

Regulatory Provisions of the Commerce Act 1986

Discussion Paper

19 December 2008



COMMERCE COMMISSION

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EXECUTIVE SUMMARY

The Commerce Amendment Act 2008 received Royal assent on 16 September 2008. This legislation has introduced significant changes to those provisions of the Commerce Act 1986 that relate to the economic regulation of goods and services in the New Zealand economy. With the exception of the majority of provisions relating to the supply of electricity lines services, which take effect from 1 April 2009, the provisions of the Commerce Amendment Act came into force on 14 October 2008.

The Commerce Amendment Act amends the regulatory provisions in Parts 4, 4A, 5 and 6 of the Commerce Act putting in place a new regulatory framework for New Zealand. The amendments directly affect the scope and role of the Commerce Commission in regulating electricity lines and gas pipeline services, and extends its responsibilities to include the regulation of specified airport services. Some of the key features of the new regulatory framework include:

- a new purpose statement common to all regulatory provisions under Part 4 and additional specific purpose statements for certain regulatory instruments;
- a broader range of regulatory instruments;
- amended regulatory inquiry provisions;
- use of upfront regulatory “input methodologies”;
- provisions relating to the regulation of electricity lines, gas pipelines and airport services (including transitional arrangements); and
- new appeal and penalty provisions;

This Discussion Paper sets out the Commerce Commission’s preliminary views on the new regulatory provisions that have been introduced through the Commerce Amendment Act. It represents the first in a series of consultation documents that will be released by the Commission in order to develop the new regulatory regimes.

The Commission is seeking submissions from interested parties on this paper.

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CHAPTER 1: INTRODUCTION

1.1 BACKGROUND AND PURPOSE

- 1 The Commerce Amendment Act 2008 (CAA), which received Royal assent on 16 September 2008, has introduced significant changes to those provisions in Parts 4, 4A, 5 and 6 of the Commerce Act 1986 (the Act) that relate to the economic regulation of goods and services (hereafter “services”) in New Zealand. The passage of the CAA followed a review of the regulatory provisions in the Act which was initiated in April 2007. The objective of that review was to ensure that the regulatory provisions in the Act promote the long-term benefit of New Zealand consumers, and to consider whether any amendments to the Act would be desirable to reinforce the Government’s objectives concerning infrastructure investment.¹
- 2 Among other things, the amendments introduced by the CAA directly affect the scope and role of the Commerce Commission (the Commission) in regulating electricity and gas distribution/transmission services. They extend the Commission’s responsibilities to include the regulation of specified airport services at the three largest international airports. The CAA also introduces new provisions that provide for the possible imposition of economic regulation in other sectors of the economy. With the exception of the majority of regulatory provisions relating to electricity lines services, which will not come into force until 1 April 2009, most of the provisions in the CAA came into force from 14 October 2008.
- 3 Key features of the new regulatory framework put in place by the CAA include:
 - a new overall purpose statement common to all regulatory provisions under the Act, as well as the additional purpose statements relating to specific subparts;
 - a broader range of ‘fit-for-purpose’ regulatory instruments actually (or potentially) applying to regulated goods or services, comprising “information disclosure regulation”, “negotiate/arbitrate regulation”, “default/customised price-quality regulation”, and “individual price-quality regulation”;
 - amended provisions for the Commission to undertake Part 4 inquiries into “whether to”, and if so, “how to” regulate services not already automatically subject to regulation under the Act;
 - new obligations for the Commission to set upfront regulatory methodologies, rules, processes, requirements and evaluation criteria (collectively and/or individually referred to as “input methodologies”) that are directly (or indirectly) relevant for applying the regulatory instruments and for undertaking Part 4 inquiries;
 - new appeal provisions relating to Commission determinations on input methodologies, and to customised and individual price-quality path determinations; and
 - new and amended penalty, compensation and offence provisions.

¹ Ministry of Economic Development, *Review of the Regulatory Control Provisions under the Commerce Act 1986, Discussion Document*, April 2007.

- 4 The purpose of this Discussion Paper is to set out the Commission's preliminary views on the new regulatory provisions that have been introduced through the CAA. It is the first in a series of consultation documents that will be released by the Commission in order to develop the regulatory regimes provided for in the Act. As is outlined in chapter 12, the Commission intends that the overall process will include a series of consultation documents. These will provide detail on "input methodologies" and the regulatory instruments applying to electricity lines services, gas pipeline services and airport services.
- 5 The Commission is seeking submissions from interested parties on this Discussion Paper. Throughout the paper, the Commission has set out a number of questions to guide submissions. In their submissions, interested parties are invited to respond to these questions as well as to any other matter raised in this paper or that is relevant to the regulatory provisions of the Act. A complete list of the questions is set out in Appendix A.
- 6 This chapter provides a brief overview of the key features of the new regulatory provisions in the Act (paragraphs 3-18) and outlines the scope of this Discussion Paper (paragraphs 19-22). It provides information for interested parties who intend to make submissions on this paper (paragraphs 23-28).

1.2 OVERVIEW OF THE NEW REGULATORY PROVISIONS IN THE COMMERCE ACT

1.2.1 Relevant Parts of the Act

- 7 Prior to the passage of the CAA, Part 4 of the Act included generic provisions relating to inquiries as to whether services may and should be controlled and to the imposition of control through an Order in Council (paragraphs 129-130 below). Part 4A previously included specific provisions relating to the regulation of electricity lines businesses—namely the electricity distribution businesses (EDBs) and Transpower New Zealand Limited (Transpower). These provisions still remain in force until 1 April 2009 (paragraphs 105-117 below).
- 8 Part 5 included generic provisions for the Commission to make authorisations and undertakings in respect of prices, revenues and quality standards for controlled services (i.e., services controlled by an Order in Council). Part 6 of the Act previously included offence provisions relating to the supply of controlled services under an authorisation or undertaking.
- 9 Part 4 of the Act now includes:
 - *generic provisions* relating to whether and how to regulate services, including the purpose of regulation, provisions relating to input methodologies, inquiries, regulatory instruments, and appeals against input methodology determinations;
 - *specific provisions* relating to the regulation by the Commission of electricity lines services, gas pipeline services and certain airport services; and
 - *transitional provisions* relating to the regulation of electricity lines services, gas pipeline services and certain airport services; and
 - *appeal provisions* against input methodology determinations.
- 10 The CAA repeals Part 4A and the relevant sections of Part 5 (i.e., sections 70-74), although Part 4A is not repealed until 1 April 2009.

11 Part 6 of the Act now includes a much broader set of provisions relating to:

- offences and penalties relating to the regulatory provisions; and
- appeals against customised and individual price-quality path determinations.

1.2.2 Purpose of Regulatory Provisions and Instruments

12 The new overall purpose statement for the regulatory provisions in Part 4 of the Act (which applies in place of the purpose for the Act set out in section 1A) is set out in section 52A as follows:

The purpose of this Part is to promote the long-term benefit of consumers in markets [where there is little or no competition and little or no likelihood of a substantial increase in competition] by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services—

- (a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and*
- (b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and*
- (c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and*
- (d) are limited in their ability to extract excessive profits.*

13 With the exception of individual price-quality regulation, each of the regulatory instruments also has its own secondary purpose statement, as do the provisions for input methodologies, as follows:

- *Input Methodologies:* to promote certainty for suppliers and consumers in relation to the rules, requirements, and processes applying to the regulation, or proposed regulation, of services under Part 4 (section 52R).
- *Information Disclosure Regulation:* to ensure that sufficient information is readily available to interested persons to assess whether the purpose of Part 4 is being met (section 53A).
- *Default/Customised Price-Quality Regulation:* to provide a relatively low-cost way of setting price-quality paths for suppliers of regulated services, while allowing the opportunity for individual regulated suppliers to have alternative price-quality paths that better meet their particular circumstances (section 53K).
- *Negotiate/Arbitrate Regulation:* to encourage a supplier and its customers to reach agreement, through negotiation, on the supplier's prices and quality standards during a specified regulatory period (section 53G).

1.2.3 Scope and Application of Regulatory Instruments by Sector

- 14 Having considered a recommendation from the Commission following a Part 4 inquiry into particular services, the Minister of Commerce (the Minister) can recommend that the Governor-General impose regulation on those services through one or more of the various regulatory instruments under the new Part 4. Regulation is imposed through an Order in Council.
- 15 Certain services are, however, automatically subject to one or more of the regulatory instruments, through specific provisions in Part 4, as follows:
 - *Electricity Lines Services.* All suppliers of electricity lines services currently subject to Part 4A (including Transpower) will be subject to information disclosure regulation under Part 4 from 1 April 2009. Non-exempt suppliers will also be subject to default/customised price-quality regulation after 1 April 2009. Suppliers that are “consumer-owned” (as defined in section 54D) will be exempt from default/customised price-quality regulation.
 - *Gas Pipeline Services.* Suppliers of gas pipeline services that meet certain criteria (set out in section 55A) are subject to information disclosure regulation, and will be subject to default/customised price-quality regulation on and after 1 July 2010 (section 55D).
 - *Airport Services.* Suppliers of specified airport services at Auckland, Wellington, and Christchurch airports (“regulated airport companies”) are subject to information disclosure regulation. Also, under section 56G, as soon as practicable after any new price for a specified airport service is set by a supplier of the service in or after 2012, the Commission must provide a report to the Ministers of Commerce and Transport as to how effectively information disclosure regulation is promoting the purpose of Part 4. This review must be carried out regardless of whether or not any new price for a specified airport service is actually set before 2012.
- 16 The Commission specifies how the relevant forms of regulation apply to suppliers of regulated services through “section 52P determinations” which, among other things, must specify the input methodologies that apply. Input methodologies have their own determination process (under section 52V), and the Commission must determine input methodologies for regulated electricity, gas and airport services by 30 June 2010 (although there is provision for a six-month extension to this deadline).

1.2.4 Key Transitional Provisions

17 Transitional provisions relating to the regulation of electricity lines services, gas pipeline services and specified airport services include the following:

- *Electricity lines services – information disclosure.* Section 54W provides that, until the Commission makes a section 52P determination specifying how information disclosure under Part 4 applies to electricity lines services (which it must do as soon as practicable after 1 April 2009), any information disclosure requirements published by the Commission under Part 4A before 1 April 2009 will continue to apply. This includes the new disclosure requirements for EDBs published by the Commission on 31 October 2008 (see paragraph 115).
- *Electricity distribution services – targeted control regime.* Section 54J provides that, for the period from 1 April 2009 to 31 March 2010, the existing thresholds for the declaration of control set by the Commission under Part 4A (paragraphs 108-109 below) will be applied to non-exempt EDBs (i.e., they are “deemed to be” section 52P determinations setting default price-quality paths under the amended Act). Although these thresholds will apply as if they were default price-quality paths, any breach of such a default price-quality path (or any threshold breaches prior to 31 March 2009) will be dealt with in accordance with a number of specific transitional provisions, rather than in accordance with the new penalty provisions in Part 6 (refer to section 54N).
- *Transpower.* Section 54M(3) provides that, before the existing administrative settlement between the Commission and Transpower expires on 30 June 2011 (paragraph 112 below), the Commission must make a recommendation to the Minister that Transpower be subject to either default/customised price-quality regulation or individual price-quality regulation.
- *Gas pipeline services – information disclosure.* Section 55J provides that, until the Commission makes a section 52P determination specifying how information disclosure under Part 4 applies to regulated gas pipeline services (which it must do as soon as practicable after October 2008), the Gas (Information Disclosure) Regulations 1997 under the Gas Act 1992 remain in force (see paragraphs 121-122).
- *Powerco’s and Vector’s controlled gas services.* Sections 55G and 55H provide that Powerco’s and Vector’s controlled gas services remain subject to the existing authorisation under Part 5 until 1 July 2012 (paragraphs 133-136 below), unless the Commission were to revoke the authorisation earlier (in which case the Order in Council would also need to be revoked). At that time, the controlled services will be subject to default/customised price-quality regulation.
- *Airport services.* Section 56F provides that, until the Commission makes a section 52P determination specifying how information disclosure under Part 4 applies to regulated airport services (which it must do no later than 1 July 2010), the Airport Authorities (Airport Companies Information Disclosure) Regulations 1999 made under the Airport Authorities Act 1966 remain in force (paragraphs 137-140 below).

- 18 Figure 1 below shows the application of the new regulatory instruments under Part 4, as well as the transition from the existing regulatory arrangements. The application of the new instruments and provisions is identified by green boxes, with transitional arrangements identified by blue boxes. Potential applications of the Part 4 regulatory instruments (at some stage in the future) are identified by yellow boxes.

Figure 1 Application of New and Transitional Regulatory Instruments

	Transitional Instruments			Amended Commerce Act Instruments				
	Information Disclosure	Part 4A: Thresholds	Part 5: Control	Information Disclosure	Negotiate-Arbitrate	Default / Customised Price-Quality	Individual Price-Quality	Reports
Airports								
Auckland, Christchurch & Wellington	Airport Authorities Act reqts until new determination	---	---	Relevant	Possibly following Ministerial report	Possibly following Ministerial report	Possibly following Ministerial report	Report to Minister in/after 2012
Gas								
Controlled distribution businesses*	Gas Act reqts until new determination	---	Authorisation until 2012	Relevant	---	Relevant (from 2012)	---	---
Regulated pipeline businesses	Gas Act reqts until new determination	---	---	Relevant	---	Relevant	---	---
Electricity								
"Consumer-owned" distribution businesses	Part 4A reqts apply until new determination	Apply until March 2009	---	Relevant	---	Subject to exemption status	---	---
Non "consumer-owned" distribution businesses	Part 4A reqts apply until new determination	Relevant until DPP applies from April 2010	---	Relevant	---	Relevant	---	---
Transpower	Part 4A reqts apply until new determination	Admin settlement until July 2011	---	Relevant	---	P-Q to apply following Ministerial rec.	P-Q to apply following Ministerial rec.	Recommendation to Minister early 2011

* Businesses subject to Commerce (Control of Natural Gas Services) Order 2005.

1.3 SCOPE OF THIS DISCUSSION PAPER

- 19 Chapter 2 provides an overview of the general rationale for economic regulation and the types of regulatory instruments typically applied in overseas jurisdictions. Chapter 3 provides an overview of economic regulation in New Zealand since the 1990s in the context of the Act, but prior to the passage of the CAA, with a particular focus on the electricity lines, gas pipelines and airport sectors.
- 20 Chapter 4 of this Discussion Paper provides an overview of the new purpose statement for Part 4, which is applicable to all the regulatory provisions introduced by the CAA. In addition, the chapter sets out the Commission's preliminary view of principles which stem from the purpose statement, and proposes general principles of good regulatory practice.
- 21 The provisions relating to input methodologies are discussed in Chapter 5. Chapter 6 discusses the generic provisions relating to Part 4 inquiries and to the various regulatory instruments.
- 22 Chapters 7-10 discuss the specific provisions relating to EDBs, Transpower, gas pipeline businesses, and airports, respectively (including transitional arrangements). Chapter 11 discusses the provisions relating to penalties and appeals. Finally, chapter 12 sets out the main papers that will be released by the Commission (including indicative timing) as the Commission implements the regulatory provisions of the CAA. The overall structure of the paper is summarised in Table 1.

Table 1 Discussion Paper Structure

Chapter	Overview
2	Provides an overview of the economic rationale underpinning regulation.
3	Provides an overview of the regulatory framework as applied to date in New Zealand.
4	Discusses regulatory purpose and principles.
5	Discusses input methodologies.
6	Discusses the generic provisions relating to the regulatory instruments provided for by the Act.
7	Provides an overview of the regime applicable to Electricity Distribution Businesses.
8	Provides an overview of the regime applicable to Transpower.
9	Provides an overview of the regime applicable to Gas Pipeline Businesses.
10	Provides an overview of the regime applicable to Airport Services.
11	Briefly discusses the penalty and appeals provisions of the Act.
12	Provides an overview of the main papers that will discuss the Commission's approach to implementing the new regulatory provisions of the Act.
Appendices	Summary of questions and abbreviations.

