model could actually weaken the incentives to make efficiency gains – or lead to the benefits from efficiency gains never being shared with customers.

DOI also considers that the Commission's assertions about the relative 'information-intensity' of price cap regulation and its light-handed alternative are not based upon a balanced assessment.

The information on actual performance that is required for each model would appear largely the same, and hence the same problems with the recording of actual information would need to be dealt with under each. Indeed, the Commission's 'light-handed' option would require information to be provided annually to the regulator – even though, for pipelines that are regulated under price cap regulation, 'the Commission rejects proposals to allow regulators access to information between

¹⁴ Ministerial Council on Energy, *Reform of Energy Markets*, Report to the Council of Australian Governments, 11 December 2003, Appendix 2 "Proposed New Regulatory Framework", p, 17.

access arrangement reviews'.¹⁵ The only difference in the level of information required to implement the two models is the information required to support forecasts of expenditure where the building block approach is used. However, to the extent that regulators rely more heavily on historical trends to establish forecasts, then the extent of additional information required would be reduced. Indeed, if historical trends in productivity growth were used to set the X factor in a price cap plan – which DOI noted as a possible future advance in price cap regulation (but the Commission rejected – see below) – then forecasts of future expenditure would not be required, and the ‘information intensity’ of the different approaches would be similar.

That said, DOI supports a ‘lighter-handed’ approach to the regulation of greenfields pipelines than for the mature systems, and proposed a number of measures in its earlier submission to this effect. Rather than considering new forms of regulation to apply equally across all systems, DOI considers the Commission should focus its attention to understanding the particular features of greenfields projects, and develop appropriate regulatory responses to those projects.

Workability of the Changes Proposed by the Commission

DOI also has serious concerns about the workability of the changes that have been proposed by the Commission. There is a significant risk that the Commission’s changes will lead to an increase – rather than a decrease – in uncertainty over the operation of the Regime. Some of DOI’s specific concerns are set out below.

New Coverage Test

The new coverage test has the potential to substantially increase the level of difficulty with deciding whether a pipeline should be regulated and – under the Commission’s model – how it should be regulated. DOI considers that it is impracticable to attempt to distinguish between a ‘substantial increase’ and a ‘material increase’ in competition in the related market in order to test whether and what form of regulation is warranted. Even if the Regime included further guidance on the interpretation of these words, the concepts are sufficiently similar – and the consequences of being judged as one rather than the other are sufficiently important – that disputes and uncertainty are inevitable.

Furthermore, the test being applied by the Commission – which is based upon observing the level of competition generated in a *related* market – is already only an indirect proxy for the real question, which is whether the facility in question has substantial market power. It does not logically follow that changes in the level of competition generated in the related markets is indicative of changes in the level of market power than the facility owner is able to exercise. Indeed, even if the facility owner was vertically separate and there was already effective competition in gas retail and production (that is, there was no *access* problem), the facility owner may still be in a position to use its substantial market power to raise prices generally, which may justify regulation.

¹⁵ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra p. 253.

- For the avoidance of doubt, DOI confirms its view that the Regime should perform the dual (but interrelated) roles of *access* regulation and *price* regulation. Indeed, given the substantial structural reforms that were undertaken in Victoria, the *price* regulation role of the Regime is the most relevant.¹⁶ Therefore, facilities that are in a position to exert substantial market power should still qualify for regulation, even if competition is well-established amongst gas retailers and producers. DOI would not support changes to the Regime that limited the coverage of the Regime only to facilities where denials of access were the concern.

