Interconnection to Private Transmission Pipelines: Advice to the Associate Minister of Energy and Resources

May 2010

GAS INDUSTRY COMPANY LIMITED

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About Gas Industry Co.

Gas Industry Co was formed to be the co-regulator under the Gas Act.

Its role is to:

- recommend arrangements, including rules and regulations where appropriate, which improve:
  - the operation of gas markets;
  - access to infrastructure; and
  - consumer outcomes;
- administer, oversee compliance with, and review such arrangements; and
- report regularly to the Minister of Energy and Resources on the performance and present state of the New Zealand gas industry, and the achievement of Government's policy objectives for the gas sector.

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Executive summary

The Associate Minister of Energy and Resources, Hon Pansy Wong (the Associate Minister), has requested advice on the desirability of applying some of the best practice arrangements outlined in Gas Industry Co's *Guidelines on Interconnection with Transmission Pipelines* (the Interconnection Guidelines) to private pipelines in the Taranaki region.

A recent problem regarding access to a private pipeline in Taranaki provides a useful context for examining the policy issues.

Gas Industry Co considers that the application of the voluntary Interconnection Guidelines to private pipelines would not have assisted parties involved in the case study, and is unlikely to improve access to private pipelines generally. The guidelines were designed for open access pipelines, and only relate to interconnection arrangements. To improve access to private pipelines, the guidelines would need to address issues arising from the carriage of non-specification gas, and the other terms of access, such as transportation and balancing, would also need to be addressed.

At this stage, Gas Industry Co notes that the costs and timeframes involved in developing access arrangements for private pipelines may not be justified given the lack of firm evidence that pipeline owners have market power, and have abused that market power.

However, to aid further exploration of the issue, Gas Industry Co notes that it does not have formal powers to investigate access disputes or to obtain information from the relevant parties ahead of specific regulations mandating access to private pipelines. In light of this, it considers that there would be merit in formalising arrangements for the collection and assessment of information regarding access disputes and related matters between the Ministry of Economic Development (MED) and the Company. It is therefore recommended that MED, and Gas Industry Co agree a protocol for ensuring that information regarding all access disputes or concerns (either formal or informal) is recorded and actions are agreed. This protocol will assist Gas Industry Co, and MED in monitoring the extent of access disputes and ultimately forming a judgment on whether further investigation or regulatory reform is warranted.

Contents

1 Introduction

1.1 Purpose

The purpose of this report is to provide advice to the Associate Minister of Energy and Resources (the Associate Minister) on the desirability of applying some of the best practice arrangements outlined in Gas Industry Company Limited's (Gas Industry Co) *Guidelines on Interconnection with Transmission Pipelines* (Interconnection Guidelines)[1] to the private pipelines in Taranaki. In this context, the 'private pipelines' under consideration are gas transmission pipelines dedicated to the service of the owner's business, which are not currently subject to open access arrangements.

1.2 Background

In a letter dated 1 February 2010, the Associate Minister commented:

> The ability to interconnect easily to existing pipelines is a core component of a well functioning gas market and a key objective under the Gas Act and Government Policy Statement on Gas Governance. The voluntary Transmission Pipeline Interconnection Guidelines issued in February 2009 provide a useful framework from which MDL and Vector can develop their interconnection services along best practice guidelines.
>
> While it is a little disappointing to see the relatively slow progress made by MDL and Vector, I am prepared to extend the timeframes for a further six months to June 2010, as recommended by Gas Industry Co.
>
> I have been made aware by industry participants of concerns over access to some of the private pipelines in Taranaki which may be preventing gas from coming to market. Accordingly, I now formally request advice from Gas Industry Co, as to the desirability of applying some of the best practice arrangements outlined in the Guidelines to the private pipelines in Taranaki and for inclusion of this in the review to be undertaken by June 2010.

[1] The Interconnection Guidelines can be found on Gas Industry Co's website: http://www.gasindustry.co.nz/work-programme/interconnection?tab=1572

1.3 Report structure

The main body of the report is structured as follows:

- Section 2 briefly discusses the rationale for open access regimes, and the economic principles underpinning such arrangements.
- Section 3 summarises the purpose and content of the Interconnection Guidelines.
- Section 4 discusses the regulatory issues, including Gas Industry Co's earlier efforts to establish a framework for regulating open access.
- Section 5 provides a confidential case study for examining access policy issues (note that this has been removed for general publication).
- Section 6 sets out Gas Industry Co's advice to the Associate Minister on the desirability of extending the Interconnection Guidelines to private pipelines in Taranaki.