1.4 SUBMISSIONS

- 23 Submissions are invited on all the issues raised by this document. To assist interested parties in making submissions, the Commission has identified a number of questions throughout this paper on which it invites comment. These questions are collated in Appendix A.
- 24 Submissions on this paper should be received by the Commission no later than 5pm Monday, 16 February 2009. All submissions should be supported by documentation and evidence, where appropriate.
- 25 To foster an informed and transparent process, the Commission intends to publish all submissions on its website. Accordingly, the Commission requests an electronic copy of each submission and requests that hard copies of submissions not be provided (unless an electronic copy is not available). Submissions should be sent to:

NPB@comcom.govt.nz;

or

David Healy
Chief Adviser
Network Performance Branch
Commerce Commission
P.O. Box 2351
Wellington

1.4.1 Confidentiality

- 26 Parties making submissions may wish to provide confidential or commercially sensitive information to the Commission. Parties can request that the Commission makes orders under s100 of the Act in respect of information that should not be made public. Any request for a s100 order must be made when the relevant information is supplied to the Commission and must identify the reasons why the relevant information should not be made public. The Commission will provide further information on s100 orders if requested by parties, including the principles that are applied when considering requests for such orders. Any s100 order will apply for a limited time only as specified in the order. Once an order expires, the Commission will follow its usual process in response to any request for information under the Official Information Act 1982.
- 27 The Commission discourages requests for non-disclosure of submissions, in whole or in part, as it is desirable to test all information in a fully public way. It is unlikely to agree to any requests that submissions in their entirety remain confidential. However, the Commission recognises there will be cases where interested parties making submissions may wish to provide confidential information to the Commission.
- 28 If it is necessary to include such material in a submission the information should be clearly marked and preferably included in an appendix to the submission. Interested parties should provide the Commission with both confidential and public versions of their submissions in both electronic and hard-copy formats. The responsibility for ensuring that confidential information is not included in a public version of a submission rests entirely with the party making the submission.

CHAPTER 2: ECONOMIC REGULATION

2.1 INTRODUCTION

- 29 This chapter provides an overview of the general rationale for economic regulation (paragraphs 29-60). In particular, this chapter explains why certain forms of market power can be constrained through pro-competitive means, while others are subject to specific regulatory oversight. It begins by discussing how and why competitive markets succeed in limiting market power and delivering efficient outcomes. However, there are some instances in which economic theory suggests competition can increase waste and constrain economic growth. In New Zealand, as elsewhere, various forms of economic regulation have been established to limit market power through other means, while ensuring that welfare losses are minimised.
- 30 In addition, this chapter provides a brief overview of the types of regulatory instruments typically applied in overseas jurisdictions (paragraphs 61-85). As is described in the next chapter, some of these approaches have already been applied in New Zealand, while others are now provided for through the introduction of the CAA.

2.2 RATIONALE FOR ECONOMIC REGULATION

2.2.1 *Benefits of Competitive Markets*

- 31 The reason the market mechanism is generally relied upon to deliver most goods and services is that, under the right conditions, it ensures resources are allocated and used in the most efficient way possible. These outcomes are achieved because consumers and suppliers are able to repeatedly interact with one another until the gains from trade, and all possible efficiencies, are exhausted (i.e., the market fully “clears”). In fact, if a market were to be *perfectly* competitive, then it would clear at a point at which nobody can be made better off without someone else being made worse off.² Such a situation is described as Pareto-optimal (or “Pareto efficient”).
- 32 A key contributor to the success of these markets is the constraint that rivalry places on the behaviour of firms. Since suppliers face the prospect of losing their customers to competitors, they have no option but to cut prices until they are each offering their services at a price and quality that cannot be beaten. This competition causes individual firms to charge the same price as their competitors, as they are required to “take” the price determined by the forces of both market supply and market demand.
- 33 Goods are then supplied by each firm at this market clearing price up to the point at which additional output, were it to be offered, would cost more to produce than consumers would be willing to pay for it. Additional resources are therefore only employed in production if the final output, when sold at the given price, would produce a greater profit than could be achieved if the resources were put to an alternative use instead. This means that the market clearing price for a good is exactly equal to the *opportunity cost* of production, at the margin—namely, the value of the resource in its

² D. Hay and D. Morris, *Industrial Economics and Organization: Theory and Evidence*, 3rd edn, Oxford University Press, Oxford, 1993, p. 566.

most valuable alternative use.³ This is often restated as saying that a perfectly competitive market clears when market price equates to the *marginal cost* of supply (i.e., the additional cost incurred when an additional unit of output is produced).⁴

- 34 Through these processes, perfect competition produces the greatest possible net benefit to society. Put another way, overall welfare or “economic surplus” is maximised, which is a measure of the total amount by which buyers and sellers benefit from their participation in the market.⁵ This is because resources are employed in their *most* valuable uses to society, whilst continued rivalry between firms compels them to maximise these values over time, by minimising costs and improving productivity.
- 35 As a consequence of this process, the concept of Pareto efficiency coincides with three further dimensions of economic efficiency: *allocative*, *productive* and *dynamic efficiency*. These are usually defined as follows:
- *Allocative efficiency* occurs when resources are allocated within the economy to the uses in which they have the highest value.
 - *Productive efficiency* is present when producers use inputs in such a manner as to minimise costs, subject to technological constraints.
 - *Dynamic efficiency* refers to decisions made over time and includes decisions relating to investment and/or innovation that can improve productivity as well as the range and quality of services.
- 36 Perfect competition ensures firms earn a “normal” level of economic profit that exactly compensates them for the value of the opportunities they forego by engaging in efficient supply. This normal rate of return, which produces “zero” economic profit over opportunity costs, is therefore sometimes referred to as a “fair” rate of return, and protects the interests of consumers and suppliers alike:

[I]n a perfectly competitive market production will always be carried out only by firms that can do so with lowest costs; ... inputs will always be allocated among firms in a way consistent with economic efficiency in production; and ... output quantities will always be tailored to the preferences of consumers ... [B]esides serving as an instrument for attaining economic efficiency, perfect competition promises fairness by its preclusion of profits that might be deemed excessive.⁶

³ Importantly, under perfect competition, firms do not price based on opportunity costs, rather prices are *competed down to* marginal opportunity costs.

⁴ As the discussion here (and throughout) examines the outcome in the long-run, all references to marginal cost should be taken to mean the long-run marginal cost of production. That is, the marginal cost that includes compensation for opportunity costs (the value of resources in their next best alternative use). Note also that marginal cost differs from average cost, which is simply the total cost divided by the number of units produced.

⁵ Economic surplus is the sum of “producer surplus” and “consumer surplus”. Producer surplus reflects the difference between the actual price suppliers are paid for the service and the minimum price they would have been willing to accept. Consumer surplus reflects the difference between the actual price consumers pay for the service and the maximum price they would have been willing to pay: R. Frank and B. Bernanke, *Principles of Economics*, McGraw-Hill Irwin, New York, 2001, p. 169.

⁶ W. Baumol and G. Sidak, *Toward Competition in Local Telephony*, MIT Press, Cambridge, 1994, pp. 29-30.

2.2.2 Workable Competition and Economic Efficiency

37 In the real world, no market is “perfect”.⁷ Instead, markets are more likely to be judged to be well-functioning if competition can be described as “workable” (or “effective”); a more broadly defined concept than “perfect competition”.⁸ For this reason, competition authorities (and regulatory agencies) often use this standard to guide the promotion of competition in markets where competition is possible (or the implementation of economic regulation in markets where the promotion of actual competition is unlikely to be effective). For instance, “workable or effective competition” (hereafter “workable competition”) is the standard of competition which underpins the Act in New Zealand (paragraphs 89-91 below). Section 3(1) of the Act provides that competition means workable or effective competition.

38 The courts in New Zealand have generally approved the Australian Trade Practices Tribunal’s discussion in *Re Queensland Co-operative Milling Association Ltd: Re Defiance Holdings Ltd.* (QCMA), as to the particular elements and principles that underlie workable competition. The discussion in QCMA draws attention to the US Attorney-General’s observation that:

... the basic characteristic of effective competition in the economic sense is that no one seller ... has the power to choose its level of profits by giving less and charging more. ... the antithesis of competition is undue market power in the sense of the power to raise price and exclude entry.⁹

⁷ Among other assumptions, the economic model of perfect competition requires that: markets are not “incomplete”—in other words, there is no unfulfilled demand; neither producers nor consumers individually have any influence over market prices (i.e., firms are “price takers” and no market participant has “market power”); entry and exit are completely free (i.e., there are no “barriers” to entry and exit); all market participants have access to “perfect information” and act according to the economic model of “rational behaviour”; and there are constant returns to scale in production (i.e., no economies or diseconomies of scale or scope).

⁸ Unlike perfect competition, the concept of workable competition is not based on a well-defined economic model in which expected outcomes arise from very strict underlying assumptions (e.g., see the previous footnote). The concept of “workable competition” was first articulated as essentially a static concept in: J.M. Clark, Toward a Concept of Workable Competition, *American Economic Review*, 30(Jun), 1940, 149-157. Clark later favoured a more dynamic concept of competition, and sought to define various criteria for this concept using the term “effective competition” (i.e., J.M. Clark, *Competition as a Dynamic Process*, The Brookings Institution, Washington DC, p ix). Economic methodologist Mark Blaug has referred to workable competition as follows: “What we have, on the one hand, is a rigorous theory of business behaviour under conditions of perfect competition, which no longer commands universal assent among modern economists and which in any case is not testable under conditions of oligopoly and, on the other hand, a loosely constructed theory of workable competition, which commands nearly universal assent but which is insufficiently specified to be potentially falsifiable” (M. Blaug, *The Methodology of Economics, Or How Economists Explain*, 2nd edn., Cambridge University Press, Cambridge, 1992, p. 158). Consequently, economic definitions of workable competition tend to encompass a variety of market structure, behaviour and/or performance criteria that would be expected to be observed in workably competitive markets (e.g., the criteria listed in: F. Scherer and D. Ross, *Industrial Market Structure and Economic Performance*, 3rd edn., Houghton Mifflin, Boston, 1990, pp 52-55; and the criteria listed in: G. Reid, *Theories of Industrial Organisation*, Basil Blackwell, 1987, pp 124-125).

⁹ (1976) 8 ALR 481.

- 39 Workable competition also tends to reflect a view that competitive behaviour is a dynamic *process*—one that emerges from the rivalry of market participants.¹⁰ In New Zealand, the High Court in *ARA v Mutual Rental Cars (Auckland Airport) Ltd and Fisher and Paykel Ltd v Commerce Commission* approved the following formulation of workable competition:

*Workable competition means a market framework in which the pressures of other participants (or the existence of potential new entrants) is sufficient to ensure that each participant is constrained to act efficiently and in its planning to take account of those other participants or likely entrants as unknown quantities. To that end there must be an opportunity for each participant or new entrant to achieve an equal footing with the efficient participants in the market by having equivalent access to the means of entry, sources of supply, outlets for product, information, expertise and finance. This is not to say that particular instances of the items on that list must be available to all. That would be impossible. For example, a particular customer is not at any one time freely available to all suppliers. Workable competition exists when there is an opportunity for sufficient influences to exist in any one market which must be taken into account by each participant and which constrain its behaviour.*¹¹

- 40 Under workable competition, the incentive for firms to improve efficiency and actively seek out opportunities for innovation is provided by the potential to earn a positive economic profit. So while profits will tend toward normal economic returns over time, they ought to be sufficient to cover efficiently incurred costs and reward innovation, prudent investment and efficiency gains.
- 41 Implicit in this approach is the notion that, under workable competition there will be occasions in which, due to superior performance, the prices for some firms over the short term will be higher than prices that provide a return offsetting the costs of production (i.e., prices above the efficient long-run average cost of production). However, over time, temporarily higher profits will be competed away and the benefits of that superior performance, in terms of both price and service quality, will be shared with consumers. Workable competition is therefore a mechanism that will generally move market participants closer towards, rather than further away from, efficient outcomes.

2.2.3 Responding to Market Power through Pro-Competitive Means

- 42 Although the advantages of free and decentralised competitive markets are widely recognised, there are a number of reasons why such markets may fail to deliver efficient outcomes. A particularly damaging, yet potentially avoidable, source of “market failure” arises when firms are able to acquire and abuse market power. Like other forms of market failure,¹² the presence of market power may warrant direct or indirect

¹⁰ Likewise, the Commission has described workable competition as a “dynamic process” (e.g., Commerce Commission, *Merger and Acquisition Guidelines*, December 2003, p 12). Nevertheless, it is important to note that the meaning of workable competition is not so broad as to simply mean “real-world” competition, or any apparent price rivalry between firms that might last for just a short period.

¹¹ *Fisher and Paykel Ltd v Commerce Commission* [1990] 2 NZLR 731, 759.

¹² Other forms of market failure include: (1) the existence of so-called ‘public goods’, which are both ‘non-rivalrous’ and ‘non-excludable’ when consumed; (2) the presence of ‘externalities’, which are any costs or benefits of an activity that are not directly priced into the market, and (3) ‘imperfect information’, which can prevent buyers and sellers from trading freely (e.g., HM Treasury (UK), *The Green Book: Appraisal and Evaluation in Central Government*, 2003, p. 51).

government intervention, recognising that such intervention is unlikely to be costless and may itself cause some inefficiencies.

- 43 Market power refers to a situation in which competition is ineffective (i.e., not workable), and once acquired, it permits firms to profitably control price or quality. By raising prices above competitive levels, firms earn a return that exceeds a normal rate of return in the long run; commonly referred to as a “monopoly rent” or “excess return”. Firms therefore have an incentive to act in anti-competitive ways in a bid to acquire market power. These types of behaviour may include predatory pricing—whereby firms set a low price (below marginal cost) to drive out competitors, before raising the price once they have left—or the creation of artificial barriers to entry into the market.
- 44 Anti-competitive practices such as these generate significant social costs, through allocative inefficiencies or reduced incentives to improve productive and dynamic efficiency.¹³ As noted last year by the OECD Secretary General Angel Gurría, “greater competition can boost a country’s growth and productivity. Conversely, restricting competition harms economic performance and delays development.”¹⁴ Indeed, many countries from both inside and outside the OECD have established competition authorities with these concerns in mind. These bodies generally aim to protect competition by ensuring there is adequate understanding, deterrence and enforcement of competition rules.

2.2.4 Natural Monopolies

- 45 In some cases, though, it is not possible to rely on competition or the threat of competition to ensure an efficient allocation and utilisation of resources. In particular, when an industry has the characteristics of a ‘natural’ monopoly, one firm is capable of supplying the market at lower cost than any combination of firms producing the goods and services separately.¹⁵ This characteristic implies that the most efficient outcome from a societal perspective would be for one firm to supply the entire market.
- 46 Natural monopolies typically arise through ‘economies of scale’ and/or ‘economies of scope’ in production. Economies of scale occur where supplying each additional unit of a single service is less costly than supplying the previous unit, in the long run. In contrast, economies of scope exist when it is less costly in the long-run to supply a set of services in combination than it would be to supply all of those services on an individual basis. Economies of scope stem from the existence of “shared inputs”—inputs which, once procured for the supply of one service, are also available (either wholly or in part) to aid in the supply of other services.

¹³ Economists term the effects of allocative inefficiency as a “deadweight loss” to the economy.

¹⁴ Angel Gurría, OECD Secretary-General, *Presentation of the Competition Assessment Toolkit*, 14 June, 2007, Mexico City.

¹⁵ The key concept underpinning a natural monopoly is the “subadditivity” of the underlying cost function, which means that the cost of producing any specified combination of services is less than the costs of producing them separately. However, proving subadditivity requires testing the cost of supplying every possible combination of services, which for a multi-product natural monopoly is generally not practically feasible (e.g., W. Baumol, On the proper cost tests for natural monopoly in a multi-product industry, *American Economic Review* 67(5), pp. 809-833, 1977).

