REVIEWING THE NT'S NETWORK ACCESS CODE

ISSUES PAPER

DECEMBER 2002

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CHAPTER

1

INTRODUCTION

Terms of reference

1.1 Third-party[1] access to prescribed[2] electricity network infrastructure facilities in the Northern Territory's electricity supply industry is governed by the *Electricity Networks (Third Party Access) Code* (hereafter referred to as "the Code") which is a schedule to the *Electricity Networks (Third Party Access) Act 2000* (hereafter referred to as "the Act").

1.2 Both the Code and the Act can be viewed on the legislation page of the Commission's website (www.utilicom.nt.gov.au).

1.3 Section 8(2) of the Act requires that:

"The Minister must review the Network Access Code before 30 June 2003."

1.4 On 12 December 2002, the Treasurer as Regulatory Minister (hereafter referred to as "the Minister") requested the Commission to undertake an Inquiry into the Code's effectiveness – under section 31 of the *Utilities Commission Act 2000* – to assist the Minister in his review of the Code.

1.5 The Inquiry's Terms of Reference are reproduced at Appendix A.

Timetable

1.6 The Commission is required to provide its final report to the Minister by 31 March 2003. In turn, in accordance with section 34 of the *Utilities Commission Act 2000*, the Minister is obliged to make the Commission's report publicly available no later than 28 days after receiving the report. The Commission will release the report at the same time.

1.7 To meet the deadline set by the Minister, the Commission has settled upon the following timetable for its Inquiry:

Submissions due on issues paper	Friday, 28 February 2003
Draft report to be released	Friday, 14 March 2003
Submissions due on draft report	Friday, 28 March 2003

1.8 The Commission will ensure that adequate time is given to consideration of submissions received including, if need be, by pushing back the publication dates of its draft and final reports.

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[1] In the context of electricity networks, 'third parties' are generators or retailers other than the generator or retailer affiliated with the network operator.

[2] Currently, the networks covered by the Territory's access code are the networks owned or operated by Power and Water Corporation (hereafter referred to as "PowerWater") in the Darwin/Katherine, Tennant Creek and Alice Springs regions.

Purpose of Issues Paper

1.9 To facilitate public consultation, this Paper is designed to identify the key issues within the scope of the Ministerial review of the Code and to invite submissions on these issues.

1.10 As such, the Paper does not aim to provide answers, but to pose questions for consideration. The Commission's hope is that the issues it has identified in this Paper will both:

- directly elicit answers from interested parties; and
- in turn, suggest related or alternative questions (or issues) that interested parties might wish to explore.

Submissions

Call for submissions

1.11 The Terms of Reference for this Inquiry require the Commission to consult with key interest groups and affected parties. Submissions are therefore invited from interested parties concerning the issues raised in this Paper and related matters.

1.12 Submissions, comments or inquiries regarding issues raised in this Paper should be directed to:

Executive Officer	Telephone:	(08) 8999 5480
Utilities Commission	Fax:	(08) 8999 6262
GPO Box 915		
DARWIN NT 0801	Email: utilities.commission@nt.gov.au	

1.13 The **closing date** for submissions is **Friday, 28 February 2003**.

Confidentiality

1.14 In the interests of transparency and to promote informed discussion, the Commission intends to make submissions publicly available. However, if a person making a submission does not want their submission to be public, that person should claim confidentiality in respect of the document (or any part of the document). Claims for confidentiality should be clearly noted on the front page of the submission and the relevant sections of the submission should be marked as confidential, so that the remainder of the document can be made publicly available.

Public access to submissions

1.15 Subject to the above, submissions will be made available for public inspection at the office of the Commission, and on its website (www.utilicom.nt.gov.au).

1.16 To facilitate publication on the Commission's website, submissions should be made electronically by disk or email. However, if this is not possible, submissions can be made in writing.

1.17 Information about the role and current activities of the Commission, including copies of reports, papers and submissions, can also be found on the Commission's website.

CHAPTER

2

THE CODE IN BRIEF

Nature of the Code[3]

2.1 Granting third-party access to essential infrastructure within the electricity supply industry involves an unbundling of electricity supply into:

- generation services (relating to the production of electricity);
- retail services (relating to the sale of electricity to end-use customers); and
- network services (relating to the transportation of electricity from generators to end-use customers via network infrastructure (or "facilities"), being the system of poles and wires operated for this purpose).

2.2 Network infrastructure providing the transportation of electricity forms an essential input into other goods or services and cannot economically be duplicated. Hence, the owner or operator of network infrastructure ("network provider") occupies a strategic position in the supply chain, since a generator or retailer can only supply electricity to its customers if it can transport this electricity via the network. To allow firms to compete effectively in the upstream and downstream markets, all parties – irrespective of their affiliation with the network provider – must have access to the network.

2.3 Reflecting the Competition Principles Agreement[4] (and the Hilmer Report[5] before it), the Code first creates a right of third-party access to infrastructure operated by network providers in the Northern Territory, on the basis that:

- access to the network is essential to permit effective competition in upstream or downstream activities; and
- the granting of the right is in the public interest having regard to the significance of the industry and the expected impact of effective competition in that industry.

2.4 At the same time, the legitimate interests of the network provider are protected through the imposition of an access fee and other terms and conditions that are fair and reasonable, including in recognising the network provider's current and potential future requirements for the capacity of the facility.

2.5 To these various ends, the Code establishes a commercial negotiation framework, with formal arbitration as the principal mechanism to resolve disputes.

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[3] The Code can be viewed on the legislation page of the Commission's website (www.utilicom.nt.gov.au).

[4] Council of Australian Governments (COAG) – Meeting 11 April 1995 (hereafter referred to as "Competition Principles Agreement"). See National Competition Council, *The Compendium of National Competition Policy Agreements*, Second Edition 1998. Available on the NCC website (www.ncc.gov.au).

[5] Independent Committee of Inquiry, *National Competition Policy*, Australian Government Publishing Service, Canberra, August 1993 (hereafter referred to as the "Hilmer Report").

2.6 In support of this negotiate-arbitrate approach, a regulatory framework also aims at addressing any imbalance between the bargaining position of the network provider and third-parties seeking access ("access seekers").

Elements of the Code

2.7 The Code therefore sets out:

- the obligations to be met by the network provider, notably:
  - to use all reasonable endeavours to accommodate the requirements of any access seekers to the electricity network; and
  - to maintain network capacity sufficient to meet existing demand or to meet growth in demand, provided the investment involved is commercially viable;
- the obligations to be met by network users under any access agreement;
- the processes to be followed by all parties in negotiating and concluding access agreements;
- the procedure to be followed for resolution of any access dispute, including through independent arbitration; and
- the regulation of network prices, aimed at preventing monopoly rent extraction by network providers and promoting competition in upstream and downstream markets and in a way that achieves reasonable certainty and consistency over time.

2.8 This latter element involves the negotiate-arbitrate process being conditioned through reference tariff arrangements oversighted by the Commission. Section 9 of the Act establishes the Commission as independent regulator.

2.9 Specifically, the Code is comprised of the following main components:

- Chapter 1 – which places obligations on the network provider to ensure third-party network users have access to electricity markets on negotiated terms and conditions;
- Chapter 2 – which sets out the process that must be followed by all parties in negotiating and concluding access agreements;
- Chapter 3 – which imposes obligations regarding the technical terms and conditions to be met by network users under any access agreement;
- Chapter 4 – which sets out the procedures to be followed in the event of an access dispute;
- Chapter 5 – which sets out broad pricing principles to be followed by the Commission and by network providers when setting access prices;
- Chapter 6 – which sets out the approach that the Commission is to use to determine the network provider's annual network revenue cap;
- Chapter 7 – which regulates the structure and level of individual network tariffs within the revenue cap established under chapter 6 of the Code;
- Chapter 8 – which provides for regulatory oversight of capital contributions expected of network users; and
- Chapter 9 – which provides for regulatory oversight of the setting of out-of-balance energy prices.

CHAPTER

3

INTERPRETING THE TERMS OF REFERENCE

Introduction

3.1 This chapter examines certain issues arising from the interpretation of the Terms of Reference (reproduced at Appendix A). In particular, the Commission states the reasons for certain choices it proposes to make in approaching this Inquiry.