Two appendices provide background information:

- Appendix A is a report from Harding Katz Pty Ltd (Harding Katz) on the rationale for open access regimes, with specific references to arrangements in Australia.
- Appendix B is a summary of the 'light regulation' approach in Australia, also prepared by Harding Katz.

2 The rationale for open access regimes

Open access regimes allow for fair access to essential facilities. Such regimes usually cover access to infrastructure that is an essential input to services in competitive upstream or downstream markets where the infrastructure service has 'natural monopoly' characteristics. These characteristics would make it unlikely that the service could be profitably or efficiently provided by more than one firm.

The rationale for open access regulation stems from the market power that sometimes attaches to the network facilities involved in the delivery of infrastructure services. In particular, concerns may arise where owners of network facilities also operate in upstream or downstream markets. Under these circumstances network owners may deny potential competitors access to their network facilities. Concerns about monopoly pricing of access, as distinct from denial of access, also provide much of the rationale for access regulation.

When owners of essential facilities exercise monopoly power, it is detrimental to service providers in related markets and ultimately to users of the final services. In particular:

- denial of access to competitors in related markets—either directly, or indirectly through unreasonable terms and conditions—is likely to be inefficient, and
- monopoly pricing of services is also likely to be inefficient, even if access is provided to all those seeking it.

Policymakers also recognise that regulating access has associated costs. Therefore, when designing efficient regulatory responses to access problems, policymakers need to be assured that the likely costs of regulatory intervention are less than the likely benefits.

For example, Australian competition law provides that a facility is subject to access regulation only when the designated Minister is satisfied of all of the following[2]:

- that access (or increased access) to the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service,

[2] Section 44H(2) Trade Practices Act 1976.

- that it would be uneconomical for anyone to develop another facility to provide the service,
- that the facility is of national significance, having regard to:
    - the size of the facility, or
    - the importance of the facility to constitutional trade or commerce, or
    - the importance of the facility to the national economy
- that access to the service can be provided without undue risk to human health or safety,
- that access to the service is not already the subject of an effective access regime, and
- that access (or increased access) to the service would not be contrary to the public interest.

In Australia, these criteria formed the basis of the decision to develop an industry-specific access regime for the gas industry in 1997 (which has subsequently been the subject of further reform). For New Zealand, Gas Industry Co considers the matters listed above provide a useful summary of the principles and criteria for assessing whether a facility should be subject to an access regime. We have therefore made reference to these principles in assessing the issues of access to private pipelines in Taranaki.

Appendix A provides a more detailed overview of the rationale for regulating open access regimes, citing the Australian experience.

3 Overview of Gas Industry Co's Interconnection Guidelines

3.1 Interconnection issues identified in 2006

Gas Industry Co's 2006 review of transmission access issues[3] identified several concerns relating to interconnection with transmission pipelines. Later discussions between Gas Industry Co and interconnecting parties suggested that:

- interconnection processes were poorly defined, so that parties seeking interconnection were exposed to uncertainty over project timing, and when key decisions have to be made,
- technical requirements for interconnection equipment have changed during the course of projects causing uncertainty, delay, and additional cost,
- roles and responsibilities have been confusing, in part because it is unclear when personnel are acting in the role of transmission system owner, contractor, or technical operator, and
- liability/ insurance matters have not been discussed until late in the process.

In response to these issues, we developed the Interconnection Guidelines and published them in February 2009.

3.2 Objectives of the guidelines

The Interconnection Guidelines (page 1) explain that:

> As the industry body under the Act, Gas Industry Co may recommend the introduction of rules or regulations to address these concerns, and achieve the objectives of the Act and GPS. However, Gas Industry Co considers that it is helpful to first develop guidelines that set out principles, procedures, documentation requirements, and arrangements for addressing disputes. These Guidelines represent Gas Industry Co's view on the features of good interconnection processes. It is hoped that the Guidelines will assist the industry to improve interconnection processes, without the need for further Gas Industry Co review, or possible regulatory intervention.

[3] Gas Transmission Access Issues Review, http://www.gasindustry.co.nz/work-programme/transmission-access-framework?tab=723.

The Interconnection Guidelines are non-binding; however, it is clear that the guidelines are intended to apply to open access pipelines where interconnection arrangements are necessary for offering access on reasonable terms and conditions. The objectives of the Interconnection Guidelines (p3) are to:

- describe what a transmission system owner's (TSO) interconnection policy should cover,
- describe the phases of interconnection, what should happen in each phase, and the key decision points,
- establish principles that should apply to the overall provision of an interconnection service, and to each phase of interconnection,
- encourage TSOs to adopt consistent interconnection documentation,
- establish clear responsibilities, and
- minimise barriers to entry by promoting transparency and efficiency.