- 47 Economies of scale and scope are caused by one of two factors: technological factors or costs that remain constant irrespective of the level of service being supplied. The latter of these are costs that are not obviously attributable to the provision of any individual unit of output or type of service. While all costs are variable in the long run, these ‘common’ costs cannot be avoided unless production was to cease entirely (i.e., of all services).¹⁶ The impact of common costs and/or technological factors is to cause average (not marginal) costs of production to decrease until there would be no further per unit cost savings if output were to be expanded, or a greater number of services provided.¹⁷ Up to this point, the marginal cost of production lies below average cost.
- 48 The term natural monopoly was coined for this type of cost-structure because, if the market was subject to competitive forces, rivalry between firms would generally be expected to result in only the most efficient firm surviving in and supplying the entire market. Where entry and exit are free and costless, that ‘natural monopolist’ would be forced to charge close to a competitive price level because it would face entry into the market by potential competitors if prices were raised (i.e., ‘hit and run’ entry). Markets in which the threat of entry effectively constrains market power in this manner, whether for a natural monopoly or other type of market, are said to be ‘contestable’. However, the conditions required for perfect contestability are almost never satisfied in practice.¹⁸

2.2.5 Causes of Market Power in Natural Monopoly Markets

- 49 It is common for natural monopolists to be able to price above competitive levels, owing to barriers to entry or exit, as these prevent the market from being contestable and give rise to market power. Barriers usually stem from the particular nature of investments in most industries with natural monopoly characteristics. Investments tend to be long-lived, irreversible and specific, and have little or no value outside of the investment to which they are committed. Although alternative uses of capital were foregone at the time of investment, after the asset has been purchased it is said to have a very low or zero opportunity cost (i.e., a resource that has little or no value in its most valuable alternative use).¹⁹ Investments of this nature are referred to as ‘sunk costs’ and contribute to barriers to entry and exit for a variety of reasons.

¹⁶ Common costs are similar to “joint costs”, and the terms are often used interchangeably. Strictly speaking, however, a firm’s joint costs are those costs that are incurred when two or more services are produced in fixed proportion. A firm’s common costs are costs incurred in the provision of some or all of the firm’s services that are not incremental to any individual service (e.g., G. Sidak and D. Spulber, *Deregulatory Takings and the Regulatory Contract, The Competitive Transformation of Network Industries in the United States*, Cambridge University Press, New York, 1997, pp. 312-313). In this Discussion Paper, the term “common costs” is used collectively, to refer to either common or joint costs.

¹⁷ See J. Panzar and R. Willig, Sustainability analysis. Economies of scope, *American Economic Review* 71(2), 268-272, 1981.

¹⁸ Assumptions for a *perfectly* contestable market are that: entry to the market is completely free and exit is costless, which requires that entry must not require the firm to make any sunk investments; entrants and incumbents compete on completely “symmetric” terms (i.e., on a “level playing field”); and entry is not impeded by fear of retaliatory price changes (e.g., W. Baumol, J. Panzar, and R. Willig, *Contestable Markets and the Theory of Industry Structure*, 2nd ed, Harcourt Brace Jovanovich, New York, 1988, pp. 349-350).

¹⁹ For example, gas pipelines can have useful lives of over 80 years, yet have very little value in any use other than the supply of gas.

- 50 First, sunk costs can provide an incumbent with an absolute cost advantage over potential entrants, because these investments affect (i.e., generally reduce) the incremental costs of making additional investments at a later time.²⁰ Potential entrants are also deterred from entry because they would need to charge an uncompetitively high price relative to the incumbent in order to make investment in sunk assets—and entry into the market—profitable. This is because the prices charged by potential entrants would need to cover both the costs of installing capacity and engaging in supply, whereas the incumbent is only motivated by a desire to achieve a surplus on its costs in the future (i.e., which does not include a contribution to the costs incurred when capacity was installed). Potential entrants therefore fear that they would not be able to recover the cost of all of their assets, were they to make the investment required to enter the market.²¹ Finally, the desire to recover all its costs acts as a barrier to the exit of the incumbent natural monopolist.

2.2.6 *Consequences of Unconstrained Natural Monopoly Market Power*

- 51 Profit-maximising natural monopolies with market power are able to abuse their position by increasing prices well beyond what might be expected in a workably competitive market, or supply services at a reduced quality. This maximises the firm's profits and transfers wealth away from consumers, which is *allocatively* inefficient since the combination of both producer and consumer surplus would be greater if prices were lowered. There is also only a small threat that a potential competitor will develop a superior product or invent a lower cost method of production, and the natural monopolist consequently may have less incentive to minimise costs and invest and innovate than a competitive firm. A profit-maximising monopolist may therefore be productively and dynamically inefficient in the absence of a competitive or regulatory constraint, or countervailing market power in the hands of the buyer.
- 52 Due to their nature, many firms operating key network utilities or “essential” facilities—such as airports, electricity distribution and transmission, and gas pipelines—can have cost structures that display strong natural monopoly characteristics. Indeed, the form of their asset base (which is largely sunk) and the lack of credible substitutes makes it probable that market power will be concentrated in the hands of a few firms supplying geographically distinct areas.²² This can be particularly detrimental because the price and quality of these services have a substantial impact on the competitiveness of other businesses, the welfare of individuals and on the overall economic performance of the country. In addition, when a natural monopolist can earn excessive profits in regulated activities, they may have an incentive to overcapitalise in that market, which can come at the expense of more efficient investments elsewhere in the economy.

²⁰ Baumol et al., *supra* n 18, p 377.

²¹ Hay and Morris, *supra* n 2, pp. 90-91.

²² Although “bypass” supply (or bypass competition) might be observed within small parts of some of these areas, the presence of a competing firm for some services does not necessarily mean that the area as a whole is not naturally monopolistic. Rather, the availability of bypass supply may simply act as a partial constraint on the ability of the incumbent natural monopolist to fully exercise market power for the affected subset of services.

2.2.7 Economic Regulation and Competitive Market Outcomes

- 53 Attempting to bring competitive forces to bear within these industries is unlikely to be the solution, however, because doing so would introduce another set of inefficiencies. An entrant into a naturally monopolistic market, through the promotion of competition, would likely result in a duplication of facilities (i.e., “bypass” supply), which would be dynamically inefficient, or a duplication of other costs (e.g., overheads), which would be productively inefficient.²³
- 54 Consequently, rather than promoting competition for all services supplied by a natural monopoly—for instance, by attempting to reduce barriers to entry—in most OECD countries the behaviour of firms such as electricity and gas network companies, or airport companies, is constrained by some form of economic regulation. Regulation typically acts to constrain monopoly market power and the extraction of monopoly rents from consumers.
- 55 Given the beneficial outcomes of competition (paragraphs 31-36 above), economic regulation is often cited as seeking to mimic or promote outcomes consistent with competitive markets, in markets where competition is inefficient, not possible, or limited. However, as the Australian Competition and Consumer Commission (ACCC) has noted, such a provision, on its own, does not provide much guidance to regulators:
- The notion that regulatory decision-makers should seek to regulate in such a way as to replicate the outcomes of a competitive market is widespread but of limited practical usefulness. There are a wide range of competitive markets with different outcomes. Policy-makers must select which outcomes of which competitive markets they will seek to replicate.*²⁴
- 56 For instance, as is discussed in chapter 4 (paragraph 161 below), attempting to promote perfectly competitive outcomes is likely to run counter to the efficient operation of markets with natural monopoly characteristics, because a natural monopolist will be unable to generate a normal economic profit even on efficient investments if it is compelled to charge at perfectly competitive price levels. For this reason, as is noted above (paragraph 37), regulatory agencies often use the standard of workable competition to guide the implementation of economic regulation in markets where the promotion of actual competition is unlikely to be effective. Likewise, in New Zealand’s case, workable competition is the standard of competition which underpins the Commerce Act.
- 57 The ACCC considers how this standard of competition generally relates to economic regulation:

²³ A separate concern that can arise where a firm operates so-called “essential” facilities relates to *access* to those facilities. Access might be necessary to allow competition with that firm in a related market (often a “downstream” or retail market). One form in which the access issue can arise is when the assets of a natural monopoly are necessary to deliver a potentially competitive service to end consumers, but the natural monopoly is also engaged in the downstream retail activity. The incumbent monopoly may set its charges or its non-price terms to potential competitors in a manner intended to preclude those firms from entering the retail market. In such cases, competition in the downstream market can be promoted by the regulator (or an arbitrator) mandating access terms.

²⁴ ACCC, *Submission to the Productivity Commission, Review of the Gas Access Regime*, 15 September 2003, p. 106.

*The concept of “workable competition” was developed in an attempt to delineate those markets in which competition yielded broadly acceptable outcomes. Therefore the notion that regulatory decision-makers should regulate in such a way as to replicate the outcomes of a “workably competitive” market is equivalent to saying that regulatory policy-makers should pursue broadly acceptable outcomes.*²⁵

- 58 Policymakers therefore typically provide regulators with specific statutory objectives that may encompass both promoting efficiency and protecting consumers from (natural monopoly) market power. Both objectives are consistent with outcomes observed in workably competitive markets because, while competition serves to allocate resources in the economy efficiently, it also limits the ability of firms to exercise market power and gives incentives for firms to improve efficiency and supply services at the desired quality.²⁶ For example, the International Energy Agency has stated:

*Two common goals [of regulatory agencies] are protecting users and protecting investors. Users need to be protected from abuse by firms with substantial market power, while investors require protection from arbitrary action by government, such as setting tariffs that are not financially sustainable. Typically, regulatory agencies have to balance these two objectives. For instance, prices are set with the aim of protecting users from monopolistic pricing while allowing investors to recover their investments and earn a return on them.*²⁷

- 59 It is important to note that, despite arguments sometimes made to the contrary, economic regulation is not intended to transfer existing or future wealth away from the suppliers of regulated services to the consumers of those services. Rather, it is intended to limit the future exercise of monopoly market power that would otherwise result in a transfer of wealth from consumers to suppliers, while at the same time maintaining incentives for suppliers to invest and operate efficiently.
- 60 The new purpose statement in section 52A of the Act sets out how Parliament expects outcomes consistent with workably competitive markets to be promoted through economic regulation. Sections 52A(1)(a)-(d) of the Act (paragraph 12 above) set out a specific list of objectives which, if achieved, will contribute to the promotion of outcomes consistent with those produced in workably competitive markets. The purpose statement and these objectives are discussed further in chapter 4.

2.3 TYPES OF ECONOMIC REGULATION

2.3.1 Rate of Return Regulation

- 61 Rate of return or ‘cost of service’ regulation was the traditional method of regulating the prices of utilities, particularly in the US, for many years. Under this form of ‘heavy-handed’ regulation the regulator sets prices that will enable the business to recover its costs, including a ‘fair’ or ‘reasonable’ rate of return on the value of the regulatory asset base (RAB). Individual prices are set so that all costs are essentially passed through to consumers via price adjustments, usually with a regulatory lag of up to one year.

²⁵ *ibid*, p. 106.

²⁶ For example, refer to the brief review of objectives of a number of overseas regulators in: Commerce Commission, *Review of the Regulatory Provisions under the Commerce Act 1986: Submission on MED’s Discussion Document*, 6 July 2007, paragraphs 37-40.

²⁷ International Energy Agency (IEA), *Regulatory Institutions in Liberalised Electricity Markets*, OECD, Paris, 2001, p 19.

- 62 The argument in favour of this form of regulation is that, by aligning prices to costs (including a pre-specified rate of return), it eliminates excess returns and increases allocative efficiency. In addition, businesses have more certainty that they will be able to repay their debt, which reduces risk and therefore the cost of capital. However, the disadvantages associated with rate of return regulation are well-known, and are caused by the impact that the guaranteed rate of return has on the incentives to improve productivity. The most significant of these is the lack of incentives for cost minimisation: the firm realises no benefit from attempting to restrain or reduce its costs, since any cost reducing activity would be offset by future price reductions.²⁸
- 63 Thus, while allocative efficiency should increase under a strictly applied rate of return regime, it is probable that prices will reflect inefficient costs. In addition, prices may not be allocatively efficient in the short term, owing to any regulatory lags in adjusting prices to reflect changes in costs. Rate of return regulation can nevertheless be an appropriate form of control for an industry which requires large scale investment, as it provides businesses with an environment of certainty. It is the overriding concern about incentives, however, that have led regulators around the world to move away from rate of return regulation towards forms of regulation with an explicit focus on incentives (or performance) instead.

2.3.2 *Incentive-Based Price-Quality Regulation*

- 64 A wide variety of regulatory schemes have been devised to incentivise efficient behaviour by regulated firms, in a manner more consistent with competitive market outcomes. Many of these schemes have been implemented across a range of sectors in different countries.²⁹ The key feature of incentive-based schemes is that they attempt to decouple the link between authorised prices and realised costs to a certain extent. Authorised prices (or revenues) are based on *expected* future costs. Regulated firms are then allowed to keep a proportion of the benefits they manage to create through efficiency gains that surpass expectations. Such an arrangement provides regulated firms with the opportunity to realise a pre-specified expected rate of return, while maintaining the incentive to out-perform expectations—since the firm will gain

²⁸ In fact, a key result of this form of regulation is that firms actually face strong incentives to *increase* the capital costs of production, relative to other inputs, for a given level of output. This effect is known as the “Averch-Johnson effect” and is caused by the fact that the business receives a guaranteed rate of return on additional capital outlays, but not on its use of other inputs. In an attempt to counter this problem some regulators in the US introduced prudency reviews in which they made an assessment of whether the investment was appropriate before it would be added to the regulatory asset base. Two issues with this are that the regulator may not be as well informed as the business to assess the suitability of the investment; and as this was done on an *ex post* basis the threat that the cost of investments would not be recovered could reduce the incentive for businesses to make the appropriate investments up-front, even if those investments are efficient.

²⁹ These can be broadly categorised into: (1) total revenue cap, (2) average revenue cap, (3) weighted average price cap, (4) disaggregated price caps. For an introduction and review of these various forms of regulation, and their application in different countries, see: Commerce Commission, *Authorisation for the Control of Supply of Natural Gas Distribution Services by Vector Ltd and Powerco Ltd, Form of Control Discussion Paper*, 7 July 2006, Ch. 6.

financially if productivity growth exceeds expectations and suffer financially if it falls short.³⁰

- 65 At the end of the regulatory period the form of control will be reviewed taking into account the cost reductions that the business has made in the previous period, thereby passing any efficiency savings on to consumers. However, the resetting of the terms of control can lead to a partial weakening of the efficiency incentives, as it limits the length of time the business retains the benefit and therefore the value to the business of making that saving. In addition, a potential problem with incentive-based regulation is that firms might prioritise short-term cost-minimisation over investment and innovation, or allow service quality to deteriorate to increase profits. Any incentive scheme put in place should be aware of any such issues and try to take their effects into account.

Price Cap (or CPI-X) Regulation

- 66 The most common of these schemes in overseas jurisdictions, by far, is known as price cap (or revenue cap) regulation. The basic premise of this approach is that regulated businesses will continue to earn a normal economic rate of return if their prices change in a similar way to prices observed in competitive markets. In particular, prices should rise at a rate that reflects the general rate of inflation, adjusted for any differences in the rates of change in the firm's costs of production relative to the rest of the economy.³¹ For a given level of output, these differences will either arise through changes in input prices or the efficiency with which these inputs are converted into outputs (i.e., productivity).
- 67 This approach is often referred to as 'CPI minus X' (CPI-X) owing to the use of the Consumer Price Index and an "X-factor" adjustment term in setting the cap for the regulated price path. Setting a regulated CPI-X price path recognises that regulated businesses face inflationary and other increasing cost pressures. However, by setting a target for firms to meet or beat, it places incentives on businesses to improve their productivity, while realistically achievable improvements in productivity are shared with consumers through the X-factor.
- 68 A common justification for the CPI-X price cap approach is that, in competitive markets, the output price will normally change by the change in input prices less the rate of industry productivity growth. Many regulators prefer to use a robust and well understood measure of price change such as the CPI rather than an industry-specific input price index. However, the CPI is itself a measure of overall economy-wide output price growth and it already incorporates the overall economy-wide rate of productivity growth. Consequently, it is usually necessary to recognise the relationship between the industry's productivity growth rate and that of the economy as a whole, as well as that between the industry's input price growth and that of the economy as a whole, when formulating the X-factor. Recognising that network industries are

³⁰ Bernstein, J.I., and Sappington, D.E.M., *Setting the X Factor in Price Cap Regulation Plans*, Working Paper 6622, National Bureau of Economic Research, June 1998, p. 6.