Meaning and implications of "effectiveness"

3.2 The Terms of Reference state that:

"…the Utilities Commission is to inquire into and report on the effectiveness of the Network Access Code…"

3.3 Effectiveness can have many meanings. In this Inquiry, the Commission intends to interpret effectiveness to mean the extent to which the rights, obligations, processes, procedures and the like set out in the Code achieve desired policy outcomes.

3.4 In this sense, judging the Code's effectiveness involves both:

- knowledge of the desired policy outcomes; and
- a canvassing of alternative means of achieving those outcomes.

3.5 Chapter 4 briefly considers alternative regulatory and policy instruments to the Code at the general level, while following chapters deal with the scope for modifications to the current Code.

3.6 The Terms of Reference nominate two particular policy outcomes, namely:

- the facilitation of competition and the use of networks by electricity generators and retailers; and
- the prevention of abuse of monopoly power by the owners/operators of electricity networks.

3.7 Other policy outcomes may also be relevant, but the Commission intends to restrict its assessments to these two policy outcomes. Not only are the two policy outcomes those specifically nominated in the Terms of Reference, in the Commission's view they also encompass the principal policy outcomes sought by governments generally from access regulation.[6]

3.8 The Commission notes that effectiveness contrasts with 'efficiency', with efficiency in a narrow sense involving the extent to which the Code is being given effect

[6] It can be argued that even these two 'outcomes' are in themselves only a means to an end, rather than being ends in themselves. As noted in the Objects of the Code section in chapter 5 below, the ultimate policy outcome sought may be the efficient use of, and investment in, essential infrastructure services.

to at least (resource) cost. The Commission does not propose to address such efficiency issues directly. Rather, in assessing the effectiveness of access regulation, the Commission recognises that the 'public benefits' and "public costs" of the intervention involved are important considerations. *Economic* efficiency gains and losses are important benefits and costs respectively for this purpose. Even if regulation is likely to have benefits:

- a particular form of regulation may only be *effective* if regulatory benefits exceed any regulatory costs; and
- a particular form of regulation will only be *more effective* than another where any associated net benefits (i.e., the extent to which regulatory benefits exceed regulatory costs) are greater than for that other form of regulation.

Role of matters other than experience with the Code

3.9 The Terms of Reference state that the Commission is to inquire into and report on the Code's effectiveness:

"…including in light of experience with application of the Code since 1 April 2000."

3.10 As permitted by the word "including", the Commission's considerations will not be limited to experience with application of the Code since 1 April 2000.

3.11 It is possible to consider the effectiveness of aspects of the Code's design without necessarily having benefited from experience with that aspect to date. The Commission and affected parties have had the opportunity to consider in detail all aspects of the Code in anticipation of them applying if the situation arose. Moreover, access regimes more generally have been subject to a good deal of discussion in other jurisdictions over time, including in:

- the Hilmer Report;
- the Productivity Commission's report of it's review of the national access regime;[7] and
- the National Competition Council's (NCC) submission to the Productivity Commission's review.[8]

In addition, the NCC's final report on the Territory's access regime is also suggestive in this regard.[9]

3.12 Hence, against such background, the Commission's intention is to review the Code's design – whether or not particular features have had application to date.

Coverage of the Inquiry

3.13 The Terms of Reference state that the Commission is to:

"…consider and report on the [Network Access] Code in its entirety including:
- *the access framework …; and*
- *the access pricing provisions …"*

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[7] Productivity Commission, *Review of the National Access Regime*, Report No. 17, AusInfo, Canberra, 28 September 2001 (hereafter referred to as "Productivity Commission Review"). Available on the Productivity Commission website (www.pc.gov.au).

[8] National Competition Council, *Review of the National Access Regime – Submission in Response to the Productivity Commission's Position Paper*, July 2001 (hereafter referred to as "NCC Submission"). Available on the Productivity Commission website (www.pc.gov.au).

[9] *Northern Territory Electricity Network Access Regime, Application for Certification under Section 44M(2) of the Trade Practices Act 1974, Final Recommendation*, December 2001 (hereafter referred to as "NCC Final Recommendation Report"). Available on the NCC website (www.ncc.gov.au).

3.14 The access framework (covering negotiations, agreements and disputes) comprises Part 2 of the Code (and chapters 1 to 4), whereas the access pricing provisions (covering pricing principles, revenue caps and tariff approvals) comprise Part 3 of the Code (and chapters 5 to 9).

3.15 Besides the two aspects of the Code nominated in the Terms of Reference, and consistent with the requirement that the Commission review the Code "in its entirety", the Commission intends to also consider and report on:

- Part 1 of the Code, which provides background and some important general provisions; and
- in conjunction with Part 1, the relevant provisions of the Act itself (specifically Parts 2 to 6 of the Act).

3.16 By contrast the Commission intends to limit itself to considering the Code *per se* rather than the broader competition regime. The latter is associated with those reforms to the Territory's electricity supply industry which took effect on 1 April 2000 which removed PowerWater's effective monopoly over the supply of electricity to end-use consumers, and established a timetable for phasing-in competition among generators and retailers.

3.17 In support of these reforms, third-party generators and retailers have been granted the right to negotiate access to PowerWater's network infrastructure.

3.18 The Commission considers the market/regulatory design in sectors upstream and downstream from the electricity network to be clearly outside the Terms of Reference. This is consistent with the intent of section 8(2) of the Act which calls for the review of the Code, which the Act defines as the *Electricity Networks (Third Party Access) Code* contained in a schedule to the Act.

3.19 For similar reasons, the Commission does not propose to address whether the scope for third-party entry into sectors upstream and downstream of the electricity networks in the Territory is sufficient to justify a third-party access regime. While such a question was not canvassed when NT Power Generation Pty Ltd ("NT Power") was active in the NT electricity market, it has emerged as a possible issue following NT Power's departure from the market. However, the presumption underlying the Commission's Inquiry is that allowing for third-party entry is both necessary and desirable: necessary because the opening up of alternative gas (fuel) supplies may present future opportunities for entry into the NT electricity supply industry, and desirable because it serves to keep the incumbent generator/retailer on its toes.

Role of recertification

3.20 The Terms of Reference state that:

> *"As any changes to the Code are likely to require recertification by the relevant Commonwealth Minister, in making its recommendations the Commission is to take into account the requirements for certification under clause 6 of the Competition Principles Agreement and Part IIIA of the Trade Practices Act."*

3.21 Appendix B reproduces the relevant parts of clause 6 of the Competition Principles Agreement.

3.22 Reflecting suggestions by the NCC, the Code was amended with effect on 1 July 2001, and subsequently was certified by the Commonwealth Treasurer as an effective State/Territory access regime under Part IIIA of the *Trade Practices Act 1974* on 21 March 2002. Certification precludes declaration of these services under

Part IIIA's provisions, and means that the access regime represents the sole legal mechanism for third-party access to electricity networks in the Territory.[10]

3.23 With regard to amendments to any certified access regime, the NCC is on the public record as stating the following:

> *"A certified access regime may cease to be effective if it no longer satisfies the CPA [Competition Principles Agreement] principles. This may occur if the regime, or the CPA principles themselves, are substantially modified: s.44G(4). While this would not affect the operability of the regime, it would expose relevant services to the risk of declaration.*
>
> *If a State proposes amending an access regime after it has been certified, it may seek the Council's view as to whether the modifications are substantial. While the Council can give an informal view, it would not bind the Council if, for example, a party applied to have a service covered by the regime declared under Part IIIA.*
>
> *If a jurisdiction seeks a greater degree of certainty, it may seek recertification of the regime by formally applying to the Council."*[11]

3.24 In general, as the desired policy outcomes of the Code are consistent with the Competition Principles Agreement's clause 6 principles, any recommendations by the Commission aimed at improving the effectiveness of the Code are only ever likely to be *in principle* consistent with the Competition Principles Agreement. The NCC's understandable concern, however, appears to be to judge such matters for itself, with a distinction being made for that purpose between 'substantial' and 'minor' modifications.

3.25 With this in mind, the Commission intends to distinguish between those of its recommendations where the modifications involved could be regarded as:

- substantial, and why; and
- minor (i.e., not substantial), and why.

Issue:

(1) Is there any disagreement with the Commission's interpretation of key aspects of the Inquiry's Terms of Reference?