4 Regulatory issues

Before examining in detail the desirability of applying the Interconnection Guidelines to the private pipelines in Taranaki, it is useful to consider:

- the legislative background,
- powers under the Gas Act relating to transmission pipelines,
- Gas Industry Co's earlier efforts to establish a regulatory framework for open access, and
- arrangements for light regulation in Australia.

This material provides important background information, which is relevant to the Associate Minister's request for advice on the desirability of extending the Interconnection Guidelines.

4.1 Legislative background

Before the Crown Minerals Act 1991, the Petroleum Act 1937, the Petroleum Regulations 1978, and the Petroleum Pipeline Regulations 1984 together established the arrangements for petroleum exploration and development. These arrangements included the installation of transmission pipelines.

Sections 63 and 64 of the Petroleum Act gave the Minister the power to grant third party access to 'authorised' pipelines. These access provisions were specifically excluded from the grandfathering provisions in the Crown Minerals Act when the Petroleum Act was repealed. In other words, Parliament made an explicit decision that direct regulatory intervention in pipeline access was no longer required. Instead, we understand that there was a presumption that access seekers could use section 36 of the Commerce Act to resolve any issues of market power.

In subsequent legislation, the Government has distinguished between private pipelines and open access pipelines on the basis that the structure of particular markets and evidence of competitive behaviour do not justify the imposition of regulation on private pipelines. For example, specified private pipelines were exempted from:

- information disclosure obligations imposed on gas pipelines under the Gas (Information Disclosure) Regulations 1997[4], and
- the price-quality regulation and information disclosure regulation imposed on 'gas pipeline services' under the Commerce Act (as amended by the Commerce Amendment Act 2008)[5].

4.2 Gas Act powers relating to transmission services

In 2004, the Gas Act was amended to provide for the co-regulation of the gas industry by the Government and an industry body. Several specific regulatory powers were included in the amendments to the Gas Act at this time. Section 43F(2)(d) empowers the Minister to make regulations for the purpose of 'prescribing reasonable terms and conditions for access to transmission or distribution pipelines'.

The Gas Act does not define 'transmission pipelines'. However, it does define 'gas transmission' as the supply of 'line function services by means of high pressure gas pipelines operated at a gauge pressure exceeding 2,000 kilopascals'. 'Line function services' means:

- the provision and maintenance of pipelines for the conveyance of gas, and
- the operation of such pipelines, including the assumption of responsibility for losses of gas.

These definitions raise questions about the scope of the transmission pipeline services covered by section 43F(2). For example, there may be uncertainty over whether a pipeline that is primarily used for storage is covered by the Gas Act.

Another important issue is the scope of the regulatory power to 'prescribe access'. As explained in further detail below, Gas Industry Co faced this issue when it considered recommending regulations at the conclusion of its earlier open access review.

[4] The pipelines exempted from the Gas (Information Disclosure) Regulations 1997, fall into two categories:
- LPG Pipelines – these were not considered to be natural monopolies, in that competitive quantities of LPG may be transported by truck/ship/rail, and
- Dedicated Pipelines – these were purpose-built to carry gas from a production or processing facility directly to a consumer (but there is also the special case of gathering pipelines, which carry gas from a production facility to a processing facility). Key features of dedicated pipelines being that:
  - they are not part of a transmission or distribution system
  - the gas they convey has only one destination, and
  - they are unlikely to be of interest to other parties.

[5] The pipelines excluded from the ambit of the price-quality and information disclosure regulation imposed by the Commerce Act are (largely) the same as those exempted from the Gas (Information Disclosure) Regulations (apart from the LPG pipelines, which have been removed from the list), and it can therefore be assumed that the exemptions were made on the same 'dedicated pipeline' basis.

4.3 Gas Industry Co's open access review

Development of the Gas Transmission Access Regulations

In June 2006, Gas Industry Co published the *Gas Transmission Access Issues Review*, which examined stakeholders' principal concerns about gas transmission access. The paper categorised these concerns into nine themes, and set out the Company's initial views on how best to deal with each theme. For example, it concluded that some matters such as title tracking and allocation should be progressed through existing work streams, while other issues, such as balancing, legacy, and capacity, should be reviewed through a series of industry forums.

Gas Industry Co concluded that issues of governance should be resolved by developing a regulatory framework. Subsequently, Gas Industry Co published a further consultation paper *Analysis of Options for an Access Framework for Governance of Gas Transmission (March 2007)*. After further consultation, we produced a *Statement of Proposal* in October 2007, which contained draft Gas Transmission Access Regulations (GTARs)[6].