³¹ For a given level of output, these differences will either arise through changes in input prices or the efficiency with which these inputs are converted into outputs (i.e., productivity). Thus, regulated prices should be allowed to rise at the rate of general rate of inflation, adjusted for any expected productivity improvements and input price inflation relative to the economy as a whole.

characterised by the presence of a high proportion of long-lived sunk assets is likely to require modifications to both the input price differential term and the way the user cost of capital is measured compared to analysis of more competitive industries. This is particularly the case if an objective of financial capital maintenance (paragraphs 190-194 below) is sought.

69 The key elements of CPI-X approaches are:

- an initial price adjustment at the start of the control period (i.e., termed a “ P_0 adjustment”), but which could be zero;
- the required rate of annual percentage average price (or revenue) reductions net of the CPI (i.e., the X-factor);
- the basis for resetting the P_0 adjustment and X factor at the end of the control period; and
- the length of the control period.

70 CPI-X price path regulation also usually involves some standards or rules in relation to service quality. This is to ensure that, in response to the incentives provided by the controlled price cap to reduce costs, the regulated firm does not allow quality to deteriorate.

‘Building Block’ Methods

71 The two key approaches for implementing CPI-X regulation include ‘building block’ methods and ‘index-based’ methods.³² Building block methods are often used to directly determine appropriate P_0 adjustments and to indirectly derive X-factors. They establish allowable annual component costs (i.e., the ‘building blocks’) over the forthcoming control period for the regulated firm on a firm-specific basis, and generally comprise depreciation of the value of the RAB, the return on capital (based on the weighted average cost of capital—i.e., the WACC—multiplied by the RAB), and non-capital costs (such as operating expenditure and tax). The regulator estimates the change in the RAB over the control period by reviewing capital expenditure forecasts typically provided by the regulated firm itself.

72 The key criticism of building block methods stems from the inherent asymmetry of information between the regulator and the regulated firm, particularly in respect of the firm’s capital and operating expenditure forecasts. Because firms always have better knowledge of their own firm-specific costs, incentives for regulatory ‘gaming’ may be significant. Consequently, the approach is comparatively costly and time-consuming for both the regulator and regulated firms. As well, by basing regulatory parameters more closely on the individual firm’s actual (or projected) costs, incentives for efficiency can be weakened.

³² For example, refer: Farrier Swier Consulting, *Comparison of Building Blocks and Index-Based Approaches*, Utility Regulators Forum, Melbourne, June 2002. There are alternative approaches for implementing CPI-X regulation, including “frontier” methods, using analytical tools such as data envelopment analysis and stochastic frontier analysis, as well as econometric benchmarking and engineering-economic models.

- 73 The Commission has applied building block approaches for implementing CPI-X regulation. For example, the recent authorisation for the control of the supply of gas distribution services for two gas pipeline businesses under Part 5 of the Act (discussed in the next chapter) involved the application of a building blocks methodology. Similarly, although used to assess excess returns, rather than to set regulated prices, a building blocks methodology underpinned both the inquiries undertaken by the Commission under Part 4, prior to the introduction of the CAA (which are also discussed in the next chapter).
- 74 Also, as is discussed in chapter 5, the Commission considers that the key “methodologies” referred to in section 52T(1)(a) of the Act, and introduced by the CAA, are likely to combine to underpin the determination of default/customised (and potentially individual) price-quality paths under Part 4 in a similar fashion to building blocks. Customised price-quality paths are part of default/customised price-quality regulation under Part 4. Initially, default/customised price-quality regulation under Part 4 applies to suppliers of electricity distribution services (that are not “consumer-owned”, as defined in section 54D) and to suppliers of gas pipeline services.

‘Index-based’ Methods

- 75 The efficiency incentives from price cap regulation can be more effective when more parameters of the price path are out of the direct control of the firm. For this reason, indexed-based approaches typically de-link prices from firm-specific costs by setting the X-factor according to an analysis of industry-wide (or peer group) productivity, rather than business-specific productivity.³³ Index number-based total factor productivity (TFP) analysis has been the most common technique for deriving estimates of economy-wide and industry level productivity performance.³⁴
- 76 Index-based approaches are typically much less intrusive and data-intensive than building block methods. However, some firms may be disadvantaged by an approach that is based on industry-wide factors, unless business-specific factors are explicitly allowed for in the analysis. For example, index-based approaches can disadvantage superior-performing firms, or firms that face comparatively more adverse cost conditions than other firms, due to business-specific environmental (or other) factors largely outside management’s control.
- 77 In practice, a combination of industry-wide and firm-specific data may be used to derive price paths for individual firms. This is sometimes referred to as a ‘partial’ building blocks approach because, while the X-factor is set using some form of industry-wide (or peer group) productivity analysis, the prices at the beginning of the control period are set using a form of building blocks.

³³ D. Lawrence, *Regulation of Electricity Lines Businesses, Analysis of Lines Business Performance—1996-2003*, Report prepared by Meyrick and Associates for the Commerce Commission, 19 December 2003, pp. 3-15.

³⁴ A TFP index is generally defined as the ratio of an index of output growth divided by an index of input growth, and is therefore a numerical measure of how efficiently firms are able to convert their inputs into outputs.

- 78 The Commission has applied index-based approaches for implementing CPI-X regulation. In particular, as is discussed in the next chapter, the CPI-X price path thresholds for the declaration of control of electricity lines businesses under Part 4A of the Act were set by the Commission using productivity analysis. Also, as is discussed in chapter 5, the X factors in the default price-quality paths (which are part of default/customised price-quality regulation under Part 4) are generally intended to be set using some form of productivity analysis.

2.3.3 *Negotiate-Arbitrate Regulation*

- 79 In some markets, particularly where there are only a small number of large and well-resourced consumers, those consumers are able to act in a coordinated way that goes some way to negate the market power of the natural monopolist. Regulatory regimes based on a negotiate-arbitrate model encourage these parties to negotiate a settlement on matters such as investments, quality of service, prices, and terms of access. If the parties fail to come to an agreement, they usually then agree on an arbitrator, or one is appointed.
- 80 A scheme with some of these characteristics has been applied under New Zealand's Telecommunications Act 2001,³⁵ and a number of overseas jurisdictions have also experienced some success with negotiated settlements. For example, Part IIIA of the Australian Trade Practices Act provides for a negotiate-arbitrate regime for terms and conditions for access to certain natural monopoly facilities (in particular, airside services at Sydney Airport),³⁶ regulators in Canada and Florida have used it in the electricity sectors, and those in the UK have applied it to some airports.
- 81 Negotiate-arbitrate regulation potentially offers a less costly and less intrusive option to regulators than conventional control, since it usually only requires intervention if parties cannot agree a deal. Overseas evidence suggests the process may also improve relationships between suppliers and consumers. However, there is a risk that parties look to the end-game under such a regime (i.e., arbitration) and position themselves to get the best outcomes. This would reduce the incentive to negotiate. An additional complication also arises when the bargaining situation is complex (such as for multiple products and parties), and if the process stalls and frustrates investment, then negotiate-arbitrate may be less efficient than more heavy-handed types of regulation.
- 82 As is discussed in chapter 5, the CAA has introduced a form of negotiate-arbitrate regulation under Part 4 of the Act. However, no services are automatically subject to negotiate-arbitrate regulation under Part 4.

³⁵ The Commission notes that recent amendments to the Telecommunications Act have now made the prospect of arbitration being sought relatively unlikely.

³⁶ The declared airside service is the service for the use of runways, taxiways, parking aprons and other associated facilities necessary to allow aircraft carrying domestic passengers to: (a) take off and land using the runways at Sydney Airport, and (b) move between the runways and the passenger terminals at Sydney Airport.

2.3.4 Information Disclosure

- 83 Information disclosure is arguably the most “light-handed” form of all types of economic regulation. The schemes place a requirement on businesses to provide enough information publicly, such as regulatory accounts and various performance indicators, to ensure that interested parties are able to assess whether the regulatory objectives are being met.
- 84 Despite being a relatively light-handed form of regulation, information disclosure can be a powerful tool in setting standards on what is acceptable and for early identification of trends which may cause concern. The dual aim is to ensure that regulators have access to enough information to impose an appropriate form of control, if this is subsequently thought to be necessary.
- 85 As is discussed in Chapter 3, information disclosure has been the most prevalent form of economic regulation for industries with natural monopoly characteristics in New Zealand over recent years. For example, information disclosure regulations for electricity lines services, gas pipeline services and certain airport services were all introduced at various stages during the 1990s. Subsequently, Part 4A of the Act provided for the Commission to implement an information disclosure regime for electricity lines services. With the introduction of the CAA, Part 4 of the Act now includes generic provisions for information disclosure regulation (discussed in Chapter 6), as well as specific provisions relating to the electricity lines, gas pipelines and airport sectors (discussed in Chapters 7-10).

CHAPTER 3: ECONOMIC REGULATION IN NEW ZEALAND

3.1 INTRODUCTION

86 This chapter provides an overview of economic regulation in New Zealand since the 1990s in the context of the Act prior to the passage of the CAA (paragraphs 87-98). The specific provisions applying to the electricity lines (paragraphs 99-117), gas pipelines (paragraphs 118-136) and airport sectors (paragraphs 141-143) are also discussed.

3.2 ECONOMIC REGULATION IN NEW ZEALAND IN THE CONTEXT OF THE COMMERCE ACT

3.2.1 *Economic Regulation in New Zealand Prior to the Commerce Act*

87 Until just over 20 years ago an important means of regulating natural monopolies or essential facilities in New Zealand was through ownership and control being vested directly, or indirectly, in the hands of elected persons. There were, however, statutory regulatory schemes for certain industries dating back to the early 1900s. The precise arrangements varied among the various industries. In addition, as recently as 1984, almost all prices, wages, rents, dividends and interest rates in New Zealand had been subject to comprehensive control. Even after the lifting of the general freeze, there were still significant areas of the economy subject to extensive regulatory controls on prices and quality.³⁷

88 It is against the background of the widespread deregulation of the economy and the removal of widespread price controls in the mid-1980s that the Act was passed in 1986.³⁸ A principal driver in passing the Act was to modernise New Zealand's competition law in line with other jurisdictions (such as the changes introduced to Australia's Trade Practices Act 1974).

3.2.2 *Pro-Competitive Provisions in the Commerce Act*

89 The Act established the Commerce Commission as New Zealand's primary competition and regulatory agency. The Commission is an independent Crown entity (although in exercising its statutory powers under the Act, the Commission must also have regard to any statements of economic policy transmitted to the Commission by the Minister in accordance with section 26 of the Act). With the exception of the regulatory provisions in Part 4—which now have their own purpose statement in section 52A (paragraph 12 above)—the current purpose of the Act, set out in section 1A, is to promote competition in markets for the long-term benefit of consumers within New Zealand. The standard of

³⁷ For a history of regulation in New Zealand see A. Bollard, 'More Market: The Deregulation of Industry' in A. Bollard and R. Buckle (eds), *Economic Liberalisation in New Zealand*, Wellington: Allen & Unwin and Port Nicholson Press, 1987.

³⁸ For the background to the introduction of the Commerce Act 1986 see K.M. Vautier, 'Competition Policy and Competition Law in New Zealand', in A. Bollard and R. Buckle (eds), *Economic Liberalisation in New Zealand*, Wellington: Allen & Unwin and Port Nicholson Press, 1987. The Commerce Act 1986 replaced (and repealed) the Commerce Act 1975.

competition underpinning the Act—in section 3(1)—is that of “workable or effective competition” (paragraphs 37 and 56 above).

90 Parts 2 and 3 of the Act prohibit a range of anti-competitive behaviour, including:

- agreements that contain provisions which substantially lessen competition in a market (including those which could arise as the result of mergers and acquisitions);
- agreements between competitors that contain exclusionary provisions preventing or limiting dealings with a rival;
- agreements containing provisions that fix prices among competitors;
- suppliers with a substantial degree of market power taking advantage of that position for an anti-competitive purpose; and
- suppliers specifying the minimum price at which the supplier’s goods can be sold by other businesses.

91 The Commission can authorise anti-competitive practices or an acquisition that would lead to the substantial lessening of competition, if the public benefits resulting from those practices or the acquisition are found to outweigh the detriments.³⁹

3.2.3 Regulatory Provisions in the Commerce Act

92 Apart from the provisions in Parts 2 and 3 for promoting competition, Part 4 of the Act (prior to its recent amendment through the CAA) provided for services to be subject to price control implemented by the Commission (and which could be as prescriptive as the Commission directly setting the tariffs for individual services). Initially, price control reframed control to be “a ‘last resort’ policy tool for circumstances of restricted competition”.⁴⁰ Also, upon introduction, all the provisions for price control that were contained in Part 4 of the Act (and in related sections of Part 5) were generic. Until 2001, no specific services were automatically subject to regulation under the Act.⁴¹

93 In 2001, a number of amendments were made to Parts 4 and 5 of the Act in order to allow more modern forms of price control to be implemented in respect of controlled services, such as CPI-X incentive regulation (paragraphs 66-70 above). Also in 2001, Part 4A of the Act was introduced. Among other things, Part 4A established a targeted control regime and an information disclosure regime specific to electricity distribution and transmission services (paragraphs 105-117 below).

94 Until the most recent amendments made in October this year (paragraphs 7-18 above), Part 4 of the Act provided for the Commission, in response to a request from the Minister (or on its own initiative), to undertake an inquiry as to whether control may

³⁹ Commerce Commission, *Anti-Competitive Practices under Part II of the Commerce Act*, September 2004, p. 5; and Commerce Commission, *supra* n 10, p. 5.

⁴⁰ Vautier, *supra* n 38, p. 59.

⁴¹ Outside of the Commerce Act, provisions for the regulation of telecommunications services by the Commission are set out in the Telecommunications Act 2001. Also, the Dairy Industry Restructuring Act provides for the regulatory and structural reform of the dairy industry, and the Commission has both an enforcement and adjudication role under subpart 5 of Part 2 of that Act.

and should be imposed on specified services, and as a result to make corresponding recommendations to the Minister. Only two such inquiries have been undertaken by the Commission—the first in respect of certain airfield services (paragraphs 141-142 below), and the second in respect of gas pipeline services (paragraphs 125-130 below).

- 95 In *Telecom Corporation of New Zealand Ltd v Clear Communications Ltd*, the Privy Council observed the complementary nature of the pro-competitive and regulatory provisions in the Act, even before the introduction of the new purpose statement in section 52A made this more explicit.

Monopolies act to the detriment of the consumer by permitting the monopolist to charge higher prices than would be the case if there were a fully competitive market. This problem can be tackled in one or other or both of two ways viz by a regulatory body artificially restricting the price chargeable or by introducing efficient competition. The introduction of efficient competition (by such anti-trust legislation as s 36) does not in itself instantly remove the evils of the monopolist's overcharging: it produces the conditions which, by market forces, eventually force the monopolist to operate efficiently (and therefore more cheaply) and to abandon policies of excessive charging. Such legislation is neither effective nor apt to take the place of a regulatory proceeding which, after detailed investigation of the efficiency of the monopoly system, can set a maximum price for goods or services to be supplied having regard to economies that could be affected and a reasonable rate of return. The Commerce Act, inter alia, directed itself to both these processes: s 36 is designed to produce the competition which will, it is hoped, in due course compete out monopoly rents: Part IV of the Act enables immediate price restriction to be imposed by regulation.⁴²

3.2.4 Government Policy Statements Relevant to Regulated Services

- 96 In August 2006, the Government provided the Commission with a statement of its economic policy relating to the incentives of regulated businesses to invest in infrastructure (the 2006 GPS)—the relevant businesses being those that are, or may be, regulated under Parts 4, 4A or sections 70 to 74 of Part 5 of the Act.⁴³ The 2006 GPS was passed to the Commission under section 26 of the Act (paragraph 89 above). The 2006 GPS states that the Government's economic policy objective is for regulated businesses to have incentives to invest in replacement, upgraded and new infrastructure and in related businesses for the long term benefit of consumers.
- 97 The 2006 GPS states that the Government considers this objective will be achieved by: (a) regulatory stability, transparency and certainty giving businesses the confidence to make long-life investments; (b) regulated rates of return being commercially realistic

⁴² [1995] 1 NZLR 407-408.