[10] The certification process is only available for State and Territory access regimes – the *Trade Practices Act 1974* does not establish an equivalent process for Commonwealth and private access regimes. However, private individuals or businesses may seek to have an access framework approved by submitting an access undertaking to the Australian Competition and Consumer Commission (ACCC). Acceptance of an undertaking provides an equivalent outcome to certification – services covered by that regime are made immune from declaration.

[11] NCC Final Recommendation Report, pp.82-83.

CHAPTER

4

ALTERNATIVES TO THE CODE

Introduction

4.1 The following chapters deal with different parts of the Code, and canvass issues related to the extent to which modifications to those parts could improve the overall effectiveness of the Code.

4.2 This chapter looks at issues associated with the Code as a whole, and whether there are alternatives to the Code itself or changes that could be affected across-the-board to the Code.

4.3 Reflecting the steps policy makers need to take to ensure that regulatory responses to access problems are effective, this chapter examines, in turn:

- the market failure(s) that policy makers are seeking to address;
- whether any regulatory intervention can be sufficiently well calibrated so that the likely costs of intervention are not so great as to outweigh the likely benefits of ameliorating any identified market failure; and
- whether there are more effective regulatory alternatives to the access regime found in the Code.

4.4 This broad-ranging look at the current arrangements is useful of itself, and as a means for exploring the basic problem that regulatory arrangements seek to address and the likely consequences of those arrangements – both intended and unintended. Even minor refinements to the Code must have regard to underlying objectives and to any adverse consequences that this sort of regulation can entail.

The benefits of access regulation

4.5 Access legislation is intended to curb the market power that attaches to the network infrastructure involved in the supply of electricity. Electricity networks are generally regarded as 'natural monopolies', that is they involve facilities that cannot be economically duplicated.

4.6 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, either directly, or indirectly through 'unreasonable' terms and conditions.

4.7 In addition, being in a strong monopoly position, a network provider has the scope to undertake monopoly pricing of services, even if access is provided to all those seeking it.

4.8 Together, as well as detracting from the efficient use of the services concerned, such behaviour can compromise efficient investment in related markets.

Moreover, the pursuit of monopoly rents might also have adverse consequences for the timing of investment to provide new essential services and to augment existing networks.

4.9 While potential problems arising from monopoly power in the delivery of essential infrastructure services are easy to identify, the actual extent and significance of these problems is less so.

Issues:

(2) Is there any evidence in the NT context – before or since April 2000 – of the exercise of market power by the network infrastructure operator?

(3) Do other reforms implemented since April 2000 (for example, the Government Owned Corporations Act) reduce the scope for emergence of the type of problems addressed by the Code?

The costs of access regulation

4.10 In assessing the case for any regulation, the *costs* of intervention are an important consideration. Even if regulation is likely to have benefits, intervention can only be warranted if those benefits exceed the regulatory costs.

4.11 Access regulation can give rise to a range of costs, including:

- administrative costs for government and compliance costs for business;
- constraints on the scope for a network provider to deliver and price its services efficiently;
- reduced incentives to invest in infrastructure facilities;
- inefficient investment in related markets; and
- wasteful strategic behaviour by both a network provider and access seekers.

Issue:

(4) How significant are the potential costs of access regulation in the NT context?

4.12 Many of the potential costs listed above reflect the possibility of 'regulatory failure', given the difficulties of regulating access to essential facilities. The role played by 'regulatory discretion' in this regard is addressed in chapter 5.

Setting the costs against the benefits

4.13 The Territory's experience with access regulation is still limited. Furthermore, in addition to its limited history, a number of the Code's key provisions have yet to be fully exercised.

4.14 At the national level, the Productivity Commission concluded that it would be inappropriate to abandon access regulation in such circumstances. A preferable strategy might be to monitor the effects of the Code (modified to reflect the outcome of this Inquiry) and to review it again when there has been further experience with third-party access.

4.15 In this regard, section 8 of the Act provides, in part, that:

"(1) The Minister may review the Network Access Code at any time.

"(2) The Minister must review the Network Access Code before 30 June 2003. …"

Issues:

(5) Are there views as to the cost-benefit balance regarding access regulation in the Territory's case?

(6) Should provision be made for regular reviews of the Code (say prior to the commencement of each regulatory period)?

Access regulation in the broader policy context

4.16 Access regimes are only one of several instruments for addressing monopoly power in the delivery of essential infrastructure services. Other possible instruments include:

- structural separation of vertically-integrated providers;
- general laws against anti-competitive conduct; and
- greater reliance on the negotiate-arbitrate approach.

Structural separation

4.17 Structural separation to address the essential services 'problem' was strongly advocated in the Hilmer Report.[12] Underlying this approach is the presumption that a non-integrated provider will have no incentive to deny access to firms operating in upstream or downstream markets. Structural separation may also remove the capacity for 'strategic' cost shifting between the input and final markets.

4.18 While integrated provision and denial of access could give a network provider greater scope to capture monopoly profits from network users (and end-use consumers), integrated provision may be more efficient especially in the Territory context as:

- fixed administrative and marketing costs can be spread across wholesale and retail outputs;
- wasteful duplication of effort can be reduced; and
- there may be cost savings from overcoming information imbalances that can make contracting and contract enforcement difficult under separated provision.

Reliance on general competitive conduct rules

4.19 The competition law provisions most relevant to access are contained in Section 46 of the *Trade Practices Act 1974*.

4.20 Reliance on this approach would see a court-based approach to access relying on general competitive conduct rules. The courts would play an *ex post* role in providing detail and precision to general 'standards' of conduct.

4.21 The costs of a court-based approach can be considerable, and its effectiveness would depend on the capacity of the courts to address issues related to the detailed terms and conditions of access.

Greater reliance on a negotiate-arbitrate approach

4.22 Absent conventional price controls, the negotiate-arbitrate approach would see the network provider and access seekers taking greater responsibility for

[12] Hilmer Report, pp.240-242.

negotiating the price – as well as other conditions – of access. It has the potential to become self-policing, such that many of the transactions costs of access regulation might be avoided.

4.23 In the short term, however, a pure negotiate-arbitrate regime is likely to have higher transactions costs than the Code's approach where price controls augment an obligation to supply.

4.24 The effectiveness with which desired policy outcomes are achieved may depend more on the pricing principles underpinning the arbitration or regulated price setting process than on the degree of prior commercial negotiation involved.

Is there any need for a change in the policy balance?

4.25 The Productivity Commission found that, Australia-wide, there is no reason for a significant change in the balance between the use of access regulation and other policy instruments available for promoting efficient access to essential infrastructure. Any such change would increase uncertainty for market participants without guaranteeing improved outcomes.

Issue:

(7) Is there a role in the Territory for a change in the balance between access regulation and other policy instruments available for promoting efficient access to essential electricity infrastructure?

CHAPTER

5

OBJECTS AND DISCRETIONS

Introduction

5.1 This chapter looks at issues arising with regard to Part 1 of the Code.

5.2 Part 1 provides background and some general provisions. In this context, Part 1 must be considered in conjunction with the relevant provisions of the Act itself (specifically Parts 2 to 6 of the Act).

5.3 Clause 3 of the Code provides definitions of key terms used in the Code. The appropriateness of particular definitions is not addressed in this chapter, but under the later chapter dealing with the most applicable Part of the Code (i.e., chapter 6 for Part 2 and chapter 7 for Part 3).

Objects of the Code

5.4 Clause 2(1) sets out the 'aim' of the Code as being:

> *"…to be an effective access regime under Part IIIA of the Trade Practices Act 1974 of the Commonwealth and so meet the requirements laid down in clause 6 of the Competition Principles Agreement."*

5.5 Furthermore, clause 2(2) provides that, in deciding on the terms and conditions for access, the regulator and any arbitrator should take into account:

> *"(a) the network provider's legitimate business interests and investment in the electricity network;*
>
> *(b) the costs to the network provider of providing access, including any costs of extending the electricity network but not costs associated with losses arising from increased competition in upstream or downstream markets;*
>
> *(c) the economic value to the network provider of any additional investment that an access applicant or the network provider has agreed to undertake;*
>
> *(d) the interests of all persons holding access agreements for use of the electricity network;*
>
> *(e) firm and binding contractual obligations of the network provider or other persons (or both) already using the electricity network;*
>
> *(f) the operational and technical requirements necessary for the safe and reliable operation of the electricity network;*
>
> *(g) the economically efficient operation of the electricity network; and*
>
> *(h) the benefit to the public from having competitive markets."*

These factors repeat the factors specified in clause 6(4)(i) of the Competition Principles Agreement.