The rationale for developing the regulatory framework was that, by establishing access principles and governance processes in the GTARs, the Maui Pipeline Operating Code (MPOC) and the Vector Transmission Code (VTC) could evolve in an environment where the pipeline owners and users had more balanced power. We noted that this approach would preserve much of the value the industry had already invested in developing those operating codes.

GTARs: pipeline owners may establish terms and conditions of access

The GTARs established high-level principles and thus, to some extent, they also cover issues raised in other themes. For example, the draft GTARs required that policies for such matters as interconnection and confidentiality be published, improving transparency and removing uncertainty.

In addition, the draft GTARs define the minimum 'standard services' that a pipeline owner must offer—transport, balancing, and interconnection. Gas Industry Co considered that without appropriately defined minimum 'standard services' the open access regime might not provide access seekers with meaningful access on reasonable terms and conditions. In developing GTARs, Gas Industry Co was conscious of the objectives of the October 2004 Government Policy Statement on Gas Governance (GPS), which sought:

> The establishment of an open access regime across transmission pipelines so gas market participants can access transmission pipelines on reasonable terms and conditions.

In establishing a framework that would allow the operating codes to evolve, the draft GTARs implicitly left the pipeline owners to establish terms and conditions of access that would comply with the

[6] Both papers are available on Gas Industry Co's website: http://www.gasindustry.co.nz/work-programme/transmission-access-framework?tab=723.

regulations. However, they also provided parties seeking access and existing pipeline users with greater negotiating strength, and easy access to a fast-track compliance regime.

The GTARs might go further than the Gas Act allows

Legal advice to Gas Industry Co was that the GTARs went too far in delegating to pipeline owners the Minister's power to 'prescribe' all terms and conditions of access. Gas Industry Co's legal advice indicated that, depending on interpretation, the Gas Act might not permit:

- regulations that sub-delegate the power to prescribe all terms and conditions to a third party (such as Gas Industry Co or a pipeline owner), or
- regulations that prescribe governance arrangements (for example setting and changing minimum terms of access or use, or tailoring compliance arrangements) unless minimum terms are also prescribed.

Instead, section 42F(2)(c) of the Gas Act provides that the Minister can recommend to the Governor-General regulations 'prescribing reasonable terms and conditions for access to transmission or distribution pipelines'. It therefore appears that the Gas Act may not provide a good basis for the regulation of private pipelines, where a lighter-handed approach, such as that contained in the GTARs, would be appropriate.

Gas Industry Co considers that regulating for the full terms and conditions of access may be too 'heavy handed' for the open access pipelines, and certainly too heavy handed for private pipelines.

4.4 Arrangements for light regulation of gas pipeline services in Australia

When considering the New Zealand legislative arrangements for access to gas pipelines it is helpful to study the Australian arrangements. The National Gas Law in Australia provides for a comprehensive access regime (including price regulation) for certain gas transmission pipelines, and 'lighter' regulation for other pipelines.

Appendix B describes these arrangements.

5 Open access issues: a case study

This section contained commercially confidential material and cannot be released publicly.

6 Analysis and advice

6.1 Context and scope of advice

The Associate Minister of Energy and Resources has asked Gas Industry Co whether it is desirable to apply the Interconnection Guidelines to the private pipelines in Taranaki.

We address this question directly in section 6.2. However, we also note that the Associate Minister's request raises wider issues relating to the provision of open access to pipelines and not only to the issue of interconnection *per se*. Accordingly, in section 6.3 we address the Associate Minister's question in the context of the overall objective of providing access to pipelines in a manner that ensures '… that gas is delivered to existing and new customers in a safe, efficient, and reliable manner' (Section 43ZN Gas Act).

6.2 Benefit in applying the Interconnection Guidelines

The owners of private pipelines, and parties seeking access to those pipelines, may find the guidelines helpful in:

- identifying all aspects of interconnection—physical and commercial—that need to be considered,
- suggesting an interconnection process that is logical and comprehensive, and
- providing checklists for necessary documentation, and the content of those documents.

However, the Interconnection Guidelines are non-binding. They were developed as an aid to the owners of open access pipelines who wished to treat all access seekers on a non-discriminatory basis and would therefore need standardised, and clearly documented, processes and procedures.

The economic characteristics of private pipelines may differ from those of open access pipelines. For instance, access to a private pipeline is more likely to be sought on an *ad-hoc* basis, if at all. Under these circumstances, it may not be reasonable to require a private pipeline owner to standardise its procedures and documentation for interconnection.