Pricing Principles

The Commission has proposed the introduction of a set of pricing principles to replace the current section 8.1 of the Code, which the Commission has argued is necessary to improve the certainty and cost-effectiveness of the Regime.¹⁷

However, DOI would question whether the Commission's proposal to insert a new set of principles in place of the current section 8.1 will increase certainty. In particular, while DOI has no specific objections to the Commission's proposed principles, it notes that the Commission does not appear to have undertaken any analysis of whether there may be inconsistencies between its proposed principles and the more detailed requirements for pricing that are set out in the remainder of section 8. While DOI would envisage that many of the more detailed requirements of section 8 may be consistent with the principles proposed by the Commission (for example, as discussed above, non-linear pricing and price discrimination is not inconsistent with section 8 as it stands), this proposition would need to be tested, particularly given the likelihood that even subtle wording differences could give rise to litigation. In addition, DOI would be concerned if the introduction of generic pricing principles weakened the important protections for both service providers and customers in the current regime, which are discussed further below.

Rather than imposing a new set of pricing principles in section 8.1 of the Code, DOI considers that a more fruitful exercise would be to analyse the detailed requirements for pricing in section 8 in their entirety, and to assess where simplifications are possible. As we noted in our earlier submission, a desirable result would be for the principles set out in section 8 to focus more on the outcomes sought, rather than forming a detailed set of implementation rules.

However, a key focus of such a simplification exercise should be to identify the constraints that currently apply to both regulators and service providers, and to assess transparently the relative merits of additional certainty provided by that constraint against the loss of flexibility in regulatory approach. One constraint on both regulators and service providers that we identified in our previous submission as being highly

¹⁶ As DOI pointed out in its earlier submission, while the retail and distribution businesses were sold as pairs ('stapled'), the service areas for the retail and distribution business only overlapped for about half of the respective areas. The intention of establishing non-coincident service areas was to reduce the incentive to deny access – which appears to have been successful.

¹⁷ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra pp. 204, 253.

desirable is the methodology prescribed for updating the value of the regulated assets from one review to the next.¹⁸ Thus, the simplification of the pricing principles should ensure that the desirable constraints on regulatory decision making are retained in a simplified version of the principles. Such an exercise would, however, require the Commission to form its own independent view on the practical workings of the pricing principles in section 8, including how they have been applied by regulators.

As discussed above, DOI noted in its previous submission that a possible advance to the application of price cap regulation in Australia may be to set the X factor in the price cap plan (after initially setting prices in line with cost) with reference to measured historical trends in total factor productivity (“TFP”), as recommended in a report to the Utilities Regulators Forum.¹⁹ Such an approach would obviate the need to make explicit forecasts of expenditure and demand – and so increase the reliance on measurable (objective) information. Accordingly, DOI recommended removing the barriers in the Regime at present to regulators applying best-practice incentive regulation. In addition, while noting that such an approach would first need to demonstrate itself superior to the use of the building block approach to setting price caps, it noted that it would be desirable to permit regulators to develop further a possible TFP-based approach for setting price caps.

In contrast, in its Draft Report, the Commission concluded that its further research had led it to conclude that ‘further work on index and productivity-based pricing methodologies is unlikely to be fruitful’.²⁰ Clearly, the Commission’s further research did not include any examination of the application of price cap regulation in the US, where the use of historical trends in TFP features prominently. DOI understands that, notwithstanding the Commission’s views, further work is being undertaken on determining the feasibility of TFP-based approaches to setting price caps, which DOI urges to continue.

¹⁸ Department of Infrastructure (Victoria) 2003, Productivity Commission Review of the Gas Access Regime: Submission to the Issues Paper, November, p. 14.

¹⁹ Farrier Swier Consulting, Comparison of Building Blocks and Index Based Approaches, Report to the Utilities Regulators Forum, June 2002.

²⁰ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra p. 222.