5.6 Altogether, the unstated 'objects' of the Code are clearly the same as those of Part IIIA of the *Trade Practices Act 1974* and clause 6 of the Competition Principles Agreement.

5.7 For access regimes to function effectively, clear objectives are needed to promote:

- decisions that are well targeted to the identified problem and which minimise unintended side effects;
- greater certainty for current and prospective facility owners, access seekers and other interested parties;
- consistency among policymakers, regulators and the judiciary responsible for implementation and enforcement; and
- regulatory accountability.

5.8 The objects of the Code must be imputed from those of clause 6 of the Competition Principles Agreement and of Part IIIA of the *Trade Practices Act 1974*. Moreover, how satisfactory these objects are in this regard depends upon how satisfactory the objects are of clause 6 of the Competition Principles Agreement and of Part IIIA of the *Trade Practices Act 1974*.

5.9 The Competition Principles Agreement does not have an objects clause as such.

5.10 As to Part IIIA of the *Trade Practice Act 1974* (which gives effect to the infrastructure access provisions of the Competition Principles Agreement), section 2 of that Act identifies the object of the Act as being to:

> *"…enhance the welfare of Australians through the promotion of competition and fair trading and provision for consumer welfare".*

5.11 The NCC is on the record as suggesting that this general high-level objects clause is:

> *"… somewhat ambiguous in the role and priority to be accorded to the various concepts identified and there is no explicit indication as to how the section is to be taken into account in interpreting specific provisions. … the specific context of Part IIIA would benefit from a more explicit objects clause."*[13]

5.12 The Productivity Commission has also supported the insertion of an objects clause into Part IIIA in order to:

> *"…to provide guidance which has been lacking for this relatively new area of economic regulation … [and to] reduce uncertainty by assisting all parties – regulators, the judiciary, access seekers, facility owners and potential infrastructure investors – to interpret the intent of various criteria."*[14]

5.13 An objects clause must capture the intent of often complex legislation in relatively few words – otherwise misconstrued purposes and/or over-emphasis on particular matters could lead to unintended outcomes. In this regard, there can be tensions between:

- the different interests of users and facility owners;
- efficient use of infrastructure and efficient investment; and
- short-term versus long-term efficiency considerations.

5.14 Competition is a means to an end, rather than an end in itself. Competition policy initiatives, in the main, aim to improve efficiency by removing institutional barriers and/or impediments which artificially distort or mask price signals (for example, production quotas and mandated cross-subsidies).

5.15 In the case of access regulation, the presumption is that unregulated markets will not promote efficiency – thus, regulatory intervention to induce

[13] NCC Submission, p.8.

[14] Productivity Commission Review, p.126.

competition is required to promote efficient outcomes. However, it is possible to have too many competitors as a result of providing access on terms and conditions which are too favourable to third parties. This can promote wasteful activity in downstream markets and deny the community the benefits of dynamic efficiency gains – for example, by deterring investment in new essential infrastructure.

5.16 Viewed in this light, the Productivity Commission considered that an objects clause in Part IIIA should:

"…incorporate an explicit efficiency objective reflecting both short term and long term considerations – in particular, recognising legitimate user/consumer interests and long term investment dimensions…"

suggesting, in particular, that the objects clause could read as follows:

"…enhance overall economic efficiency by promoting efficient use of, and investment in, essential infrastructure services…"[15]

Issues:

(8) Is there a need to include a specific objects clause in the Code?

(9) If a specific objects clause were to be included in the Code, would sufficient overall guidance be provided to the Commission by use of the Productivity Commission's proposal that the objects of access regulation are "to promote the economically efficient use of, and investment in, essential infrastructure services." What alternative/additional objectives might be preferred?

Related provisions of the Act

5.17 The Code itself does not have force of law and is, in effect, an 'extrinsic code'. The provisions of the access regime which have force of law are included in the Act, and include the following:

- the Minister is expressly prohibited from directing the Commission to suppress or vary determinations or approvals made by the Commission under the Code or in any other way to adopt a course of action that would directly affect the terms and conditions under which network users have access to electricity networks under the Code (section 11(2));
- the determinations and approvals made by the Commission under the Code are final, with appeals to the courts limited to questions of law (section 14); and
- the Minister is to review the Code by 30 June 2003 (section 8(2)).

Extent of regulatory discretion

5.18 Section 11(2) of the Act provides that:

"No ministerial direction can be given to the regulator –

(a) to suppress or vary determinations or approvals made by the regulator under the Network Access Code;

(b) to compel the regulator to conciliate or refrain from conciliating an access dispute under the Network Access Code;

(c) to compel the regulator to refer or refrain from referring an access dispute to arbitration under the Network Access Code;

(d) to compel the regulator to appoint or refrain from appointing a particular person as an arbitrator under the Network Access Code;

(e) to compel the regulator to make a determination or an approval under the Network Access Code on specific terms; or

[15] Productivity Commission Review, p.130.

(f) to require the regulator in any other way to adopt a course of action that would directly affect the terms and conditions under which network users or contestable customers have access to electricity networks under the Network Access Code."

5.19 Regulatory discretion can give rise to regulatory uncertainty. This has been explained as follows:

"One of the most fundamental reasons for addressing competition issues through regulation rather than through legislation is that a complete set of rules is very difficult (if not impossible) to specify in advance, and the costs of adapting pre-specified rules to changing circumstances through legislative amendment are considered to be greater than those of relying on regulatory decisions made within the terms of more open-ended standards. Thus, regulators always have some non-trivial decisions to make. As a consequence, the outcomes from the future stream of regulatory decision making processes cannot be predicted with certainty."[16]

5.20 In a submission to the Productivity Commission, the Regulated Business Forum argued that regulators operating in the National Electricity Market were guilty of:

"... inconsistency, subjective judgements, cherry picking methodologies, use of false benchmarks and asymmetrical approaches that cannot be consistently maintained into the future..."[17]

5.21 Put more circumspectly, information constraints and imperfect regulatory instruments mean that some degree of regulatory failure is likely almost irrespective of how well regulators perform their task.

5.22 Regulatory errors can take two general forms:

- a regulator may wrongly identify a case of market failure requiring intervention where there is in fact no market failure (or the costs of that failure are less than the costs of attempting to correct it); or
- conversely, a regulator may fail to correct market failure where such market failure exists.

5.23 In an access context, the potential costs of such errors in regulatory decision-making include:

- diminishing the incentives for businesses to invest in infrastructure facilities and thus limiting, rather than enhancing, overall competition and economic efficiency;
- impinging on the private property rights of infrastructure owners;
- creating distortions in market outcomes, where the choice of regulatory tool (in the present case, access regulation) is not correctly aligned with the source of the market power problems;
- imposing administrative costs for government and compliance costs for business;
- constraining the scope for infrastructure providers to deliver and price their services efficiently;
- encouraging inefficient investment in related markets; and
- facilitating wasteful strategic behaviour by both service providers and access seekers.[18]

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[16] Ergas, Hornby, Little and Small (Network Economics Consulting Group), "Regulatory Risk", a paper prepared for the ACCC Regulation and Investment Conference, Manly, March 2001, p.8. Available on the ACCC website (www.accc.gov.au).

[17] Quoted by Productivity Commission Review, p.91.

[18] Productivity Commission Review, p.59.

Issue:

(10) To what extent should the Code leave matters of implementation or detail to the parties and/or the Commission? Should the Code be more or less prescriptive?

Appeal and review

5.24 Section 14 of the Act provides that:

"(1) Subject to subsection (2), a determination or approval of the regulator made under Part 3 of the Network Access Code is final.

(2) An appeal lies to the Supreme Court in respect of a determination or approval of the regulator made under the Network Access Code.

(3) An appeal may only be made on the grounds that –

(a) there has been bias; or

(b) the facts on which the decision is based have been misinterpreted in a material respect.