We also note that the guidelines were developed for transmission pipelines carrying specification gas:

> All gas being transported should comply with the requirements of Gas Specification NZS5442. The MPOC and VTC set out the obligations and liabilities of the parties in respect to gas quality.[7]

The owner of a private pipeline may choose to carry non-specification gas. If so, issues of filtration, metering, odourisation, and monitoring may be dealt with differently from the provisions set out in the guidelines. Also, if different types of non-specification gas are mingled in the pipeline, complex questions arise about the physical and commercial interactions.

So, while the Interconnection Guidelines may be helpful in the context of a private pipeline interconnection, they were not intended for that purpose and may not adequately deal with all the issues that would arise.

6.3 Interconnection Guidelines in the overall context of pipeline access

Adherence to the Interconnection Guidelines is not sufficient to provide open access on fair and reasonable terms. As explained in the Interconnection Guidelines, an interconnection agreement (ICA) does not provide transportation rights:

> An ICA does not confer rights to transmission capacity and may be negotiated independently of transportation arrangements. In certain circumstances, the TSO may require the ICA and transportation arrangements to be negotiated together. This should not unnecessarily delay establishing an interconnection. The TSO's interconnection policy should discuss those circumstances.[8]

Access to private pipelines must be considered in the overall regulatory context. Legislative changes have already determined that pipeline owners are no longer legally obliged to provide third party access, but that access seekers can use section 36 of the Commerce Act to deal with any issues of market power. In addition, policy decisions have already been made to exclude private pipelines from price control and information disclosure.

Nonetheless, the Associate Minister may consider that the access regime has inadequate safeguards for third parties seeking access. If so, the economic principles described in section 2 of this report would imply a 'lighter' form of regulation for private pipelines would be the preferred approach for improving safeguards. It appears, however, that the Gas Act may not provide the Associate Minister with the powers to issue 'light' forms of regulation. In addition, there may be some ambiguity as to whether some services (such as storage, for instance) are covered by the Gas Act.

[8] Interconnection Guidelines, page 12.

6.4 Advice

The Associate Minister has asked Gas Industry Co to consider whether it is desirable to apply the Interconnection Guidelines to the private pipelines in Taranaki. Based on the analysis and discussion presented in this report, our view is that:

- The Interconnection Guidelines are probably not suitable to be applied to private pipelines, because they were drafted with open access pipelines in mind. The Interconnection Guidelines may be a useful guide to the owners of private pipelines and to parties seeking access to those pipelines. However, the guidelines are non-binding. If they were to be made binding on private pipelines they would need to be modified to cover the carriage of non-specification gas.
- If the real problem is access, not interconnection, then wider issues must be considered. Interconnection arrangements are only one element of providing access on fair and reasonable terms. The wider matters to be addressed include the means of determining which pipelines are to be required to offer open access, and the form of access regulation (other than the anti-competitive conduct provisions of the Commerce Act).

Further investigation of the case study or other incidents may lead to the conclusion that regulation of access to private pipelines is required. If this is the case, our view is that it would be a lengthy process to develop and implement appropriate regulation. In this regard, Gas Industry Co notes that the establishment of an access regime in Australia initially occurred over the two year period 1995-1997. The development of the current regime, which includes 'light regulation', occurred over the period 2002-2008. Based on the Australian experience, Gas Industry Co considers that the establishment of a fully functioning open access regime would take at least two years, and more likely four years.

The gas industry and the Associate Minister would need to be persuaded that the costs of regulation would be justified by the benefits to the gas industry and gas users. Experience with the GTARs suggests that amendments to the Gas Act may be required to give effect to the appropriate form of 'light regulation'. As noted above however, Gas Industry Co does not consider that the access difficulties experienced by parties involved in the case study warrant further regulatory reform at this time.

Gas Industry Co does not have formal powers to investigate access disputes or to obtain information from the relevant parties ahead of specific regulations mandating access to private pipelines[9].

However, there would be merit in formalising arrangements for the collection and assessment of information regarding access disputes and related matters between the Ministry of Economic Development (MED) and the Company. Gas Industry Co therefore recommends that the MED and Gas Industry Co agree a protocol for ensuring that all information regarding access disputes or concerns (either formal or informal) is recorded and actions agreed. This protocol will assist both parties in

[9] Section 43U of the Gas Act provides powers to request documents and interview participants once regulations have been made.

monitoring the extent of access disputes and ultimately forming a judgment on whether further investigation or regulatory reform is warranted.

Appendix A Harding Katz Advice

Advice on the rationale for open access regimes: Australian experience (March 2010)

There have been considerable developments in competition policy in Australia – including the establishment of open access regimes 'from scratch' – since the early 1990s. Although the competition law regimes in Australia and New Zealand differ from one another in a number of important respects, the recent experience of Australia's development of access regimes provides a convenient context in which to identify the rationale for access regulation and the economic principles underpinning the establishment of access regimes.