SECTION 4 FURTHER ISSUES FOR THE COMMISSION TO CONSIDER

Issues Raised in the Earlier DOI Submission

As summarised already in section 2, DOI's previous submission made a number of proposals for practical changes to the Regime to improve its workability. Two specific proposals were made with respect to the pricing principles in section 8 of the Code, namely to remove a potential barrier to new gas extension projects,²¹ and to remove a barrier to regulators pursuing best-practice approaches to incentive regulation.²² DOI also suggested that the Commission should consider a more general simplification of the section 8 pricing principles, with the objective of focusing them more on the outcomes sought rather than the specific implementation, subject to the important constraints on regulators and service providers remaining.²³

In a similar vein, DOI proposed that the current legal structure of the Regime – in particular, the interrelationships between the Law and the Code – be rationalised and simplified to better reflect the relative importance of the respective provisions.²⁴ DOI noted that such a rationalisation would be necessary if the code-change function were to be transferred over to the proposed Australian Energy Market Commission (AEMC), as has now been agreed.²⁵

In its Draft Report, the Commission has not pursued any of these proposals for practical refinement of the Regime. While DOI accepts that many of its proposals were technical in nature and would have required a detailed understanding of the Regime to comprehend fully, it notes that getting the detail correct is essential to the effective functioning of the Regime. DOI urges the Commission to consider the proposals for practical refinement of the Regime that it proposed in its earlier submission and also to assess where other practical refinements of the Regime would be appropriate.

DOI's earlier submission also highlighted the importance to Victoria of an appropriate treatment of greenfields projects, and proposed a number of measures in relation to the regulatory treatment of these projects (amongst other things, accepting the Parer Review²⁶ recommendations). The specific measures included clarifying that an access arrangement can be submitted and approved prior to construction, permitting the National Competition Council to issue a binding ruling on coverage prior to

²¹ Department of Infrastructure (Victoria) 2003, Productivity Commission Review of the Gas Access Regime: Submission to the Issues Paper, November, p. 19.

²² Department of Infrastructure (Victoria) 2003, Productivity Commission Review of the Gas Access Regime: Submission to the Issues Paper, November, p. 13.

²³ Department of Infrastructure (Victoria) 2003, Productivity Commission Review of the Gas Access Regime: Submission to the Issues Paper, November, pp. 13-14.

²⁴ Department of Infrastructure (Victoria) 2003, Productivity Commission Review of the Gas Access Regime: Submission to the Issues Paper, November, pp. 21-25.

²⁵ Ministerial Council on Energy, Reform of Energy Markets, Report to the Council of Australian Governments, 11 December 2003, section 4.2.1.

²⁶ W. Parer 2002, 'Towards a Truly National and Efficient Energy Market', Report to the Council of Australian Governments Energy Market Review.

construction, and to permit an ‘access holiday’ for certain facilities under certain conditions. Simplification of the competitive tendering provisions was also proposed.

While the Commission has accepted many of these recommendations, it has rejected an important element, namely the possibility of an access holiday. DOI is concerned that the Commission has not carefully distinguished greenfields projects from other investment and given the treatment of greenfields projects sufficient priority in its Draft Report. DOI is also concerned that the Commission’s rejection of the access holiday option was critically dependent on its intention to substantially reduce the scope of facilities that are covered by the Regime. Given DOI’s earlier views on the Commission’s proposals, it would suggest that the Commission revisit its views on potential measures for greenfields projects. DOI also notes that while the Commission accepted its proposal to simplify the competitive tendering provisions, it has not provided any further guidance on this matter.²⁷ DOI recommends that the Commission consider further the competitive tendering provisions in the Code and provided practical recommendations for their simplification.

Other Potential Issues with the Growth of the Gas Market

DOI is concerned that the Commission’s focus on the ‘headline’ investment-related issues may have led it to ignore other potential barriers to new investment. It is also concerned that the Commission’s restricted focus has led it to exclude from consideration whether the Regime could usefully perform an expanded role in order to promote the development of the gas market. These issues are addressed in turn below.

Investment where there are diffuse beneficiaries

An emerging issue for Victoria that has been raised by a number of market participants is whether the market is likely to generate the necessary pipeline augmentations in the gas network when those augmentations are required.