(4) An appeal must be commenced not later than 14 days after the date the determination or approval is made or any longer period that the Supreme Court may allow.

(5) Part 6 of the Utilities Commission Act does not apply in respect of a determination or approval of the regulator made under Part 3 of the Network Access Code."

5.25 Access seekers generally prefer limits on the scope of review on the basis that speedier, even if more imperfect, decisions flow. On the other hand, access providers generally prefer to expand the scope of review of regulatory decision-making on the basis that more opportunities for review of regulatory decisions allow a greater number of errors to be filtered out, or the extent of error minimised, than would otherwise be the case.

5.26 The Productivity Commission has suggested that increased accountability and transparency of regulatory decision-making is warranted in current access regimes, including on the grounds that:

"Eliminating the scope for an appeal removes the possible divulgence of regulatory error, but it does not remove its consequences for parties…"

and:

"[appeal rights] are critical where regulatory decisions have such importance for investment incentives and efficiency for access seekers and providers. They recognise the sizeable potential for regulatory error and provide an incentive for the regulator to maintain balance in its decisions." [19]

Issue:

(11) Is there a need to increase the grounds for review of regulatory decisions beyond just 'bias' or 'errors of fact or interpretation'?

Coverage of the Code

5.27 Section 5(1) of the Act provides that:

"The Network Access Code applies to the electricity networks prescribed by the Minister by notice in the Gazette."

5.28 The electricity networks prescribed by the Minister are currently:

- Darwin/Katherine, including the Darwin-Katherine transmission line ("DKTL");

[19] Productivity Commission, *Telecommunications Competition Regulation*, Final Report, AusInfo, Canberra, 28 September 2001, p.340 and p.xxxii. Available on the Productivity commission website (www.pc.gov.au).

- Tennant Creek; and
- Alice Springs.

5.29 The DKTL was not covered by the Code while it was privately owned. At that time, to facilitate access to the DKTL, the Commission gave some consideration to other options for applying the Code in whole or in part to non-prescribed electricity networks. In particular, the Commission considered the provision of a mechanism whereby an owner of an asset could give an undertaking in relation to access to the asset which could take the form of a modified access code.

Issues:

(12) Should the Code provide the criteria upon which the Minister is to determine which networks are to be covered and which are not?

(13) What modifications are needed to the Code before coverage could be extended beyond government-owned networks?

CHAPTER

6

ACCESS NEGOTIATION FRAMEWORK

Introduction

6.1 Part 2 of the Code establishes the terms and conditions under which access to an electricity network is to be granted to third parties. This Part lays down the processes to be followed in negotiating and implementing access agreements and for resolving any access disputes.

Obligations of a network provider

6.2 Chapter 1 of the Code places certain obligations on a network provider on account of the monopoly power it possesses in the delivery of essential infrastructure services.

6.3 In particular, chapter 1 of the Code generally obliges a network provider to:

- use all reasonable endeavours to accommodate the requirements of those seeking access to the electricity network;
- provide information on access arrangements and requirements by developing and maintaining a package of information containing all matters of interest to access seekers regarding the arrangements and requirements for access;
- comply with good electricity industry practice when providing network access services and in planning, operating, maintaining, developing and extending the electricity network and to facilitate this by preparing and making publicly available a network technical code and network planning criteria;
- use reasonable endeavours to provide network access services of a quality and a standard specified in the Code;
- keep separate its network and other businesses as prescribed by the Commission under a ring-fencing code; and
- develop and publish a network technical code and network planning criteria.

Issues:

(14) Is the Code specific enough about the information to be provided by a network provider to access seekers?

(15) Should the nature of (internal) access arrangements between PowerWater Retail/Generation and PowerWater Networks be subject to greater prescription under the Code?

(16) Are the technical code and planning criteria requirements in the Code too onerous? Have they served as a barrier to entry?

Negotiation of access

6.4 Chapter 2 of the Code sets out the process that must be followed by all parties in negotiating and concluding access agreements.

6.5 These negotiation arrangements aim to both:

- address the perceived imbalance between the bargaining position of the network provider and access seekers; and
- avoid excessive costs where possible, given initial applications for access and the following negotiations to secure access can be costly in terms of time, money and effort of the applicant and the network provider.

6.6 The clauses in the chapter set out both the scope of information required of each party and the maximum timetables to be observed.

Issues:

(17) How appropriate are the Code's timeframes in which information and responses are to be provided between access seeker and network provider?

(18) Can the Code's negotiation framework accommodate likely future changes in the Territory's electricity supply industry (considering the potential availability of off-shore gas as a fuel)?

Access terms

6.7 Chapter 3 of the Code imposes obligations regarding the technical terms and conditions to be met by network users under any access agreement.

6.8 The terms of the access agreement underpin the ongoing relationship between the network provider and the access seeker. The terms set out the rights of and obligations on each of the parties during the contractual period.

Issues:

(19) Has there been any evidence of attempts to frustrate access through technical barriers and the like?

(20) Should the generation-related provisions of the Code be removed to a more appropriate vehicle? What might be the more appropriate locations of such provisions?

Definition of network user

6.9 The Code generally uses the term 'network user', which is defined to be a person who has been granted access to the electricity network by the network provider in order to transport electrical energy to or from a particular point. Chapter 3 of the Code, however, distinguishes between a:

- 'generator user', which means a person who has been granted access to the electricity network by the network provider and who supplies electricity into the electricity network at an entry point; and
- 'load user', which means a person who has been granted access to the electricity network by the network provider and who takes electricity from the electricity network at an exit point.

6.10 The Commission has noted that these overlapping definitions have given rise on some occasions to interpretative difficulties for affected parties.

Issue:

(21) Should the overlapping definitions of network 'users' be removed? Alternatively, should a clearer distinction be made between generators and retailers/end-use customers?

Access disputes

6.11 Chapter 4 of the Code sets out the procedures to be followed in the event of an access dispute. The dispute resolution process can be invoked by either party requesting that the Commission refer the dispute to arbitration.

6.12 Clause 35 of the Code provides that an access dispute exists if:

- the network provider or an affected network user refuses or fails to enter into good faith negotiations with the access applicant within 21 days;
- the access applicant and the network provider fail (within 90 days of the receipt of the access application) to reach agreement on the access application after making reasonable attempts to do so; or
- the parties agree that there is no reasonable prospect of reaching agreement.

6.13 On receiving the request, under clause 38 of the Code the Commission must either:

- if the parties to the dispute agree, attempt to settle the dispute by conciliation; or
- if the parties do not agree, or they agree but the Commission fails to settle the dispute by conciliation after having made reasonable attempts to do so, appoint an arbitrator and refer the dispute to them.

6.14 The Code is not designed to replace commercial negotiations. The intention is that the applicant should first seek to negotiate with the network provider, with the Code only coming into play if a dispute arises. Underpinning this 'light handed' approach is concern to avoid the costs of more intrusive regulation.

Issues:

(22) Is there sufficient certainty as to the conditions to be met before an access dispute can be declared? Should the Code be amended to be more prescriptive in this regard?

(23) Should the role of the Commission be more explicit under the Code with regard to the dispute resolution process?

Related provisions of the Act

6.15 The Code establishes certain rights and responsibilities for network providers, access seekers and network users (together referred to as "Code participants"). To ensure that these rights are upheld and responsibilities are adhered to, the Act contains provisions for legal enforcement of the Code.

6.16 In particular:

- section 19 empowers the Commission to seek injunctive remedies by application to the Supreme Court;

- section 22 makes provision for Code participants as well as the Commission to initiate court proceedings against one another in certain circumstances; and
- sections 23-25 empower the Commission to demand (and enforce) civil penalties for breach of the Code.

Issue:

(24) Are the Act's enforcement provisions strong enough to ensure compliance with the Code?

CHAPTER

7

ACCESS PRICE REGULATION

Introduction

7.1 Part 3 of the Code specifies the price control framework to be observed by the Commission and by providers of both network access services and out-of-balance energy when setting the prices to be paid by network users for the conveyance of electricity through the electricity network.

Why regulate access prices?

7.2 The Hilmer Report urged the avoidance, where possible, of 'conventional' price controls:

> *"Since price control never solves the underlying problem it should be seen as a 'last resort'."* [20]

7.3 Conceptually, 'conventional' price controls can take various forms, including price or revenue caps applying to baskets of items, or controls on the price of individual services. They can be related directly to production costs or, alternatively, linked to some sort of productivity benchmark.