⁴³ New Zealand Government, *Statement to the Commerce Commission of Economic Policy of the Government: Incentives of Regulated Businesses to Invest in Infrastructure*, 7 August 2006. In addition, in April 2008, the Government updated its s 26 policy statement on gas governance (2008 Gas GPS): New Zealand Government, *Government Policy Statement in Relation to Gas Governance*, April 2008. Apart from setting out an overall policy objective for the sector, the 2008 Gas GPS solely sets out the objectives and outcomes that the Government wants the Gas Industry Company (GIC) to pursue. In May 2008, the Government updated its s 26 policy statement on electricity governance (2008 Electricity GPS): New Zealand Government, *Government Policy Statement in Relation to Electricity Industry Governance*, May 2008. The 2008 Electricity GPS sets out statutory objectives for the Electricity Commission and the Government's expectations and intentions regarding the interrelationship between the Commerce Commission and the Electricity Commission with regard to the regulation of electricity lines businesses. In particular, the 2008 Electricity GPS recognises that the two Commissions have developed and published a Memorandum of Understanding on their respective roles.

and taking full account of the long-term risks to consumers of underinvestment in basic infrastructure; and (c) regulated businesses being confident they will not be disadvantaged in their regulated businesses if they invest in other infrastructure and services.

- 98 The 2006 GPS also states that the Government considers it is important that regulatory control ensures, that: (a) the consumers of regulated businesses are not disadvantaged by the investments of regulated businesses in other infrastructure and services; (b) regulated businesses are held accountable for making investments in that business where those investments have been provided for in regulated revenues and prices; and (c) regulated businesses provide infrastructure at the quality required by consumers at an efficient price. Some of the elements of the 2006 GPS have now been reflected in the changes to the Act introduced through the CAA.

3.3 REGULATION OF ELECTRICITY LINES SERVICES

3.3.1 Reforms Impacting Electricity Lines Services: 1994-2001

- 99 From 1994 until the enactment of Part 4A of the Act in August 2001, a “light-handed” regulatory regime based on information disclosure provided the only form of economic regulatory oversight for electricity distribution and transmission services in New Zealand. In 1994, electricity distribution was undertaken by vertically-integrated electricity supply companies. These companies provided distribution network conveyance services, as well as being involved in downstream electricity retail markets (i.e., the supply of electricity). Some electricity supply companies were also involved in upstream electricity generation.
- 100 Given the potential for a single firm to more efficiently meet the entire demand for network conveyance services (i.e., line services), within certain geographic limits, the distribution business units of the electricity supply companies were regarded as being natural monopolies (paragraphs 45-48 above). On the other hand, electricity retailing and generation were considered to be potentially contestable activities (paragraph 48 above), although competitive retailing of electricity required “open access” to the distribution networks.⁴⁴ Electricity transmission, also a natural monopoly, was undertaken by Transpower, although some of the largest electricity supply companies also operated some lines at similar voltage levels.
- 101 At this time, there were a number of key policy concerns in relation to electricity distribution and retailing. First, pressure on costs and profits in distribution were considered to be relatively weak, and therefore monopoly profits might be present. Also, barriers to retail competition were considered to be high due to electricity supply companies having the incentives to deter competition in retailing by, among other things, cross-subsidising (through monopoly profits) retail customers at risk of switching to competing retailers. Similarly, it was thought that electricity supply companies had incentives to cross-subsidise investments in generation from distribution and retail customers not subject to competition.

⁴⁴ See footnote 23.

102 The response to the above policy concerns initially comprised three principal components:

- the overall general competition law framework provided under Parts 2 and 3 of the Act;
- the threat of further regulation, such as price control under Parts 4 (and 5) of the Act, if market power were abused; and
- the *Electricity (Information Disclosure) Regulations 1994* promulgated under the Electricity Act 1992, which were designed to make transparent the actions and activities of electricity supply companies—particularly in respect of allowing open access to their distribution networks, and monitoring the financial and other performance of the monopoly lines business part of the electricity supply companies.⁴⁵ These regulations were administered by the Ministry of Commerce—subsequently the Ministry of Economic Development (MED).

103 However, in 1998, the Government undertook a major restructuring of the electricity industry via the Electricity Industry Reform Act 1998 (EIRA). A major effect of EIRA was the ownership separation of electricity distribution from electricity retailing and any (large-scale) generation, and by April 1999, this separation was mostly complete. Prohibiting common ownership of these different types of businesses by a single owner was intended to more effectively address the perceived risks of anti-competitive restrictions on access to distribution networks for competing retailers, as well as the cross-subsidisation of retail or generation activities from distribution activities. In order to reflect the ownership separation of lines businesses, the information disclosure regulations also went through a significant review (i.e., resulting in the *Electricity (Information Disclosure) Regulations 1999*).

104 EIRA did not, however, directly address the policy concern that the residual EDBs might be earning monopoly profits. This issue was subsequently addressed through the enactment of Part 4A of the Act, which stemmed from the recommendations of the Ministerial Inquiry into the Electricity Industry in 2000. Part 4A provided for a strengthened information disclosure regime, and a new targeted control regime for electricity lines businesses, both to be implemented by the Commission, in order to respond to concerns about the potential for market power to be exploited in the supply of electricity distribution and transmission services.⁴⁶

3.3.2 Targeted Control Regime under Part 4A

105 Part 4A of the Act, which remains in force until 1 April 2009, established a targeted control regime for the electricity lines businesses (ELBs)—namely the EDBs and Transpower. The regime is “targeted” because, unlike price control regimes for electricity lines businesses in overseas jurisdictions, ELBs in New Zealand did not automatically become subject to control of their prices, revenues and/or service quality.

⁴⁵ Ministry of Commerce, Energy Policy Group, *Light-Handed Regulation of New Zealand’s Electricity and Gas Industries*, Wellington, October 1995.

⁴⁶ Ministry of Economic Development, *Inquiry into the Electricity Industry*, Report to the Minister of Energy, June 2000, paragraphs 71, 108, 111, 135, 180, 192-193 and 199.

Under Part 4A, lines businesses have been only *potentially* subject to control if they breach one or more performance thresholds set by the Commission.

- 106 The overall purpose of the targeted control regime (under subpart 1 of Part 4A) is to promote the efficient operation of electricity distribution and transmission markets for the long-term benefit of consumers. There are three key steps to the targeted control regime. The first is for the Commission to set performance thresholds for all ELBs; the second is for the Commission to identify businesses that breach those thresholds; and the third is for the Commission to determine whether or not to control particular services supplied by identified ELBs.
- 107 A breach of the thresholds enables the Commission to investigate the recent, current and future performance of an identified ELB. This “post-breach inquiry” is directed at determining whether the performance of the ELB is consistent with the specific objectives of the regime—namely, that the business is limited in its ability to earn excessive profits, faces incentives to improve efficiency and to provide services at a quality that reflects consumer demands, and shares the benefits of efficiency gains with consumers, including through lower prices. Should the performance of the identified business not be consistent with these objectives and the long-term benefit of consumers, then the Commission needs to decide whether control under Part 5 of the Act would be necessary for the objectives of the regime to be achieved.

3.3.3 *Thresholds and Post-Breach Inquiries*

- 108 The Commission set its initial thresholds from 6 June 2003,⁴⁷ and these were reset for a five-year regulatory period from 1 April 2004 to 31 March 2009 for the 28 EDBs existing in 2003/04.⁴⁸ The thresholds comprise a price path threshold and a quality threshold. The price path threshold has allowed businesses to increase their average distribution prices each year, without breaching the threshold, by the consumer price index (CPI) less an X-factor. This threshold is conceptually similar to the CPI-X incentive mechanisms that regulators commonly use for control in overseas jurisdictions (paragraphs 66-70 above). However, the immediate consequence of breaching a threshold is only the prospect of an inquiry, rather than any penalty or enforcement action. For the current price path thresholds, X factors were assigned to EDBs on the basis of industry-wide productivity found using TFP analysis (paragraphs 75-76 above), as well as on the relative efficiency and relative profitability of the businesses. The X factors ranged from +2% to -1%.
- 109 The quality threshold requires the EDBs to demonstrate annually that there has been no material deterioration in reliability, measured against average SAIDI and SAIFI performance from 1998 to 2003. In addition, every two years EDBs must demonstrate that they have meaningfully engaged with consumers to determine their demand for service quality.
- 110 The Commission has completed and is still undertaking a number of post-breach inquiries, but to date has never imposed control in response to a threshold breach.

⁴⁷ *Commerce Act (Electricity Lines Thresholds) Notice 2003*, as gazetted on 6 June 2003.

⁴⁸ *Commerce Act (Electricity Distribution Thresholds) Notice 2004*, as gazetted on 31 March 2004.

Chapter 7 discusses the transitional provisions introduced in the CAA which relate to the resolution of treatment of unresolved breaches. At the time the CAA was passed, the Commission had been consulting on resetting the thresholds for EDBs from 1 April 2009.⁴⁹ As is also discussed in Chapter 7, this work has now been superseded by the transitional provisions for EDBs.

3.3.4 *Administrative Settlements for Unison, Vector and Transpower*

- 111 The Commission has indicated that it is possible for a breach of the thresholds to be resolved by an “administrative settlement”, which involves an identified ELB voluntarily reaching an agreement with the Commission on an appropriate course of action. If, following consultation with interested parties, the Commission and an ELB agree on a settlement, the Commission can then cease its inquiry and publish its reasons for not declaring control—referring to the terms of the settlement.
- 112 The Commission has agreed an administrative settlement with Unison Networks Limited (Unison)⁵⁰ in May 2007, and in May 2008 the Commission agreed administrative settlements with Vector Limited (Vector)⁵¹ and with Transpower. As is discussed in Chapter 7, there are transitional provisions introduced by the CAA which relate to any existing administrative settlements for EDBs. In the case of both Unison and Vector, although there are some settlement terms relating to the period after 1 April 2009, most of the key actions under those settlements have already been completed by the two businesses. As is discussed in Chapter 8, the transitional provisions for Transpower provide that its settlement continues to remain in force until the expiry date on 30 June 2011.⁵²

3.3.5 *Information Disclosure under Part 4A*

- 113 The information disclosure regime under subpart 3 of Part 4A shares the same overall purpose as that of the targeted control regime—namely, promoting the efficient operation of electricity distribution and transmission markets (paragraph 106 above). Although sharing this common purpose, in the case of information disclosure this purpose is to be achieved by ensuring that ELBs make publicly available reliable and timely information about their operation and behaviour, so that a wide range of people are informed about such factors as profits, costs, asset values, price (including terms and conditions of supply), quality, security, and reliability of supply of those businesses. The Commission is required to publish summaries and analyses of disclosed information for the purpose of promoting greater understanding of the relative performance of lines businesses, and the changes in their performance over time.

⁴⁹ The most recent Commission document relating to this consultation process was: Commerce Commission, *Regulation of Electricity Lines Businesses, Targeted Control Regime, Threshold Reset 2009, Methodology Paper: Update*, 25 June 2008.

⁵⁰ Commerce Commission, *Reasons for Not Declaring Control, Unison Networks Limited*, 11 May 2007.

⁵¹ Commerce Commission, *Reasons for Not Declaring Control of Vector Limited*, 30 May 2008.

⁵² Transpower’s administrative settlement is explained in: Commerce Commission, *Decision and Reasons for Not Declaring Control of Transpower New Zealand Limited & Decision to Reset Transpower’s Thresholds*, 13 May 2008.

- 114 The Commission issued its initial set of information disclosure requirements for lines businesses pursuant to Part 4A in March 2004. As an interim measure, these initial disclosure requirements largely replicated the provisions in the subsequently revoked *Electricity (Information Disclosure) Regulations 1999* (paragraph 103 above). The key exception to replicating the previous disclosure regulations was to update the previous MED handbook on valuing the system fixed assets of EDBs using the optimal deprival valuation (ODV) methodology, and the Commission issued its own ODV Handbook in August 2004. Following these interim steps, the Commission initiated a full review of the information disclosure regime, beginning from first principles.
- 115 High-level decisions on the review of information disclosure regime were issued by the Commission in October 2005.⁵³ This was followed by detailed changes to the disclosure requirements for EDB asset management plans in March 2006, and to the majority of the other requirements for EDBs in October 2008. (Disclosure requirements for Transpower remained largely unchanged).⁵⁴
- 116 A key concept underpinning the Commission's decisions on the information disclosure regime was that of financial capital maintenance (FCM)—discussed further in Chapter 4 (paragraphs 190-194 below). Application of the FCM concept means that the financial capital employed by a firm to efficiently construct and install assets used to supply line business services is preserved in real terms. Although the application of the FCM concept for the purposes of the information disclosure regime does not, of itself, maintain financial capital—as this will depend on the actual average price path which a lines business faces—FCM provided a valuable guiding principle in specifying how the value of the regulatory asset base (RAB) is to be rolled forward, and how changes in asset value should be reflected in the measurement of business profitability.
- 117 As is discussed in Chapters 7 and 8, the transitional provisions introduced by the CAA provide that the information disclosure requirements published by the Commission in October this year under Part 4A will continue to apply to EDBs and Transpower, until the Commission specifies how information disclosure applies to electricity lines services supplied under Part 4 (by making a section 52P determination).

3.4 REGULATION OF GAS PIPELINE SERVICES

3.4.1 Overview of the Regulatory Regime for Gas Pipeline Services Prior to the CAA

- 118 Up until 1992, the gas supply industry in New Zealand was subject to price control implemented by the Commission. The Commission periodically determined the prices that gas utilities were permitted to charge for the bundled supply of natural gas. Natural gas supply was the last activity to be removed from direct price regulation as part of the

⁵³ Commerce Commission, *Regulation of Electricity Lines Businesses, Review of the Information Disclosure Regime, Decision Paper*, 13 October 2005.

⁵⁴ Commerce Commission, *Electricity (Information Disclosure) Requirements 2008*, 31 October 2008. The new requirements are explained in: Commerce Commission, *Regulation of Electricity Lines Businesses, Information Disclosure Regime, Companion Paper to the Revised Information Disclosure Requirements*, 31 October 2008.

reforms to New Zealand's economy during the 1980s and early 1990s (paragraphs 87-88 above), with the Commission's last price determination being in 1992.⁵⁵

- 119 As a result of the passage of the Gas Act 1992, the industry was deregulated from April 1993, with a new regulatory regime—comprising information disclosure and the threat of re-regulation—taking the place of the Commission's price setting role. However, although information disclosure regulations for the electricity supply industry came into effect for the 1993/94 financial year (paragraph 102 above), the information disclosure regulations for the gas supply industry did not come into effect until July 1997, first applying to the 1996/97 year.
- 120 MED described the economic regulatory regime for the gas sector as comprising a number of elements, namely:
- the potential application of Part 2 of the Commerce Act to prohibit anti-competitive behaviour;
 - the threat of applying more heavy-handed regulation, such as control of prices, revenue and/or quality under Part 5 of the Act, following an inquiry by the Commission under Part 4 of the Act; and
 - an information disclosure regime introduced in 1997, set out in the *Gas (Information Disclosure) Regulations 1997* and administered by MED (previously the Ministry of Commerce), pursuant to section 55 of the Gas Act.⁵⁶

3.4.2 Gas (*Information Disclosure*) Regulations 1997

- 121 The gas information disclosure regulations were intended to encourage self-regulation by the gas pipeline businesses, thereby avoiding the risk of price control under the Act. Consequently, the regulations were designed to assist in:
- discouraging monopoly pricing (involving excessive profits and/or costs);
 - discouraging excessive cross-subsidies between consumer classes;
 - promoting competition in gas retailing and wholesaling by facilitating open access to natural monopoly pipelines, as well as revealing cross-subsidies between natural monopoly and competitive activities; and
 - identifying inadequate service quality.⁵⁷
- 122 As is discussed in Chapter 10, the transitional provisions introduced by the CAA provide that the gas information disclosure regulations continue to remain in force until the Commission specifies how information disclosure under Part 4 applies to gas pipeline services (by making a section 52P determination). Consequently, the disclosure regulations still require gas pipeline businesses to disclose a range of information, including financial statements, financial and efficiency performance

⁵⁵ Commerce Commission, *Decision 266*, 19 February 1992.