In 2001, the Productivity Commission[10] undertook a wide-ranging review of the Australian national access regime. The Commission's final report explained that[11]:

- In broad terms, the Australian national access regime is a regulatory framework which provides an avenue for firms to use certain infrastructure services owned and operated by others when commercial negotiations regarding access are unsuccessful.
- The focus of the regime is on infrastructure services that are essential inputs to services provided in other (upstream or downstream) markets and which involve a 'natural monopoly' technology. The latter characteristic means that it is unlikely to be profitable or efficient for more than one firm to provide the service.
- Access regulation aims to promote competition in markets that use the services of 'bottleneck' or 'essential' infrastructure facilities, without compromising incentives to develop and maintain such facilities.
- The perceived need for access regulation stems from the market power that sometimes attaches to the transmission and distribution facilities involved in the delivery of infrastructure services. Particularly where owners of such facilities also operate in upstream or downstream markets, the concern is that they may deny potential competitors in these related markets access to their facilities.
- Concerns about monopoly pricing of access, as distinct from denial of access, also provide much of the rationale for access regulation.
- In effect, the presumption is that the exercise of monopoly power by owners of essential facilities - regardless of its particular manifestation - will be to the detriment of providers in related markets and ultimately to users of the final services.

[10] The Productivity Commission is the Australian Government's independent research and advisory body on a range of economic, social and environmental issues.
[11] Productivity Commission, *Review of the National Access Regime, Report no. 17*, 2001, pages xiv ,11, 38-40, 45.

- Whatever the precise source of any market power enjoyed by the owner of an essential facility, the denial of access to competitors in related markets - either directly, or indirectly through 'unreasonable' terms and conditions - is likely to have adverse efficiency effects. So too will monopoly pricing of services, even if access is provided to all those seeking it. Such behaviour is also likely to affect income distribution, although whether such impacts will be material depends on the particular circumstances.

The rationale for, and the characteristics of effective access regimes are summarised succinctly in the following passage[12]:

> The philosophy underlying our various access regimes is that they function as surrogates for the normal competitive process. In Australia, we see regimes of this nature in several industries. To a considerable extent, these regimes owe their existence to the conclusions and recommendations of the Hilmer Committee in 1993.
>
> A pivotal conclusion of that Committee was that Part IV of the Trade Practices Act – and, in particular, section 46 which prohibits corporations taking advantage of a substantial degree of market power for certain proscribed exclusionary purposes – could not be relied upon to provide an appropriate access regime for nationally significant infrastructure. There were thought to be difficulties in respect of both establishing a proscribed purpose and for the Courts in determining appropriate terms and conditions of access, particularly price.
>
> The Committee recommended 'light-handed regulation'. While they vary in their detail, the resulting access regimes share several features:
>
> - the industries are of considerable economic significance,
> - the decisions entrusted to regulators involve highly complex topics. Access pricing normally combines the disciplines of economics, corporate finance, engineering, accounting and law,
> - the regulatory decision maker is given a discretion to assess price by reference to broad statutory criteria,
> - it is recognised that, particularly in relation to price, there is a significant amount of judgment involved. The Hilmer Committee, while it saw access pricing as key, concluded that 'neither the application of economic theory nor general notions of fairness provide a clear answer as to the appropriate access fee in all circumstances',
> - information asymmetry. The regulator normally has less information available to it than the firms being regulated, and
> - it is critical that there be on-going investment in the underlying infrastructure. Uncertainty of regulatory outcomes can diminish the incentive to invest.

The generic access framework[13] established in Australia under Part IIIA of the Trade Practices Act (following the conclusion of the Hilmer review) contains the following objects clause[14]:

[12] Paul Hughes, Justin Oliver and Rachel Trindade, *The Role of Courts and Tribunals in Providing Guidance to Regulators*, Ninth ACCC Regulatory Conference, 24-25 July 2008.
[13] Industry-specific access regimes apply to gas and electricity networks. However, the principles underpinning the generic regime are common to all Australian access regimes.

> The objects of this Part are to:
>
> (a) promote the economically efficient operation of, use of and investment in the infrastructure by which services are provided, thereby promoting effective competition in upstream and downstream markets, and
>
> (b) provide a framework and guiding principles to encourage a consistent approach to access regulation in each industry.

Under Part IIIA, the designated Minister may make a decision to 'declare' a service to be subject to the access regime. In making such a decision, the Minister:

- must have regard to the objects of Part IIIA, and
- must consider whether it would be economical for anyone to develop another facility that could provide part of the service. (This subsection does not limit the grounds on which the designated Minister may make a decision whether to declare the service or not)[15].