7.4 As a practical matter, the pricing of regulated access is perhaps the most contentious issue in the area of access regulation. As the NCC has argued:

> *"The Australian experience with price control … [highlights that] the control of utility prices to final consumers is inherently a highly politicised process, which is rarely likely to lead to outcomes consistent with efficiency principles. Additionally, the approach seems to seriously under-estimate the difficulties inherent in going from a given final price, even if efficiently set, to the determination of appropriate charges for the supply of the intermediate inputs (such as access)."* [21]

7.5 In an access context, price controls can lessen the scope for a network provider and access seekers to negotiate a price for access. Indeed, at the extreme, where the price of an individual access service is set ("posted"), all scope for negotiation on price (as distinct from conditions) is removed.

7.6 While some sort of access rule or obligation to supply will almost always be required to complement a conventional price control approach, some have argued that a negotiate-arbitrate approach does not necessarily require price regulation.

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[20] Hilmer Report, p.271.

[21] NCC Submission, p.26.

Issue:

(25) Does the fact that the network provider is fully government owned provide sufficient surety that prices will not be excessive, or does arm's length price control remain necessary?

Pricing principles

7.7 Chapter 5 of the Code sets out broad pricing principles to be followed by the Commission and by service providers when setting access prices.

7.8 Essentially, the Code provides that the prices that network providers charge retailers, generators or individual contestable customers for use of the network are to be regulated by:

- determining an annual cap or limit on total revenue, sufficient to enable an efficient supplier of regulated services to raise sufficient revenue to meet its operating costs, to finance necessary new investment and to provide an adequate return on past investment efficiently undertaken; and
- within limits imposed by the revenue cap, ensuring that (maximum) network tariffs are structured so as to be cost-reflective and non-discriminatory.

7.9 Clause 63 of the Code states that access price regulation must be administered to achieve the following outcomes:

"(a) efficient costs of supply;

(b) prevention of monopoly rent extraction by the network provider;

(c) promotion of competition in upstream and downstream markets and promotion of competition in the provision of network services where economically feasible;

(d) an efficient and cost-effective regulatory environment;

(e) regulatory accountability through transparency and public disclosure of regulatory processes and the basis of regulatory decisions;

(f) reasonable certainty and consistency over time of the outcomes of regulatory processes; and

(g) an acceptable balancing of the interests of the network provider, network users and the public interest."

7.10 These criteria involve a balancing of interests.

7.11 The difficulties associated with access pricing were recognised in the Hilmer Report:

"Neither the application of economic theory nor general notions of fairness provide a clear answer as to the appropriate access fee in all circumstances. Policy judgments are involved as to where to strike the balance between the owner's interest in receiving a high price, including monopoly rents that might otherwise be obtainable, and the user's interest in paying a low price, perhaps limited to the marginal costs associated with providing access. Appropriate access prices may depend on factors such as the extent the facility's existing capacity is being used, firmly planned future utilisation and the extent to which the capital costs of producing the facility have already been recovered. Decisions in this area also need to take account of the impact of prices on the incentives to produce and maintain facilities and the important signalling effect of higher returns in encouraging technical innovation. For example, relatively low access prices might contribute to an efficient allocation of resources in the short term, but in the longer term the reduced profit incentives might impede technical innovation." [22]

7.12 The Hilmer Report considered two possible responses for regulating access pricing:

[22] Hilmer Report, p.253.

> *" the entrusting of a broad discretion to an independent regulator, leaving the regulator to decide where the balance should be drawn in particular circumstances, perhaps guided by broad and general guidelines as to the factors to be taken into account; or*
>
> - *requiring the relevant Minister to stipulate more specific pricing principles in the context of declaring a right of access to particular facilities. Such principles would guide commercial negotiations and, if either party could not agree on an access price, the opportunity for arbitration could be provided."*[23]

7.13 The Hilmer Report favoured the second approach:

> *"... under which the key policy issues relating to pricing principles are more transparent ... Once principles are in place the parties have a greater degree of certainty over their respective rights and obligations. This approach is also less interventionist than regulated outcomes and should facilitate the evolution of more market-oriented solutions over time."*[24]

7.14 For its part, the Productivity Commission more recently concluded that:

> *"... a key role of pricing principles is not so much to prescribe what should happen in a particular situation, but to rule out approaches and methodologies which would be inappropriate. More generally, even pricing principles which signal that a particular outcome could fall within a wide band provide, at least tacitly, some discipline on regulators to justify the outcome of a particular determination. For example, transparent pricing principles might allay concerns that a regulator will simply bring its own values to bear when setting the terms and conditions of access."*[25]

7.15 Clearly articulated pricing objectives can reduce the scope for ambiguity and regulatory error, ensure consistency in regulatory decisions and assist regulators to reach outcomes consistent with the government's policy goals.

7.16 Counter-balancing these views is the possibility that objectives which are too restrictive may inhibit a regulator's ability to adapt to changing circumstances and to take account of continued improvements in regulatory best practice. Regulators also need a degree of flexibility to enable them to make appropriate decisions when issues arise that may not have been foreseen in the policy and design stages of setting up the regulatory regime.

Issues:

(26) Are the objectives of price regulation set out in the Code appropriate? Are they detailed enough, or too detailed?

(27) Should the Code's pricing principles provide guidance as to the relative weights to be accorded to what can often be conflicting objectives?

Network revenue caps

7.17 Chapter 6 of the Code sets out the approach that the Commission is to use to determine the network provider's annual network revenue cap.

7.18 A 'revenue cap' establishes the maximum allowed revenue determined by the Commission to be raised during a financial year, or nominated part of a year, from included network access services by the network provider.

7.19 Essentially, clause 69 of the Code provides for the revenue cap in the first year of a regulatory period to be set by the Commission in order:

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[23] Hilmer Report, p.255.

[24] Hilmer Report, p.255.

[25] Productivity Commission Review, p.142.

"…to provide a fair and reasonable risk-adjusted rate of return to the network provider on efficient investment given efficient operating and maintenance practices on the part of the network provider..."

In this respect, schedules 6 and 8 to the Code provide important guidance to the Commission, where:

- Schedule 6 provides that an accrual 'building blocks approach' be used, being a summation of a return on capital, return of capital (depreciation) and a return of efficient non-capital costs; and
- Schedule 8 specifies the methodology to be used to determine the weighted average cost of capital ("WACC") to be applied in calculating the return on capital.

7.20 Clause 70 of the Code requires the Commission to roll forward the annual revenue cap over the second and remaining years of a regulatory control period using an "CPI-X" adjustment, where:

- Schedule 9 details the manner in which revenue caps for subsequent years of the regulatory period are to be established (by escalating the preceding year in line with CPI less an efficiency gains ("X") factor); and
- Schedule 10 specifies the factors to be taken into account and the methodology to be used in determining the X factor.

7.21 Clause 72 of the Code makes reference to 'excluded services', being those services for which the associated costs and revenue are to be excluded from the revenue cap. In particular, clause 72(2) states that:

"Excluded network access services relate to services –

(a) the supply of which, in the assessment of the regulator, is subject to effective competition; and

(b) the cost of which, in the assessment of the regulator, can be satisfactorily excluded from the cost base (including all asset-related costs) used for the purpose of calculating the revenue cap applying to regulated network access services."

Scope of the revenue cap

7.22 Essentially, PowerWater's network business provides services that can be grouped into three broad categories:

- services which are subject to the revenue cap;
- services which may be subject to regulation, but are not included in the revenue cap; and
- non-regulated services.

7.23 By contrast, the Code (especially clause 72) only recognises two groups of services. In some senses, the Code may not distinguish sufficiently between services that deserve to be regulated by means other than a revenue cap and services which need not be regulated at all.

Issue:

(28) Should the Code give more or less guidance on the different types of 'excluded (from the revenue cap) services'?

Length of regulatory periods

7.24 Under clause 3 of the Code, the 'regulatory control period' is defined to mean the period between major price reviews during which time the methodology used in setting prices is held constant. Specifically, the first regulatory control period is the period between commencement of the Code and 30 June 2003 and the second

regulatory control period is "expected to be" the period between 1 July 2003 and 30 June 2008.