⁵⁶ Ministry of Economic Development, *Proposals for Amending the Gas (Information Disclosure) Regulations 1997*, 13 October 1999, paragraph 9.

⁵⁷ Ministry of Commerce, *Gas (Information Disclosure) Regulations Newsletter No. 1*, March 1996, p. 1.

measures, methodologies for allocating costs and revenues between gas distribution, transmission and retailing activities, line charges and pricing methodologies, and details on contracts.⁵⁸

3.4.3 Review of New Zealand's Gas Sector

123 In 2001, the Government initiated a comprehensive review of the New Zealand gas sector (the Gas Sector Review). The Gas Sector Review was intended to ensure that the gas industry could meet the Government's overall objective for the sector, which at the time was "to ensure that gas is delivered to existing and new customers in an efficient, fair, reliable, and environmentally sustainable manner." The terms of reference for the Gas Sector Review were issued in March 2001 and, among other things, included:

- reviewing the regulatory regime for gas;
- considering the impact on efficient outcomes of common ownership of gas businesses by companies operating other network businesses (i.e., multi-utilities); and
- considering the appropriate methodology for valuing gas "system fixed assets", the majority of which are pipelines.⁵⁹

124 Following the completion of the Gas Sector Review, the Minister of Energy announced that he would request the Commission, pursuant to Part 4 of the Act, to report on whether increased regulatory control should be introduced for gas pipeline services. Specifically, the Minister of Energy noted:

*There has been significant debate over whether gas pipeline prices are excessive. Some commentators believe that there is evidence that monopoly rents have been received by at least the main pipeline owners. ... A formal inquiry by the Commerce Commission under section 56 of the Commerce Act offers the best way of dealing with the various monopoly issues, including asset valuation.*⁶⁰

3.4.4 Gas Control Inquiry

125 In April 2003, the Minister of Energy requested that the Commission report on whether goods and services supplied in markets directly related to gas transmission and distribution systems should be subject to control, and hence whether an Order in Council under section 53 of the Act should be made in relation to gas pipeline services.

126 In reaching his view on whether control should be introduced, the Minister of Energy requested specific advice on:

- whether gas pipeline services may be controlled in terms of section 52 of the Act;
- the methodology that the Commission considers appropriate for valuation of pipeline assets;

⁵⁸ Gas (Information Disclosure) Regulations 1997, regulations 6-27 and Schedule 1.

⁵⁹ Ministry of Economic Development, *Review of New Zealand's Gas Sector, Terms of Reference*, 15 March 2001.

⁶⁰ Hon. Pete Hodgson, *Gas Pipeline Businesses under Investigation*, Media Release, 6 November 2002.

- the net benefits to the public of control; and
- any other matter that the Commission may consider relevant to a decision on whether control should be introduced.

127 In undertaking the Gas Control Inquiry, the Commission's work was governed by sections 52 to 56 in Part 4 of the Act. At the time, section 52 of the Act required the Commission to consider two key issues in relation to whether or not control under Part 5 may be imposed. Goods or services may be controlled under section 52 if:

- they are, or will be, supplied or acquired in a market in which competition is limited or is likely to be lessened; and
- control is necessary or desirable in the interests of persons who acquire or supply the goods or services.

128 In considering whether competition was limited or was likely to be lessened, the Commission assessed both structural and behavioural considerations in the markets in which gas services were supplied. In considering whether control was necessary or desirable in the interests of acquirers the Commission determined the net benefits of control for both direct and indirect acquirers of gas pipeline services. Direct acquirers include gas retail businesses and directly supplied large consumers, whereas indirect acquirers are end-use consumers that purchase gas from gas retail businesses. The Commission's analysis contrasted what would happen if control were not imposed, with an estimate of the potential benefits and detriments to acquirers if control were to be imposed.

129 Having determined whether control may be introduced under section 52, the Commission conducted further analysis to determine whether an Order in Council imposing control should be made (section 56(1)). The matters considered in relation to whether control may be imposed remained relevant. In addition, the Commission considered the efficiency costs of achieving reductions in excess returns, the magnitude of the benefit to acquirers, the impact of a recommendation not to control and other qualitative considerations.

130 The Commission reported to the Minister of Energy in November 2004.⁶¹ In its final report, the Commission recommended that:

- the gas pipeline businesses of Nova Gas, as well as a number of small pipeline systems in Taranaki, may not be controlled, because the requirements of section 52 were not met;
- the gas pipeline businesses of National Gas Corporation (NGC) Transmission, NGC Distribution, Wanganui Gas, and Maui Development Limited should not be controlled (though the requirements of section 52 were met); and
- the gas pipeline businesses of Powerco and Vector should be controlled, because Powerco and Vector had been earning significant excess profits, and the net benefits to acquirers of declaring control of Powerco's and Vector's gas pipeline services would be substantial.

⁶¹ Commerce Commission, *Gas Control Inquiry Final Report*, 29 November 2004.

3.4.5 Imposition of Control under Part 5 – Order In Council and Provisional Authorisation

- 131 After seeking the views of interested parties on the Commission's Gas Control Inquiry Final Report, as well as the advice of MED and the Treasury, on 27 July 2005 the Minister of Energy recommended to the Governor General that an Order in Council be made under section 53 of the Act to impose control over the gas pipeline services owned by Powerco and Vector.⁶² Control was implemented by way of an Order in Council pursuant to section 53 of the Act and, after an amendment, took effect from 25 August 2005 with an expiry date in 2016.⁶³
- 132 Under section 55 of the Act, once control has been imposed by an Order in Council the services can only lawfully be supplied pursuant to and in accordance with a provisional authorisation, an authorisation, or an undertaking. Therefore, in order to enable the continued supply of the controlled services, the Commission issued a provisional authorisation to coincide with the commencement date in the Order in Council. This provisional authorisation imposed average price reductions of 9% for Powerco and 9.5% for Vector, and subsequently held prices constant in nominal terms.

3.4.6 Authorisation for Powerco's and Vector's Controlled Gas Pipeline Services

- 133 As is discussed in chapter 9, the CAA provides that the Order in Council in respect of Powerco's and Vector's controlled pipeline services now expires on 1 July 2012. The CAA clarifies, however, that any authorisation made before 1 April 2009 is preserved under the Act. The Commission, therefore, made its final authorisation as if Parts 4 to 6 of the Act had not been amended or repealed by the CAA, and that authorisation remains in force until it is revoked or until 1 July 2012, whichever is the earlier.
- 134 The authorisation was made by the Commission in respect of Powerco and Vector on 30 October 2008, and it superseded the provisional authorisation.⁶⁴ In making the authorisation the Commission was required to have regard to the considerations in section 70A of the Act, namely:
- the extent to which competition is limited or likely to be lessened in respect of the controlled services (section 70A(a));
 - the necessity or desirability of safeguarding the interests of persons who acquire (whether directly or indirectly) the controlled services (section 70A(b)); and
 - the promotion of efficiency in the production and supply or acquisition of the controlled services (section 70A(c)).

⁶² In Vector's case, the Order in Council only relates to Vector's Auckland gas network assets, and not the assets that Vector had acquired from NGC following the completion of the Commission's Gas Control Inquiry Final Report.

⁶³ *Commerce (Control of Natural Gas Services) Order 2005* and *Commerce (Control of Natural Gas Services) Amendment Order 2005*.

⁶⁴ Commerce Commission, *Decision 656 (Powerco) and Decision 657 (Vector)*, 30 October 2008, and refer to Commerce Commission, *Authorisation for the Control of Supply of Natural Gas Distribution Services by Powerco Ltd and Vector Ltd, Decisions Paper*, 30 October 2008.

- 135 Further average price reductions of 11.1% for Powerco and 3.7% for Vector will be required when the authorisation is implemented on 1 January 2009. Prices will then be held constant in real terms for the remainder of the control period to 2012 (i.e., price changes of CPI–0% per annum), and set in accordance with pricing methodologies for the controlled services which need to be approved by the Commission. In making the Authorisation, the Commission used a building blocks approach, commonly used by regulators overseas (paragraphs 71-72 above), in order to determine allowable revenue for the controlled services, in a manner consistent with the concept of financial capital maintenance (paragraph 116 above).
- 136 The Commission also decided that quality should be regulated under the authorisation through annual information disclosure on quality performance, in accordance with quality indicators and reporting requirements set by the Commission for this purpose.

3.5 REGULATION OF AIRPORT SERVICES

3.5.1 Regulatory Regime for Airports

- 137 Since 1986, airports have been subject to the generic pro-competitive and regulatory provisions in the Act, including the threat of control under Part 4. In addition, they are also subject to the Airport Authorities Act 1966 (AAA), which requires airports to operate as commercial undertakings. The AAA and associated regulations include provisions to address competition concerns and enhance the countervailing market power of airlines.⁶⁵
- 138 In particular, under section 4A of the AAA, airport operators are required to consult airline customers when setting charges, and also when undertaking major capital expenditure. Section 4A allows an airport company—after consulting with substantial customers⁶⁶—to set such charges as it thinks fit for the use of the airport and its services or facilities.
- 139 The *Airport Authorities (Airport Companies Information Disclosure) Regulations 1999* were issued pursuant to the AAA, in respect of the three major international airports at Auckland, Wellington and Christchurch. These regulations are administered by the Ministry of Transport. The airport companies are required to disclose: audited segmented financial statements for identified airport activities; passenger charges and charges for identified airport activities (and the methodology used to determine the charges); the basis for allocating assets to identified airport activities; details of asset revaluations; operating costs of identified airport activities; WACC and the methodology and calculations used to determine WACC; numbers of passenger and aircraft movements; interruptions to services; and the number of people employed in

⁶⁵ Hon. Lianne Dalziel, *Regulatory Control Inquiry into Airfield Activities: Memorandum to Cabinet*, from the Minister of Commerce, May 2003, paragraph 8.

⁶⁶ The AAA defines a *substantial customer* to be a person who pays (or is liable to pay) more than 5% of an airport's annual revenues in relation to identified airport activities. In addition, a person who is authorised in writing to represent a number of persons who in aggregate pay (or are liable to pay) more than 5% of an airport's annual revenues in relation to identified airport activities. For example, the Board of Airline Representatives of New Zealand Inc. (BARNZ) is deemed to be a substantial customer.

identified airport activities.⁶⁷ However, in comparison to either the electricity or gas information disclosure regimes, the airport information disclosure regulations are considerably less specific and prescriptive.

- 140 As is discussed in chapter 10, the transitional provisions introduced by the CAA provide that the airport information disclosure regulations continue to remain in force until the Commission specifies how information disclosure under Part 4 applies to airport services (by making a section 52P determination).

3.5.2 *Inquiry into Airfield Activities*

- 141 In July 2001 the Minister issued a request requiring the Commission to report whether an Order in Council under section 53 of the Act, controlling certain airfield activities at the Auckland, Wellington and Christchurch international airports, should be made.⁶⁸ Airfield activities are the activities undertaken (including the facilities and services provided) to enable aircraft to land and take-off. The inquiry was initiated following concerns over the lack of market competition for international airfield activities, and the possibility that this limited competition enabled the international airports to earn monopoly profits.⁶⁹ In particular, the Cabinet papers leading up to the Minister's original request indicated the Government's concerns that the AAA did not go far enough to protect against abuses of monopoly power.⁷⁰
- 142 The Commission reported to the Minister in August 2002.⁷¹ In its final report, the Commission recommended that:
- the airfield activities supplied by Auckland International Airport Limited should be controlled;
 - the airfield activities supplied by Wellington International Airport Limited (WIAL) should not be controlled, but noted that if WIAL were to impose a significant increase in charges as a result of its ongoing consultation with the airlines, the Commission would likely be satisfied that it would be necessary or desirable for the airfield activities supplied by WIAL to be controlled; and
 - the airfield activities supplied by Christchurch International Airport Limited should not be controlled.

⁶⁷ Airport Authorities (Airport Companies Information Disclosure) Regulations 1999, regulations 6 and 7, and clauses 2-8 of the Schedule.

⁶⁸ This request superseded an earlier request by the Minister made in May 1998, in light of the amendments made to the Act in May 2001.

⁶⁹ Hon. Lianne Dalziel, *No Control Imposed on Airfield Activities*, Media Release, 23 May 2003.

⁷⁰ Commerce Commission, *Final Report, Part IV Inquiry into Airfield Activities at Auckland, Wellington, and Christchurch International Airports*, 1 August 2002, paragraph 2.68.

⁷¹ *ibid.*

143 In May 2003, after considering the Commission's recommendations, submissions on the Commission's report, and advice from MED, the Minister decided that controls would not be imposed on airfield activities at either Auckland, Wellington or Christchurch international airports, largely on the grounds that the expected level of price reductions to passengers were not sufficient to merit the imposition of control.⁷²

⁷² Dalziel, *supra* n 69.

CHAPTER 4: REGULATORY PURPOSE AND PRINCIPLES

4.1 INTRODUCTION

- 144 This chapter provides an overview of the new purpose statement applicable to all the regulatory provisions introduced by the CAA (paragraphs 145-155). The chapter also sets out the Commission’s preliminary views of the economic principles which stem from the purpose statement (paragraphs 156-194), and proposes implementation principles relating to good regulatory practice (paragraphs 195-197).

4.2 STATUTORY PURPOSE OF PART 4 OF THE COMMERCE ACT

4.2.1 Purpose Statement

- 145 Section 52 of the Act provides an overview of Part 4. It states that Part 4 “provides for the regulation of the price and quality of goods and services in markets where there is little or no competition and little or no likelihood of a substantial increase in competition”.

- 146 Part 4 contains an overall purpose statement for regulating the price and quality of goods or services. In addition, there are additional purpose statements that are specific to input methodologies (i.e., refer Chapter 5) and to a number of the regulatory instruments (refer Chapter 6 under the headings that relate to each regulatory instrument). Section 52A provides that the purpose of Part 4 is:

The purpose of this Part is to promote the long-term benefit of consumers in markets referred to in section 52 by promoting outcomes that are consistent with outcomes produced in competitive markets such that suppliers of regulated goods or services—

- (a) have incentives to innovate and to invest, including in replacement, upgraded, and new assets; and*
- (b) have incentives to improve efficiency and provide services at a quality that reflects consumer demands; and*
- (c) share with consumers the benefits of efficiency gains in the supply of the regulated goods or services, including through lower prices; and*
- (d) are limited in their ability to extract excessive profits.*

- 147 In other words, the primary regulatory purpose is to promote the long-term benefit of consumers. This must be achieved, in a general sense, by promoting the outcomes that are consistent with those produced in competitive markets. These outcomes are, in turn, to be achieved through objectives of:

- incentivising innovation and investment;
- incentivising improved efficiency and the provision of regulated services at a quality that reflects consumer demands;
- encouraging regulated businesses to share the benefits of efficiency gains with consumers, including through lower prices; and
- limiting the ability of regulated businesses to make excessive profits.

4.2.2 Explanation by the Select Committee of the New Purpose Statement

- 148 The Select Committee Report on the Commerce Amendment Bill 2008 explains the new purpose statement as follows:

New section 52A sets out a purpose statement for Part 4, which is aimed at safeguarding the long-term interests of consumers in markets where there is little or no competition, by promoting outcomes consistent with competition. This requires incentives for suppliers to invest and innovate, share the benefits of efficiency gains with consumers, limit excessive profits, improve efficiency, and provide services of the quality required by consumers.