Section 44H(4) sets out the following key principles for determining whether a service is to be made subject to the generic access regime[16]:

> The designated Minister cannot declare a service unless he or she is satisfied of all of the following matters:
>
> (a) that access (or increased access) to the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service
>
> (b) that it would be uneconomical for anyone to develop another facility to provide the service
>
> (c) that the facility is of national significance, having regard to:
>
> (iv) the size of the facility, or
>
> (v) the importance of the facility to constitutional trade or commerce, or
>
> (vi) the importance of the facility to the national economy
>
> (d) that access to the service can be provided without undue risk to human health or safety
>
> (e) that access to the service is not already the subject of an effective access regime
>
> (f) that access (or increased access) to the service would not be contrary to the public interest.

It is important to note that once a service is declared, the terms and conditions of access may be privately negotiated by the parties, however if the negotiation fails, the fact of declaration enables either party to notify the competition regulator (the ACCC) of an access dispute, and the ACCC may[17]:

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[14] Section 44AA.
[15] Section 44H(1A) and (2).
[16] In Australia, these criteria formed the basis of the decision to develop an industry-specific access regime for the gas industry in 1997 (which has subsequently been the subject of further reform).
[17] Section 44W prescribes limits on the determination that can be made by the ACCC.

- require the provider to provide access to the service by the third party,
- require the third party to accept, and pay for access to the service,
- specify the terms and conditions of the third party's access to the service, or
- require the provider to extend the facility.

In determining an access dispute, the ACCC must take into account[18]:

- the objects of Part IIIA,
- the legitimate business interests of the provider,
- the public interest,
- the interests of all persons who have rights to use the service,
- the direct costs of providing access to the service,
- the operational and technical requirements for the safe and reliable operation of the facility,
- the economically efficient operation of the facility, and
- the pricing principles specified in section 44ZZCA.

The relevant pricing principles are:

(a) that regulated access prices should:

  (i) be set so as to generate expected revenue for a regulated service or services that is at least sufficient to meet the efficient costs of providing access to the regulated service or services, and

  (ii) include a return on investment commensurate with the regulatory and commercial risks involved, and

(b) that the access price structures should:

  (i) allow multi part pricing and price discrimination when it aids efficiency, and

  (ii) not allow a vertically integrated access provider to set terms and conditions that discriminate in favour of its downstream operations, except to the extent that the cost of providing access to other operators is higher, and

(c) that access pricing regimes should provide incentives to reduce costs or otherwise improve productivity.

In assessing the rationale for, and the potential net benefits of access regulation during its 2001 review, the Productivity Commission drew on the following general assessment principles[19]:

[18] Section 44X.

Regulatory assessment: some general principles

Objectives

What problem does the regulation seek to address?

Is the problem significant enough to warrant a regulatory response, having regard to the likely costs of intervention? In other words, are the benefits of regulation to the community as a whole likely to exceed the costs?

General efficacy

- Does the regulation target the problem effectively?
- Does it have any unintended consequences and costs?
- Is it consistent with related regulations?
- Can it readily accommodate expected changes to the nature of the regulated activity?
- Would changes to the design and implementation of the regulation improve its effectiveness?
- Would alternative regulatory approaches provide a superior outcome for the community?

Administrative efficiency and accountability

- Are administrative processes timely and transparent?
- Are there appropriate and effective monitoring and review provisions?
- Are regulators accountable for their decisions?
- Is there appropriate separation of policy making and regulatory functions?
- Could changes be made to reduce administrative and compliance costs without undermining the regulation's effectiveness?

These principles may provide useful guidance to Gas Industry Co in the consideration and assessment of alternative regulatory responses to issues relating to access to private pipelines.

[19] Productivity Commission, *Review of the National Access Regime, Report no. 17*, 2001, page 37.

Appendix B Arrangements for 'light regulation' of gas pipeline services in Australia

The National Gas Law governs the regulation of gas pipelines in Australia. The objective of the law (the 'National Gas Objective') is to 'promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas'.

In addition to providing for a comprehensive access regime (including price regulation) to be applied to certain gas transmission and distribution systems, the Law provides for the application of a 'light' form of regulation. The excerpts below (taken from the second reading speech of the National Gas Bill 2008) provide an overview of these arrangements.