7.25 The Commission intends to seek Ministerial agreement to extend the first regulatory period through to 30 June 2004, on the grounds that this will enable the Ministerial review of the Code to be completed and any changes to the Code put into effect in advance of the regulatory processes that need to take place prior to a new regulatory period. The way the Code stands at the moment, there is a prospect that any changes to the Code as a result of the Ministerial review may either not have effect until the third regulatory period or result in the truncation of the second regulatory period. A one year's delay in the second regulatory period seems more sensible all around.

7.26 The presumption in the Code is that, in future, regulatory periods should be five years in length. This is the term typical in other jurisdictions.

Issue:

(29) Should regulatory periods in future be five years? Or shorter? Or longer?

What approach for the second regulatory period?

7.27 Schedules 6, 8 and 9 to the Code allow methodologies in subsequent regulatory periods to be determined by the Commission, taking into account measurement and definitional conventions generally accepted at that time.

Building blocks approach

7.28 The revenue cap is based on the so-called building blocks approach, where the revenue that a firm may earn is directly related to the costs it can be expected to incur in providing its services in an efficient manner.

7.29 The capped amount for each year is set by building up the cost-base for the facility from its individual components. The cost-base generally includes: return on capital, depreciation and operating expenses. To obtain these values, the Commission requires information on the asset base of the facility, expected capital expenditure, the weighted average cost of capital for the business and efficient operating and maintenance costs. Since caps are set for future years, forecasts of each of these elements are required as well as forecasts of likely inflation.

7.30 The advantage of the building blocks approach is that the necessary information is readily available (being based on the network provider's actual capital base and estimates of future capital expenditure and operating costs extrapolated from historical data), and is seen to be objective and transparent.

7.31 The main areas of criticism of the building block methodology are:

- it is considered information intensive and intrusive; and
- the need to forecast future costs and validate proposed capital expenditure can lead to a regulator having significant influence over the running of the business.

Industry-wide efficiency gains approach

7.32 An alternative approach is to allow prices or revenue to rise by CPI less an efficiency gains (or productivity) factor determined by reference to the industry or economy as a whole, rather than the individual firm. Under this approach, if a firm performs better than the 'average' for the industry, it retains some or all of the gains, whereas if its costs are higher than average it will be penalised. This can provide powerful incentives for firms to improve their performance.

7.33 The measure generally used is the total factor productivity (TFP) for the industry, although measures can also be derived from data envelop analysis (DEA) or based on best-practice benchmarking.

7.34 In exploring these alternatives to the building blocks approach, the Productivity Commission has noted the following:

"Yet, while productivity-based approaches are clearly feasible, like all forms of price control, they are far from perfect:

- *developing robust productivity benchmarks is not costless;*
- *there will always be scope for dispute as to whether the results of a TFP or benchmarking exercise are applicable in a given situation; and*
- *they appear to be less precise than cost-based approaches and, in the short-term, may not align prices as closely with costs."*[26]

7.35 In light of these issues, the Utility Regulators' Forum commissioned a study to examine the relative merits of building blocks and productivity-based approaches to regulation of monopoly prices. The study concluded that:

- there is no single best approach, with the choice of approach to regulation depending on environmental factors and objectives;
- if priority objectives are to promote productive and dynamic efficiency by mimicking competition and to reduce regulatory costs, then further consideration of TFP-based approached is warranted; and
- if the priority is static efficiency and reduction in risks, a building blocks approach may be best.[27]

Issues:

(30) The Code seems to lock in price regulation based on the building blocks approach, to the exclusion of alternative approaches. Should the Code's reliance on a building blocks approach be relaxed? What role could greater emphasis upon a productivity-based approach play?

(31) If the Code is to be relaxed in this regard, should the Code make the call regarding the choice among alternative approaches, or should this be a matter left to be determined among the parties concerned?

Network tariffs

7.36 Chapter 7 of the Code regulates the structure and level of individual network tariffs within the revenue cap established under Chapter 6.

7.37 Clause 73 of the Code provides that regulated tariffs are to be 'reference tariffs', which specify the *maximum* tariff to apply in a particular year with respect to a specific individual standard network access service. 'Standard network access services' mean the network access services for which reference tariffs are published in respect of a financial year.

Objectives of network tariffs

7.38 Clause 74 of the Code sets out the objectives of network tariffs as follows:

"The reference tariffs are –

(a) to reflect efficient costs of supply;

[26] Productivity Commission Review, p.344.

[27] Farrier Swier Consulting, *Comparison of Building Blocks and Index-based Approaches*, Utility Regulators' Forum, June 2002. Available on the ACCC website (www.accc.gov.au/utipubreg/pubreg.htm).

(b) to involve a common approach for all network users, with the actual tariff with respect to a particular network access service only differing between users because of –

(i) the user's geographical and electrical location;

(ii) the quantities in which the relevant network access service is to be supplied or is supplied;

(iii) the pattern of network usage;

(iv) the technical characteristics or requirements of the user's load or generation;

(v) the nature of the plant or equipment required to provide the network access service; and

(vi) the periods for which the network access service is expected to be supplied;

(c) to be transparent and published in order to provide pricing signals to network users;

(d) to promote price stability; and

(e) to reflect a balancing of the quest for detail against the administrative costs of doing so which would be passed through to end-use customers."

Issue:

(32) Are there any conflicts between the clause 74 objectives and the chapter 5 pricing principles?

Structure of regulated network prices

7.39 Clause 75(2) of the Code sets out the categories by which the network service provider may distinguish tariffs and charges for standard network access services:

(a) entry services that include the asset-related costs and services provided to serve a generator user at its connection point;

(b) exit services that include the asset-related costs and services provided to serve a load user at its connection point;

(c) common services that include the asset-related costs and services that ensure the integrity of the network and benefit all network users and cannot be allocated on the basis of voltage levels or location; and

(d) use of network services that include the network shared by generator users and load users, but exclude entry services, exit services and common services.

7.40 However, in the network tariff schedules approved for use in the first regulatory period, PowerWater effectively only has one bundled tariff for regulated network services which is calculated by summing a daily standing charge, an energy based charge (which has peak and off-peak rates) and a demand base charge (which also has peak and off-peak rates), levied based on the requirements of the end-use customer.

7.41 Charges associated with standard connection and disconnection, metering and other services related to the transportation of electricity (e.g., normal meter reading, billing services) are implicitly bundled into these tariffs. There were no network reference tariffs applicable to generators submitted or approved for the first regulatory period.

Issue:

(33) Is one bundled tariff for regulated network services (as applied in the first regulatory period) sufficient to provide appropriate price signals to the market? Should unbundled charges be mandated by the Code?

Pricing principles statement

7.42 Clause 75(5) of the Code provides that, prior to the commencement of each regulatory period, the network provider is to submit for the Commission's approval a

draft statement setting out details of principles and methods to be used for defining the individual standard network access services to be supplied by the network provider and for establishing the reference tariffs to apply to those services.

7.43 The Commission may only withhold its approval of the pricing principles statement if the statement is not consistent with the principles in clause 74 of the Code.

Issue:

(34) Was the pricing principles statement approved by the Commission for use in the first regulatory period sufficient in all regards? Should the provisions relating to this statement in the Code be made more or less prescriptive?

Capital contributions

7.44 Chapter 8 of the Code provides for regulatory oversight of capital contributions expected of network users.

7.45 'Capital contributions' involve a financial contribution made by a network user towards the capital investment associated with designing, constructing, installing and commissioning the electricity network assets of a network provider.

7.46 The main provisions of chapter 8 of the Code are as follows:

- clause 80(2) provides that an access applicant or network user may be required to make a capital contribution towards the extension of connection equipment or network system assets only if the network provider can demonstrate that the extension is not 'commercially viable' without that capital contribution;
- clause 80(3) defines the conditions to be met for an extension to be commercially viable, which includes definitions for this purpose relating to:
  - a reasonable rate of return on the capital investment associated with the proposed extension,
  - a reasonable time within which the costs, the capital investment and a reasonable rate of return on the capital investment in respect of a proposed extension must be recovered, and
  - reasonable terms and conditions upon which funding is to be obtained to finance the proposed extension; and
- clause 81(2) requires the network provider to submit for the Commission's approval details of principles and methods for establishing capital contributions.