The particular concern relates to augmentations for which the beneficiaries are likely to be diffuse.²⁸ In particular, while new large customers – like a gas-fired generator – would be expected to be in a position to contract to underwrite augmentations required to serve their load, it is less likely that there will be a party who will be in a prepared to underwrite the network augmentations required for general load growth. In particular, if there is no readily identifiable beneficiary, even though a pipeline expansion would appear to provide benefits to a range of users, it is unlikely that a single party will volunteer to underpin an investment that will also benefit others (that is, there is a ‘free rider’ effect).

The intended treatment of these projects under the Regime at present would appear to be for the service provider to propose an augmentation, and then to present a case to the regulator that the project generates ‘system-wide benefits’²⁹ and so should be

²⁷ Productivity Commission 2003, *Review of the Gas Access Regime*, Draft Report, Canberra, p. 241.

²⁸ This issue is only emerging in importance in Victoria as no substantial augmentations are forecast to be required until 2009. However, its importance may grow over time.

²⁹ Code, section 8.16(b)(ii).

rolled-in to the provider's regulatory asset base. However, DOI is concerned that the current Code provisions may present a barrier to these projects.

- First, as DOI has already discussed in relation to new gas extension projects,³⁰ investors in such assets are likely to seek a degree of regulatory certainty up-front as to the treatment of these projects – including whether the regulator will agree to the cost of the project being rolled-in to the provider's regulatory asset base. However, while an up-front approval is *possible* under the current provisions, the process is very cumbersome (requiring, amongst other things, a regulator to follow the same process of consultation as it would when considering the whole access arrangement).
- Secondly, the system-wide benefits test itself would appear to be flawed, and create an impediment to these projects. In particular, the requirement for the regulator to be convinced that the 'system-wide benefits' justify a price rise 'to all users' has been interpreted as requiring that the benefits also accrue to all users – which is an impossible hurdle for any project to meet. A more relevant test would be to ensure that the particular project delivered net benefits across the whole market (and greater net benefits than alternative means of meeting the same need).³¹
- Thirdly, the ability for the regulator to declare assets to be redundant or partially redundant at future reviews may create a further barrier to these projects, given that the diffuse beneficiaries effectively means that service provider is precluded from entering into contracts to underpin the investment.

These concerns would suggest that change to the relevant provisions in the Code (sections 8.16, 8.21-8.22 and 8.27-8.33) would be highly desirable.³²

A related issue is which entity should have the role of 'planning' for such augmentations. One of the problems with a market-benefit-type test (like the 'system-wide benefits' test) is that the application of such a test requires substantial knowledge of the system, as well as judgement, creating asymmetry of information problems for the regulator if the service provider (who has a commercial interest in the outcome) is also the party undertaking the analysis.

Under the present arrangements in Victoria, the independent entity VENCORP has a function of providing the market with information on the system capabilities and future demand and supply scenarios in order to permit more informed decision

³⁰ Department of Infrastructure (Victoria) 2003, Productivity Commission Review of the Gas Access Regime: Submission to the Issues Paper, November, p. 19.

³¹ The 'regulatory test' in chapter 5 of the National Electricity Code, which requires that a proposed large electricity network augmentation maximise net market benefits (after considering alternative projects, timing, and undertaking sensitivity analysis on the assumptions underpinning the analysis) is an obvious parallel. In this context, the benefits and costs are taken as the sum of all benefits (and sum of all costs) across the whole market.

³² As discussed earlier, DOI considers that a thorough simplification of the pricing principles in section 8 is warranted, subject to retaining the important constraints on service providers and regulators.

making by market participants. One option of overcoming information asymmetry concerns would be for VENCorp also to undertake analysis of augmentation options, and so provide the regulator with the benefit of an assessment by an ‘expert’ independent body with no commercial interest in the outcome. DOI notes that such a role may reduce concerns about the ‘costs’ associated with the administration of such provisions.

Other Barriers to Greater Trade in Gas

A second emerging issue is whether there may be other barriers to the greater development of markets to facilitate an expanded interstate trade in natural gas that the Regime usefully could address.