Most submitters supported the purpose statement as drafted. Others argued that the primary objective in the purpose statement should be investment. Although we agree that incentives to invest are important, we consider they need to be balanced against the need to protect consumers from excessive prices.⁷³

- 149 In the Commission's view, this explanation of the purpose statement implicitly recognises the benefits that accrue to consumers through the economic regulation of market power, as is discussed in chapter 2 (paragraphs 31-60). Such benefits are consistent with the outcomes observed in workably competitive markets: while competition serves to allocate resources in the economy efficiently, it also limits market power and gives incentives for suppliers to improve efficiency and provide services at the desired quality. For instance, a reduction in prices from monopolistic levels—through either more effective competition or through economic regulation—has at least two consequential outcomes over time. First, there is an improvement in efficiency; secondly, a reduction in the level of monopoly rents captured by the supplier. Thus, like competition, economic regulation serves to limit the future transfer of wealth from consumers to suppliers that arises from the exercise of otherwise unconstrained monopoly power (paragraph 51 above).
- 150 Promoting benefits to consumers in the long term requires that regulated firms have appropriate incentives to invest and innovate, in order to efficiently maintain and expand the supply of services at the quantity and quality that consumers demand. Consequently, as in competitive markets, regulated firms should have the opportunity to earn a “normal” economic profit (paragraph 36 above), because doing so allows them to make a return on, and a return of, the capital employed in efficiently incurred investments over time. There are, however, inevitably trade-offs involved in the promotion of regulatory objectives for the long-term benefit of consumers. As is the case for regulators in other jurisdictions, in weighing up such trade-offs in the context of the statutory purpose and objectives (i.e., in section 52A of the Act), the Commission will need to exercise its judgement in striking the appropriate balance between the interests of consumers and the interests of regulated suppliers.
- 151 Similar public policy concerns to those identified in the Select Committee Report underpinned the two inquiries undertaken by the Commission under the previous Part 4 of the Act (i.e., first into airfield activities, and second into gas pipeline services). In both cases, the policy objective was to limit potential abuse of monopoly market power and the prospect of suppliers extracting monopoly profits from consumers (paragraphs

⁷³ Commentary to the Commerce Amendment Bill (201-2), Government Bill, as reported from the Commerce Committee, Wellington, 28 July 2008, p 2.

124 and 141 above). Similarly, Part 4A of the Act was introduced to respond to concerns about the potential for market power to be exploited in the electricity lines sector (paragraph 104 above).

- (1). Do you have any views on the new purpose statement in section 52A of the Act and how this might impact on the Commission's role?

4.2.3 Similarities with the Purpose of the Targeted Control Regime in Part 4A

152 Indeed, the new purpose statement is similar to the current purpose statement for the targeted control of electricity lines businesses in section 57E of the Act.⁷⁴ Section 57E provides that:

The purpose of this subpart is to promote the efficient operation of markets directly related to electricity distribution and transmission services through targeted control for the long-term benefit of consumers by ensuring that suppliers:

- (a) are limited in their ability to extract excessive profits;*
- (b) face strong incentives to improve efficiency and provide services at a quality that reflects consumer demands; and*
- (c) share the benefits of efficiency gains with consumers, including through lower prices.*

153 This section has been interpreted by the High Court as follows:

...the s57E(a) to (c) goals have the following meanings:

- (a) as to (a), the goal is to ensure that LELBs [large electricity lines businesses] are limited in their ability to earn profits in excess of their WACC [weighted average cost of capital]. Differently put, the aim is to limit the ability of LELBs to earn greater than normal profits;*
- (b) the s57E(b) aim requires the Commission to direct its actions toward the goals of ensuring that LELBs do not incur unnecessary or wasteful costs, and make appropriate trade-offs between increased quality and cost. Expenditure should be restricted to meeting quality standards required by consumers;*
- (c) section 57E(c) requires the Commission to ensure that efficiency gains, when achieved, are shared with customers. Implicit in "sharing" is that the LELB can retain some of the gain. The sharing could take the form of lower prices or of improved quality of service, or a combination of the two.⁷⁵*

154 The Court held that, for the purpose of construction, section 57E could be broken down into three parts as follows:

First there is the statement of purpose...to promote the efficient operation of markets directly related to electricity distribution...services...

Second, is the means of achieving that purpose:...through targeted control for the long term benefit of consumers.

⁷⁴ As noted above (paragraph 10), Part 4A remains in force until 1 April 2009.

⁷⁵ *Unison Networks Limited v Commerce Commission and Powerco Limited*, High Court, Wellington, CIV 2004-485-960 [28 November 2005], Wild J, paragraph [60]. Justice Wild's observations in relation to s 57E were not disturbed by the Supreme Court in *Unison Networks Limited v Commerce Commission*, Unreported, SC/12/2007, [10 September 2007].

*Third, is the amplification of that means, in the form of ensuring that the objectives set out in paragraphs (a) to (c) are achieved.*⁷⁶

- 155 The Court also noted that subsections (a) to (c) “are identified by Parliament as central aspects of the long-term interests of consumers and are central, though not exclusive, goals for the Commission in the performance of its duties under subpart 1 of Part 4A.”⁷⁷ This serves as a useful guide to interpreting the new purpose statement in section 52A.

- (2). In what ways do you consider the new purpose statement in section 52A to be materially different from that in section 57E?

4.3 REGULATORY FRAMEWORK PRINCIPLES

4.3.1 Economic Principles and Implementation Principles

- 156 The costs of regulation can be minimised, and the net benefits maximised, by well-designed and well-implemented regulatory regimes. The introduction of an overall purpose statement for all the regulatory provisions in the Act is itself an important part of contributing to regulatory certainty, consistency and accountability.
- 157 In undertaking its functions under Part 4 of the Act, the Commission considers that there are a number of key economic principles which will assist in promoting the purpose of Part 4. These principles stem from the three dimensions of economic efficiency (paragraph 35 above). They form an important part of promoting the long-term benefit of consumers because they promote outcomes consistent with a benchmark of workable competition (paragraphs 160-168 below). The economic principles are to:
- promote allocative efficiency, subject to the opportunity for regulated businesses to earn normal returns (paragraphs 169-175 below);
 - promote realistic and achievable gains in productive efficiency (paragraphs 176-182 below); and
 - promote dynamic efficiency by incentivising efficient investment (paragraphs 183-189 below).
- 158 The Commission considers that the application of the ‘NPV=0’ approach, and the related concept of real FCM, are consistent with these principles. NPV=0 and FCM are explained below (paragraphs 190-194).
- 159 Over and above applying appropriate economic principles to achieve statutory objectives, regulators are also able to reduce ambiguity and increase predictability of regulatory outcomes over time simply by acting in particular ways. These desirable characteristics, or implementation principles relating to good regulatory practice, are widely recognised. For example, the Australasian Utility Regulators’ Forum has proposed principles of: effectiveness and efficiency, consistency, predictability, flexibility, communication, consultation, transparency, independence, and

⁷⁶ CIV 2004-485-960, paragraphs [110]-[112].

⁷⁷ *ibid*, paragraph [59].

accountability.⁷⁸ Some of these are expressly required by specific sections of the Act, or are implied by the scheme of the Act, while others are motivated by their contribution to successful regulation. The Commission's preliminary views concerning key implementation principles are also discussed below (paragraphs 195-197).⁷⁹

4.3.2 *Workable Competition as a Benchmark*

- 160 The standard of competition that underpins section 52A and Part 4, as well as the other parts of the Act, is that of 'workable or effective' competition.⁸⁰ As is discussed above (paragraphs 38-39), the courts in New Zealand have interpreted the key characteristics of workably competitive markets.
- 161 Workable competition provides a more useful framework for regulators when assessing the likely benefits of intervention than perfect competition (paragraph 36-37 above). The problem that arises with the benchmark of perfect competition is that a natural monopolist will be unable to generate a normal economic profit even on efficient investments if it is compelled to charge at perfectly competitive, welfare-maximising levels (i.e., prices based on long-run marginal costs). The prices that maximise economic welfare are described as 'first best' in allocative efficiency terms, since the marginal cost of supply equals the marginal benefit of consumption. However, a natural monopolist's marginal cost differs from (and generally lies below) the average cost of producing the firm's output. Simply charging prices equal to marginal cost is therefore likely to conflict with dynamic efficiency, as it removes the regulated firm's incentive to invest further or even remain in the industry.
- 162 Even when regulated firms are free to price using multi-part tariffs, 'first best' pricing is usually infeasible. Regulators must instead balance concerns about dynamic efficiency with those of allocative efficiency, by allowing prices to deviate from marginal costs to the extent necessary for regulated firms to be able to earn a normal return. The most allocatively efficient prices in such a situation will be those that deviate from marginal cost in a way that minimises deadweight losses to society, yet provide the firm with the opportunity to recover the total efficient costs of production, including the firm's risk-adjusted cost of capital (i.e., the WACC). Such an outcome is said to be 'second best', given the constraint that firms must be able to earn a fair rate of return. The prices that produce the 'second best' outcome are known as 'Ramsey-Boiteux' or 'Ramsey' prices.⁸¹

⁷⁸ Utilities Regulators' Forum, *Best practice utility regulation – A discussion paper*, 1999. Also refer: Better Regulation Commission (UK), *Principles of Good Regulation*, 2008.

⁷⁹ The independence of the Commission primarily stems from the Crown Entities Act 2004, which in s 7 acknowledges the Commission as an independent entity (paragraph 89 above). There is also operational accountability through the Crown Entities Act and the Output Agreement with relevant Ministers for the efficient and effective delivery of the Commission's functions. Accountability mechanisms relating to the Commission's decisions are also provided through the appeal provisions in the Act itself (i.e., refer to Chapter 11 of this paper), as well as through judicial review. The principles of independence and accountability are not discussed further in this paper.

⁸⁰ Section 3(1) of the Act states that in this Act, competition means workable or effective competition.

⁸¹ Ramsey-Boiteux pricing is also sometimes referred to simply as "Ramsey" pricing. The reference to Ramsey-Boiteux pricing instead of Ramsey pricing in the context of utility regulation, acknowledges that

- 163 In competitive markets, the greater the level of competition, the more observed prices will tend to approximate such allocatively efficient prices. By being cognisant of the price responsiveness of its customers, and the service quality that they desire, competitive firms minimise the likelihood that their customers would either switch to one of its competitors or consume a substitute service.⁸² A workably competitive benchmark therefore implies that constrained, ‘second best’ allocative efficiency is the desired goal for regulators.
- 164 Such an approach should also be consistent with the promotion of productive or dynamic efficiency. Persistent excess profits are not consistent with promoting efficiency and sharing the benefits of efficiency gains with consumers. On the other hand, persistent losses will discourage new investment and affect a firm’s incentive to provide the services at the requisite quality, thereby harming the interests of consumers in the long term.
- 165 However, just because a firm is earning more than a normal return in the short term does not necessarily mean that those higher returns are all so-called “functionless” monopoly rents (i.e., profits that are not associated with promoting efficiency). Greater profit levels may actually reflect temporarily superior performance in terms of productive and/or dynamic efficiency improvements. However, in a workably competitive market such profits would be only temporary, because other firms will improve performance and curtail the competitive advantage enjoyed by market leaders. Regulators therefore do not tend to guarantee any particular rate of return—rather they provide regulated businesses with a reasonable opportunity to recover their costs, including their cost of capital.⁸³
- 166 It can be difficult to separate out higher profits due to superior performance from higher profits due to functionless monopoly rents. Nevertheless, it is clear that if the excess returns simply arise due to circumstances beyond the firm’s control, then this is likely to result in ‘windfall profits’ (or ‘windfall gains’) and a pure transfer of wealth from consumers to suppliers (paragraph 59 above). Windfall profits (or equivalent losses) arising from factors outside the control of a regulated business, should therefore be addressed by regulators where they arise, if this is possible, as they do not benefit consumers in the long-term and are inconsistent with the promotion of efficiency.
- 167 A contrasting issue is that inferior performance and higher costs may reduce the reported measure of a firm’s returns to a level that is apparently consistent with their WACC, thereby disguising inefficiencies. As the Court of Appeal has recently observed, “the earning of ‘normal’ rates of return does not preclude the possibility of

Ramsey established a general rule (i.e., the “Ramsey Rule”) for taxation in F.P. Ramsey, A Contribution to the Theory of Taxation, *Economic Journal* 37, 1927, 47-61, whereas Boiteux independently derived the same result in the context of cost recovery for a public utility in M. Boiteux, On the Management of Public Monopolies Subject to Budgetary Constraints, *Journal of Economic Theory* 3, 1971, 219-40 (which is translated from the original article in French from 1956).

⁸² Baumol and Sidak, *supra* n 6, p. 37.

⁸³ For example: G. Shuttleworth, *EREG Paper on Tariff Principles: A Comment*, Prepared for Gas Transport Services, NERA, London, 23 January 2008, pp 4 and 7.

supra-competitive pricing”, as it “overlooks the possibility that existing prices are recovering inefficiently incurred costs”.⁸⁴

- 168 In summary, as is noted above (paragraph 40), workable competition forces market participants to act in ways that are efficient, for a given level of service quality, while ensuring that efficiency gains are shared with consumers over time. In addition, firms are limited in their ability to earn excessive profits. Similarly, the regulatory instruments provided for in Part 4 of the Act can promote improvements across the three dimensions of efficiency and promote the associated objectives specified in subsections (a)-(d) of the section 52A purpose statement. In turn, this will lead to outcomes that are consistent with outcomes produced in competitive markets and, ultimately, will promote the long-term benefit of consumers. However, the Commission is mindful that economic efficiency should be promoted within the constraints that arise from the relevant markets having natural monopoly characteristics.

4.3.3 Promote Allocative Efficiency within the Constraints Imposed by Natural Monopoly

- 169 Section 52A(1)(b) of the Act refers to incentives for suppliers of regulated services to improve ‘efficiency’ and provide services at a quality that reflects consumer demands. The Commission considers that the reference to efficiency in section 52A(1)(b) encompasses all three dimensions of economic efficiency.⁸⁵
- 170 In respect of allocative efficiency, a key feature of competitive markets is that they allocate resources to their most valuable uses within the economy (i.e., their value over and above their opportunity cost). This implies that “pricing efficiency” is a desirable goal of regulation, as this is the mechanism that conveys the relative value of various goods and services throughout society. Prices that are closer to the long-run marginal costs of supplying services at the requisite quality will increase allocative efficiency, overall welfare and the long-term benefits to consumers.
- 171 However, as is discussed above, marginal cost pricing is unlikely to yield sufficient revenue to recover the efficiently incurred costs of production. Where such tensions exist, the Commission has in the course of regulatory proceedings consistently given weight to dynamic efficiency considerations when promoting the long-term benefit of end-users. Thus, allocative efficiency is desirable insofar as it is achieved within the constraint that the firm is afforded the opportunity to earn a normal rate of return.
- 172 A problematic task for regulators lies in assessing whether regulated firms are earning a normal rate of return over time. Apart from the measurement issues associated with superior or inferior performance (paragraph 166 above), there are other difficulties with measuring economic returns, because economic returns differ from publicly available assessments of accounting profitability. In particular, for regulated utilities the analysis will almost always be over a time period shorter than the economic lifetimes of the

⁸⁴ *New Zealand Bus Ltd & Infratil Ltd v Commerce Commission* [2007] NZCA 502 paragraphs [241] and [242].