Issue:

(35) Should the Code's provisions relating to capital contributions be more or less prescriptive?

Charges for out-of-balance energy services

7.47 Chapter 9 of the Code provides for regulatory oversight of the setting of out-of-balance energy prices.

7.48 Out-of-balance energy means the supply of electrical energy to a load user by a generator other than the generator user who is party to the access agreement

when there is a mismatch between the transfer of electrical energy into and out of the electricity network by the parties to the access agreement.

7.49 These provisions were substantially modified as a result of the amendments which took effect on 1 July 2001. The economic dispatch arrangements that gave effect to the pricing principles in this chapter became operational on 1 July 2002.

System imbalance pricing

7.50 Clause 85 of the Code provides that, when determining guidelines or dispatch arrangements which may affect the prices for any out-of-balance energy services, the Commission and the power system controller must ensure that these guidelines and arrangements result in prices which best promote:

> *"(a) the efficient provision of out-of-balance capacity and energy; and*
>
> *(b) the efficient operation and ongoing development of the power system as a whole."*

7.51 Clause 85A of the Code provides that settlement of out-of-balance energy services is to involves both:

- a system imbalance *energy* price, defined by reference to the marginal operating costs of generation units instructed by the power system controller to deviate from their expected level of output; and
- a system imbalance *capacity* price, defined by reference to the incremental capital cost of generation units instructed by the power system controller to commence output.

7.52 Clause 87(3) of the Code provides, among other things, that the Commission is to review the economic dispatch arrangements giving effect to the provisions of chapter 9 by 30 June 2003 and that, in conducting the review, the Commission must assess the extent to which the arrangements are meeting the requirements of clause 85.

Issues:

(36) Should the Code's provisions relating to system imbalance pricing be more or less prescriptive?

(37) Should the generation-related provisions of chapter 9 of the Code be removed to a more appropriate vehicle?

Energy loss factor formula

7.53 Clause 82(2A) of the Code provides that:

> *"The power system controller's assessment of the out-of-balance energy supplied or demanded by a generator must take full account of network energy losses where such energy losses are:*
>
> *(a) estimated in accordance with Schedule 13; or*
>
> *(b) as otherwise determined from time to time by the regulator."*

7.54 'Network energy loss' means the energy loss incurred in the transportation of electricity from an entry or transfer point to an exit point or another transfer point on an electricity network.

7.55 Schedule 13 of the Code, which deals with calculation of loss factors, appears ambiguous in a number of areas. It does, however, appear to be prescribing the calculation of loss factors on the basis of stand-alone losses. As this loss factor calculation is neither on the basis of marginal losses (which would ensure allocative efficiency), nor on a basis (such as average losses) which ensures there is no surplus or deficit, and as this surplus (the fixed loss element of the stand-alone losses makes it

almost certain to be a surplus) will accrue to the network provider, it may be neither allocatively efficient nor competitively neutral.

Issue:

(38) Should the Code contain more direction on the calculation of energy loss factors? Should the Commission be obliged to determine a means of calculating these factors alternative to that in Schedule 13?

APPENDIX

A

TERMS OF REFERENCE

Pursuant to section 8(2) of the *Electricity Networks (Third Party Access) Act* and section 31 of the *Utilities Commission Act*, the Utilities Commission is to inquire into and report on the effectiveness of the Network Access Code in:

- facilitating competition and the use of networks by electricity generators and retailers; and
- preventing the exercise of market power by the owners/operators of electricity networks;

including in light of experience with application of the Code since 1 April 2000.

The Commission is to consider and report on the Code in its entirety including:

- the access framework (covering negotiations, agreements and disputes); and
- the access pricing provisions (covering pricing principles, revenue caps and tariff approvals).

As any changes to the Code are likely to require recertification by the relevant Commonwealth Minister, in making its recommendations the Commission is to take into account the requirements for certification under clause 6 of the Competition Principles Agreement and Part IIIA of the *Trade Practices Act*.

In undertaking the inquiry, the Commission is to:

- consult with key interest groups and affected parties;
- release an issues paper and draft report to facilitate consultation; and
- provide its final report by 31 March 2003.

TREASURER
12 December 2002

APPENDIX

B

EFFECTIVE ACCESS REGIMES

The criteria for assessing the effectiveness of a State or Territory access regime are set out in clauses 6(2) to 6(4) of the Competition Principles Agreement and specified below:

6(2) The regime to be established by Commonwealth legislation is not intended to cover a service provided by means of a facility where the State or Territory Party in whose jurisdiction the facility is situated has in place an access regime which covers the facility and conforms to the principles set out in this clause unless:

(a) the Council determines that the regime is ineffective having regard to the influence of the facility beyond the jurisdictional boundary of the State or Territory; or

(b) substantial difficulties arise from the facility being situated in more than one jurisdiction.

6(3) For a State or Territory access regime to conform to the principles set out in this clause, it should:

(a) apply to services provided by means of significant infrastructure facilities where:

(i) it would not be economically feasible to duplicate the facility;

(ii) access to the service is necessary in order to permit effective competition in a downstream or upstream market; and

(iii) the safe use of the facility by the person seeking access can be ensured at an economically feasible cost and, if there is a safety requirement, appropriate regulatory arrangements exist; and

(b) incorporate the principles referred to in subclause (4).

6(4) A State or Territory access regime should incorporate the following principles:

(a) Wherever possible third party access to a service provided by means of a facility should be on the basis of terms and conditions agreed between the owner of the facility and the person seeking access.

(b) Where such agreement cannot be reached, governments should establish a right for persons to negotiate access to a service provided by means of a facility.

(c) Any right to negotiate access should provide for an enforcement process.

(d) Any right to negotiate access should include a date after which the right would lapse unless reviewed and subsequently extended; however, existing contractual rights and obligations should not be automatically revoked.

(e) The owner of a facility that is used to provide a service should use all reasonable endeavours to accommodate the requirements of persons seeking access.

(f) Access to a service for persons seeking access need not be on exactly the same terms and conditions.

(g) Where the owner and a person seeking access cannot agree on terms and conditions for access to the service, they should be required to appoint and fund an independent body to resolve the dispute, if they have not already done so.

(h) The decisions of the dispute resolution body should bind the parties; however, rights of appeal under existing legislative provisions should be preserved.

(i) In deciding on the terms and conditions for access, the dispute resolution body should take into account:

(i) the owner's legitimate business interests and investment in the facility;

(ii) the costs to the owner of providing access, including any costs of extending the facility but not costs associated with losses arising from increased competition in upstream or downstream markets;

(iii) the economic value to the owner of any additional investment that the person seeking access or the owner has agreed to undertake;

(iv) the interests of all persons holding contracts for use of the facility;

(v) firm and binding contractual obligations of the owner or other persons (or both) already using the facility;

(vi) the operational and technical requirements necessary for the safe and reliable operation of the facility;

(vii) the economically efficient operation of the facility; and

(viii) the benefit to the public from having competitive markets.

(j) The owner may be required to extend, or to permit extension of, the facility that is used to provide a service if necessary but this would be subject to:

(i) such extension being technically and economically feasible and consistent with the safe and reliable operation of the facility;

(ii) the owner's legitimate business interests in the facility being protected; and

(iii) the terms of access for the third party taking into account the costs borne by the parties for the extension and the economic benefits to the parties resulting from the extension.

(k) If there has been a material change in circumstances, the parties should be able to apply for a revocation or modification of the access arrangement which was made at the conclusion of the dispute resolution process.

(l) The dispute resolution body should only impede the existing right of a person to use a facility where the dispute resolution body has considered whether there is a case for compensation of that person and, if appropriate, determined such compensation.

(m) The owner or user of a service shall not engage in conduct for the purpose of hindering access to that service by another person.

(n) Separate accounting arrangements should be required for the elements of a business which are covered by the access regime.

(o) The dispute resolution body, or relevant authority where provided for under specific legislation, should have access to financial statements and other accounting information pertaining to a service.

(p) Where more than one State or Territory regime applies to a service, those regimes should be consistent and, by means of vested jurisdiction or other co-operative legislative scheme, provide for a single process for persons to seek access to the service, a single body to resolve disputes about any aspect of access and a single forum for enforcement of access arrangements.