> **Light regulation of services**
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> Under the National Gas Law not all covered pipelines will necessarily be subject to upfront price regulation in an access arrangement. This Bill implements the recommendation of the Productivity Commission that a light handed form of regulation be introduced into the gas access regime which does not involve upfront setting of reference tariffs through the access arrangement approval process. In its response to the review, the Ministerial Council on Energy largely accepted the thrust of the Productivity Commission's proposals and adapted them to be consistent with the new governance framework. It should be noted that both the Productivity Commission and the Ministerial Council have recognised that binding arbitration, as a core requirement for certified effective access regimes, needs to be able to be applied to pipelines under this form of regulation.
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> The National Gas Law allows service providers operating covered pipelines to apply for the services offered by means of that pipeline to be 'light regulation services'. The National Competition Council is the body charged with the responsibility of deciding whether or not to make a 'light regulation determination' in regard to a covered pipeline. A light regulation determination means that services provided by a pipeline are light regulation services and has effect until it is revoked.
>
> Service providers offering light regulation services are not required to, but may, submit a limited access arrangement to the Australian Energy Regulator for approval. A limited access arrangement is an access arrangement without provision for price or revenue regulation. Service providers may wish to submit such an arrangement as it gives certainty over terms and conditions applicable to their pipeline services. Further, a limited access arrangement also means the Australian Energy Regulator, in resolving an access dispute, must apply the limited access arrangement terms and conditions. Even though limited access arrangements do not provide for price or revenue regulation, in an arbitration the Australian Energy Regulator will be able to set a price between the parties for the purpose of resolving the access dispute. However, the price

would only be a price set between the parties to the dispute based upon the application of the revenue and pricing principles.

Service providers subject to light regulation will be required to make public the terms and conditions of access, including prices, for provision of those services. A service provider is also required by the National Gas Law not to engage in price discrimination.

The Ministerial Council has also agreed that the market status of the current covered pipeline networks in South Australia, Victoria and Western Australia makes them inappropriate for light regulation. These networks will be listed as designated pipelines in the initial regulations. Should market circumstances change, advice may be provided to the Ministerial Council by the Australian Energy Regulator and the Council may decide to pass a regulation removing one or more of the pipelines from the list as designated pipelines.

Test for light regulation and form of regulation factors

Determining how covered pipeline services are to be regulated requires an assessment of the potential for market power to be exploited by a service provider. The National Gas Law requires the National Competition Council to consider the likely effectiveness of light regulation as opposed to access arrangement regulation in promoting access to pipeline services in light of the costs of each form of regulation. Accordingly, where light regulation can reduce the costs of regulation while still providing an effective check on a pipeline's market power, the light regulation option should be available. Light regulation may be particularly relevant for point-to-point transmission pipelines with a small number of users who have countervailing market power.

The National Gas Objective and 'form of regulation factors' guide this assessment of the form of regulation to apply to covered pipeline services.

The first of the form of regulation factors assesses the presence and extent of any barriers to entry in a market for pipeline services. Many of the services provided by pipelines can be characterised as natural monopolies and need to be regulated to ensure that consumers' interests are met.

Another factor that predisposes pipelines towards natural monopoly status is the interdependent nature of network services. This means that it is usually more efficient to have one service provider provide a pipeline service to a given geographical area. Additionally it may be more efficient to have the same company provide other pipeline services to the same geographical area.

The second and third form of regulation factors require that the National Competition Council identify these interdependencies and network externalities as potential sources of market power.

The fourth form of regulation factor looks to consider the extent to which market power possessed by the owner, operator or controller of a pipeline by which services to be subject to regulation are provided is likely to be mitigated by countervailing market power possessed by the users of those services. This factor allows the National Competition Council to apply a lighter form of regulation to a pipeline that is subject to this type of countervailing market power from a major user.

Another factor that may cause the National Competition Council to consider a lighter form of regulation is the degree to which pipeline services can be substituted for other products. For example, electricity may also compete with natural gas for some or all of a customer's needs. The fifth and sixth form of regulation factors allow the National Competition Council to consider the presence and extent of substitutions for users to be provided with the particular service.

Finally, customers can only negotiate with service providers when they have adequate information, to determine whether or not payments required of them accurately reflect the efficient cost of providing the service. In a competitive market the efficient cost is revealed as competing providers seek to out-bid each other down to the point where they are covering their costs plus a normal profit. Where a business is a natural monopoly this does not occur and it can be difficult for consumers and regulators to access information from natural monopoly service providers. The final form of regulation factor allows the National Competition Council to consider the extent to which there is adequate information available to users, to enable them to negotiate with the service provider on an informed basis.

Additionally, even within a pipeline regulated by an access arrangement, some services may still only be subject to arbitration rather than upfront price regulation. The form of regulation factors will guide the Australian Energy Market Commission in making rules which distinguish between these services.