Outside of Victoria, the level of information available on current physical deliveries and capabilities and forecasts of future demand and supply scenarios is limited.³³ Retailers have raised the lack of transparency as a factor that has impeded the growth of financial markets around the physical trade in gas. A second factor that has been raised as a barrier to the development of financial markets is the lack of transparency in the value of gas at any point, Victoria again being the exception.³⁴

An issue for the Commission is whether the Regime could usefully perform an expanded role, that being to increase the level of transparency of factors like physical quantities and capabilities and the value of gas at any point in time. While some of these matters could be addressed on a case-by-case basis in individual access arrangements,³⁵ the increasing level of interconnection and trade in natural gas suggests that a more coordinated approach across at least the southern and eastern markets would be highly desirable. As noted further below, one of the substantial differences between the Gas Code and Electricity Code is that the latter’s coverage explicitly includes measures to create transparency in such matters as physical quantities and capabilities and the value of the product at any time, as well as other measures to facilitate financial markets around the ‘physical’ trade.

Consistency between Electricity and Gas – the Ministerial Council on Energy Decisions

Lastly, one of the main objectives of the energy market reforms that are being pursued through the Ministerial Council on Energy (“MCE”) is to promote greater consistency across the regulation of electricity and gas in Australia, and a number of specific measures to promote this end have been announced. It is surprising, therefore, that the Commission has not addressed the current differences between the network regulatory arrangements for the electricity and gas industries, whether there are justifications for

³³ VENCorp provides substantial information to the market on these matters as part of its planning reviews.

³⁴ The Victorian spot market arrangements create a transparent benchmark for the value of gas at any point in time.

³⁵ By way of example, the treatment of a user’s short-term imbalances (which must be an element of a transmission access arrangement) creates an *implicit* value of gas at any point in time. The Victorian spot-market arrangement makes this short term value explicit, in effect, by automatically cashing out imbalances at a market-determined spot-price.

those differences, and what inefficiencies may result. It is also surprising that the Commission has given little attention to the strengthening interrelationship between the gas and electricity markets in its assessment of the Regime.³⁶ DOI notes that the reference in the Commission's Terms of Reference to 'energy services', not just 'gas services' provides a clear direction not to consider gas in isolation.³⁷

The differences in the regimes applied by the codes for electricity and gas exist at all levels. In terms on their assessment under Part IIIA of the *Trade Practices Act*, the Gas Code is an effective state-based regime (where the National Competition Council and Commonwealth Minister is the accreditation body), whereas the Electricity Code is recognised under the undertakings provisions, making the Australian Competition and Consumer Commission the accreditation body. In addition, while the Gas Code has a mechanism for assessing whether facilities should qualify for regulation (the coverage test), no similar mechanism exists in electricity. There are obvious differences in the provisions governing price regulation, including in the objectives and guidance given to regulators under each regime, as well as differences in the scope for appeals from the relevant regulator's decisions.

The regulatory and commercial arrangements for the transmission elements of the industry also differ at a more fundamental level. In particular, the electricity network is operated – and charged to customers – as a single, integrated system. In contrast, individual gas pipelines are operated – and charged to customers – independently. While the prospects for competition between networks are made limited under the electricity model, the ability to trade across multiple networks is greatly enhanced. Lastly, the two codes also have a much different coverage of matters, with the Electricity Code establishing standardised arrangements for the technical and commercial arrangements associated with access, which are established on a case-by-case basis under the Gas Code.

While clearly there are differences in the technology and markets between gas and electricity that may justify different approaches, it is an important issue to establish when those differences are justifiable, and when consistency would be appropriate.

³⁶ The recent incident at Moomba – and the subsequent effect on spot-prices in the electricity market – provides a good demonstration of the effect of the gas market on the electricity market. Similarly, the interrelationship between the electricity and gas markets is a key issue in VENCORP's current review of the Victorian gas spot market and balancing arrangements.

³⁷ Costello, P. 2003, Terms of Reference for the Gas Access Review, para. IV(2)(a).