⁸⁵ The Commission notes that, in undertaking a Part 4 inquiry (in accordance with the provisions in subpart 2), the Commission must, as far as practicable, quantify material effects on allocative, productive and dynamic efficiency (i.e., in s 52I(3)(a)).

assets involved; and will have to primarily rely on accounting-based rather than economic-based data (particularly for asset values).⁸⁶

- 173 Simply because prices result in regulated revenues that provide a normal return over time does not mean that they will minimise the allocative inefficiencies caused by departing from marginal cost-based prices. Allocative efficiency is more dependent on individual price levels and structure than on overall revenue—consumers respond to the prices that they face, rather than to the revenues that firms make. Similarly, service quality is more important to consumers at an individual service level than on a whole-of-business basis. Once regulated revenues are set at a level that is expected to provide a normal return, allocative efficiency will be promoted if, within that overall limitation, businesses set efficient relative prices for different consumer groups, individual services or price components that are also reflective of the service quality that consumers demand. Consequently, allocative efficiency is particularly relevant to the pricing methodologies that firms apply when setting their charges for specific regulated services.
- 174 Ramsey pricing provides a useful source of qualitative guidance to regulators when attempting to assess whether natural monopolies are recovering the costs of production in an efficient, ‘second best’ manner through the methodologies that they use to set prices.⁸⁷ Such an approach ensures that, as far as practicable, the consumers that bear costs are the same as those that cause them, or—where costs cannot be directly attributed—they are paid for by those that are most willing to do so.
- 175 The Commission therefore intends applying the principle of allocative efficiency within the constraint that the firm has the opportunity to recover its efficiently incurred costs, including the cost of capital. This ‘constrained’ promotion of allocative efficiency will:
- promote incentives for regulated suppliers to improve allocative efficiency and provide services at a quality that reflects consumer demands, consistent with section 52A(1)(b);
 - share the benefits of efficiency gains with consumers in the supply of the regulated services, including through lower prices, consistent with section 52A(1)(c); and
 - limit the ability of regulated firms to earn excessive profits, consistent with section 52A(1)(d).

⁸⁶ A discussion of the differences between accounting measures of profitability, such as the accounting rate of profit (ARP), and economic measures of return, such as the internal rate of return (IRR), and the way in which the two can be reconciled, is provided in Chapter 3 and Appendix F of: Commerce Commission, *Authorisation for the Control of Supply of Natural Gas Distribution Services by Powerco Ltd and Vector Ltd, Decisions Paper*, 30 October 2008, paragraphs 174-214 and F.1-F.23.

⁸⁷ In other words, Ramsey pricing principles are generally not applied as a means of determining precise and definitive prescriptions for pricing. This is because Ramsey-Boiteux prices are difficult to implement in practice. The most obvious issue that can be identified with Ramsey-Boiteux prices is that it can be difficult to determine the base marginal cost for a particular service and, even where no complicating factors arise, it is a difficult empirical question to measure elasticities, and there are a number of other complexities that are usually present (e.g., Baumol and Sidak, *supra* n 6, pp. 36-37).

4.3.4 Promote Realistic and Achievable Gains in Productive Efficiency

- 176 In respect of productive efficiency, suppliers of services with market power are arguably not subject to the same pressures to reduce production costs as firms in a more competitive market.⁸⁸ Economic theory also suggests that when such firms are subject to regulation, they may have greater incentives to overstate costs or overcapitalise in production.⁸⁹ Well designed regulatory regimes should instead encourage regulated businesses to move towards a more efficient use of inputs, thereby resulting in superior performance.
- 177 In order to do so, regulators often estimate in advance (i.e., on an ex ante basis) the potential scale of improvements that firms are capable of making during the forthcoming regulatory period, and provide them with the incentives to achieve them.
- 178 Rather than target particular expenditure categories, the Commission considers it appropriate to forecast realistically achievable efficiency gains individually (e.g., for operating expenditure), aggregate them together, and then allow the business to decide how best to achieve these gains in a manner that meets consumer demands at the appropriate level of quality. This approach is based on the assumption that businesses are better placed to make appropriate trade-offs between the different types of costs they incur in providing regulated services.
- 179 The ability of the Commission to set cost allowances that are realistic and achievable, whether on an aggregate or disaggregated basis, will depend on the nature of the regulatory instrument being applied. For instance, the incentives provided by information disclosure are of a different character to those provided by, say, individual price-quality regulation. However, firms regulated under information disclosure will likely still have their behaviour monitored to ensure that they are taking action to minimise their costs in an efficient manner.
- 180 Additional incentives for productive efficiency gains over and above any such cost allowances can also be promoted—again depending on the type of regulatory instrument and the specific design of that instrument. For instance, where the regulatory instrument involves a controlled CPI-X price path set in advance, regulated businesses can earn higher-than-expected profits in the short term, as a result of performance superior to that implied by their price path. Businesses are permitted to

⁸⁸ When an industry has a monopoly structure, Leibenstein outlined that a firm will not be subject to the same pressures to decrease costs as in a competitive industry. This type of inefficiency due to such things as lax management, outdated production methods and inadequate cost control was referred to as “X-Efficiency”. See H. Leibenstein, “Allocative vs. “X-Efficiency””, *American Economic Review* 56, 1966, 392-415.

⁸⁹ H. Averch and L.L. Johnson, “Behaviour of the Firm under Regulatory Constraint”, *American Economic Review* 52, 1962, 1053-69, suggested that a monopoly subject to rate-of-return (RoR) regulation had incentives to over-capitalise in its supply of services. That is, for any given fair rate of return, by increasing the value of its capital asset base, it was shown that a RoR-regulated firm could increase the net operating profit that it was allowed to earn in each year. T.W. Kennedy, “The Regulated Firm with a Fixed Proportion Production Function”, *American Economic Review* 67, 1977, 968-71, also showed that there may be an incentive for the RoR-regulated monopoly to engage in so-called ‘gold plating’ of its network. Gold plating involves employing additional capital that is completely unproductive or even decreases the level of output, but allows the regulated firm to increase its overall level of profit.

retain a proportion of productive efficiency gains that are made for a certain period in order to provide them with the incentive to make such gains in the first place.

- 181 Under a CPI-X price path, efficiency gains are shared with consumers during the regulatory control period in two ways. The first way that they are shared with consumers is during the regulatory control period, because regulated revenues are based on forecasts of efficient operational (and capital) expenditure (e.g., under a building blocks approach), or on expected productivity gains (e.g., under an index-based approach). Under either approach this impacts the appropriate selection of the X-factor. A second way in which efficiency gains can be shared with consumers is by making initial price adjustments (i.e., 'P₀ adjustments') at the beginning of each regulatory control period (paragraph 69 above). P₀ adjustments share the benefits of efficiency gains with consumers over the medium term.
- 182 The Commission intends applying the principle of productive efficiency by promoting realistically achievable cost minimisation for the requisite level of service quality, consistent with section 52A(1)(b). Over time, the benefits of productive efficiency gains will be shared with consumers through prices lower than they otherwise would be in the absence of regulation, consistent with section 52A(1)(c).

4.3.5 Promote Dynamic Efficiency by Incentivising Investment

- 183 The concept of dynamic efficiency tends to be the least well-defined type of efficiency. Though it is arguably the most important form of efficiency in practice, as it relates to ongoing investment and innovation in respect of the supply of services to consumers over the medium-to-long term. Consequently, dynamic efficiency relates to the objectives in section 52A(1)(a) and (b), and is particularly relevant to promoting the long-term benefit of consumers.
- 184 The Commission notes that, in the context of performing its regulatory functions prior to the introduction of the CAA, it considered the promotion of dynamic efficiency to already be implicit in section 57E(b) (paragraph 152 above) and in section 70A(c) of the Act (paragraph 134 above), as well as in the 2006 GPS (paragraphs 96-98 above). This is because the Commission considers that in each case the reference to efficiency relates to all three efficiency dimensions.
- 185 The Commission considers that what matters most for dynamic efficiency is how new investment will be treated. If the regulated firm does not expect to make at least a normal return on its efficient incremental investments going forward, it would be unable to maintain the quality of its services and would have no incentive to invest further in order to meet the growth in consumer demand. Such an outcome would not promote the long-term benefit of consumers.
- 186 As well as expecting to receive a normal return on its future efficient investments, a regulated firm should also be able to make a normal return on the efficient investments it has already made. This ensures that the firm will have incentives not just to remain in the market, but to make further efficient investments in replacement, upgraded and new infrastructure as well. Doing so, as is described in the next section (paragraphs 190-194), is also consistent with the concept of real financial capital maintenance and the NPV=0 approach—an approach explicitly or implicitly applied by a number of regulators of energy network companies in jurisdictions overseas.

- 187 In most markets, competitive forces put pressure on firms to undertake investments at the socially optimal time. The Commission considers that effective regulation can play an analogous role to workable competition in this regard. As with productive efficiency, firms that are subject to a CPI-X price path set in advance can have incentives to make more efficient investments (or to undertake more efficient trade-offs between capital and operating expenditure) than those implied by that price path. However, if actual capital expenditure over the control period falls below the amounts already provided for under the regulated price path, such differences ought to be due to efficiency gains, rather than to the regulated business reducing service quantity or quality below levels that consumers demand.
- 188 Consequently, it is also important that, where practicable, businesses that supply services regulated under Part 4 are accountable for making those investments where they are provided for in regulated revenues and prices, consistent with section 8(c) of the 2006 GPS (paragraph 98 above). This ensures that the interests of consumers are protected against ‘gaming’ by the business when regulated revenues are set based on forecasts of efficient capital expenditures, or against the business delaying efficient investments simply for short-term gain.
- 189 The Commission considers that applying the principle of dynamic efficiency will promote the long-term benefit of consumers, because doing so will:
- incentivise innovation and investment, consistent with section 52A(1)(a) and (b); while
 - limit the ability of regulated businesses to make excessive profits, consistent with section 52A(1)(d).

4.3.6 NPV=0 and Financial Capital Maintenance (FCM)

- 190 Over the lifetime of an asset, the returns for efficient firms in workably competitive markets, discounted by an appropriate WACC, would be expected to be approximately equal to the initial investment amount. Since this equates to saying that the expected Net Present Value (NPV) of an efficient investment should be zero, it gives rise to what is known as the ‘NPV equals zero’ rule (or approach). Consistent with the importance of promoting ongoing incentives for productive and dynamic efficiency, this approach generally applies to the revenues that regulated businesses should expect to earn *ex ante*, and is particularly important where large capital intensive sunk investments are being considered.
- 191 Because satisfying NPV=0 over the lifetime of an investment acts to preserve the firm’s ‘financial capital’ (in real terms), such an outcome is often referred to in accounting terms as FCM.⁹⁰ FCM is a lifetime concept, relevant not only to future investments, but

⁹⁰ FCM is one of a number of “capital maintenance” concepts applied by the accounting profession, and originally stems from a historic cost-based approach to income measurement and the preparation of financial statements (for example, L. Revsine, A Capital Maintenance Approach to Income Measurement, *The Accounting Review*, Vol. 56, No. 2, pp. 383-389, 1981). The key alternative concept to FCM is that of operating (or physical) capability maintenance (OCM). Under OCM the depreciation provision is a mechanism for setting aside funds for the eventual replacement of the assets currently employed when they expire. However, an OCM-based approach can expose regulated businesses to the risk associated with unpredictable changes in capital costs relative to prices over time, meaning that they do not recover

also to investments that have already been made in the past. Also, FCM assumes that capital will be maintained in *real* (not nominal) terms. In a regulatory context, this is achieved by ensuring that firms are compensated for the impact of economy-wide inflation. This is comparable to the outcomes of competitive markets:

*No commercial competitors would come into an industry if they did not expect to be able to recover the decline in real values of their assets, as well as earn a normal profit (the opportunity cost of capital). They would measure their return on investment after recovery of funds sufficient to maintain the real value of the financial capital they had invested.*⁹¹

*In defining the costs of depreciation and allowed return, regulators should adopt rules that meet the accounting principle of “Financial Capital Maintenance” (FCM), i.e., rules which allow investors to maintain the real value of their capital. This principle is a necessary condition for total cost recovery—meaning for efficient investment and for the prevention of monopoly profits. ... FCM therefore provides the standard by which investors effectively measure whether the regulatory regime is allowing them to recover their costs including a rate of return comparable with that offered by other companies and sectors.*⁹²

- 192 NPV=0 and FCM are closely aligned to the conditions required for dynamically efficient investment because funds that are efficiently invested can be recovered over time through regulatory depreciation allowances (section 5.5.6) and the business earns a risk-adjusted rate of return on the depreciated value of those investments in the meantime. Asset replacement expenditure is thus recovered through future revenue streams (i.e., the return on and of that investment after the replacement investment has been made).
- 193 Generally speaking, a strict NPV=0 approach cannot usually be applied to regulated businesses in practice, as any analysis used to undertake inquiries, monitor profitability, or set controlled prices, will typically be conducted part way through the lifetimes of assets utilised in supplying regulated services. Rather, NPV=0 and FCM are useful concepts in deciding how to deal with particular issues in a consistent way and in a manner that moves the outcomes closer to, rather than further away from, normal returns over time.
- 194 In the past the Commission has applied the NPV=0 and/or FCM concepts in the context of a number of different regulatory instruments—for instance, information disclosure under Part 4A (e.g., paragraph 116 above) and price control under Part 5 (paragraph 134 above). In addition, the Commission has applied the NPV=0 approach for the two Part 4 inquiries undertaken prior to the introduction of the CAA (sections 3.4.4 and 3.5.2 above). The Commission considers that it is likely that NPV=0 and FCM will continue to be important concepts in performing its regulatory functions under Part 4 in a manner consistent with the purpose in section 52A. However, as is discussed further in chapter 5 (paragraphs 317-323), the extent to which the Commission can apply the

their past efficient investments in real terms. On the other hand, an OCM approach can equally result in windfall profits (paragraph 166)—in other words, profits that are not earned as a result of superior performance, but as a result of circumstances outside the regulated firm’s control (for example: ACCC, *Accounting Separation Regime*, July 2003, p. 22).

⁹¹ HM Treasury Advisory Group, *Accounting for Economic Costs and Changing Prices*, A Report to HM Treasury by an Advisory Group, Vol. 1, HMSO, London, 1986, paragraph 19.

⁹² Shuttleworth, *supra* n 83, pp. ii and 13-15.

NPV=0 approach in practice will likely depend on the nature of the specific regulatory instruments being applied.

- (3). Do you agree with the regulatory framework principles proposed above? If not, please explain.
- (4). Are there other economic or regulatory framework principles that the Commission might apply in performing its functions under Part 4 of the Act? If so, please discuss.

4.4 IMPLEMENTATION PRINCIPLES

4.4.1 Consistency

195 The criterion of consistency stems from two considerations. First, there is the need to reduce uncertainty. This requires a consistent promotion of the purpose statement. Equally though, the need for consistency stems from principles of administrative law, which necessitate that regulatory principles be constructed and applied in a consistent manner in similar circumstances irrespective of the parties affected.⁹³ The Commission considers that, where possible, this will be achieved by ensuring that the principles proposed above are consistently applied to every decision made during the process of regulating.⁹⁴ In some cases, such as in respect of input methodology determinations (i.e., under section 52T(2)(c), which is discussed in chapter 5), the Commission is required, as far as is reasonably practicable, to take a consistent approach. Of course, the ability for a consistent approach to be translated into similar treatment of different parties will be limited by differences between the regulatory instruments, differences between types of services, and differences between the regulated businesses, as well as a number of real-world constraints, such as the availability of supporting information or data.

4.4.2 Flexibility

196 A key policy objective of introducing the provisions in the CAA is to improve certainty and predictability for businesses, thereby promoting efficient infrastructure investment.⁹⁵ However, as far as is practicable, regulatory decisions should take into account both prevailing market conditions and those that can reasonably be expected in the future, including any technological progress. Consequently, a prescriptive approach that minimises uncertainty under current conditions—in other words, ‘regulatory commitment’—must be balanced against the need for regulation to adapt and remain applicable as industry and external factors evolve over time.⁹⁶ In order to do so, while

⁹³ In particular, to the greatest extent possible, regulation should ensure that parties in similar economic situations are treated in a similar way. This principle is commonly known as horizontal equity.

⁹⁴ Indeed, the Act includes specific provisions to ensure that input methodologies are consistent with one another and across sectors.

⁹⁵ Hon. Lianne Dalziel & Hon. David Parker, *Bill gives better incentives for infrastructure investment*, Media Statement, Ministers of Commerce and Energy, Wellington, 13 March 2008.

⁹⁶ Regulatory commitment relates to the extent to which both regulators and regulated parties can and do commit to actions under the regulatory regime, particularly over timeframes longer than a single regulatory control period.

still promoting certainty and predictability, the Commission proposes that, where possible, any changes planned to the regulatory regimes implemented under Part 4 of the Act will be signalled and explained in advance to minimise uncertainty.

4.4.3 Cost-Effectiveness

197 A less burdensome method to achieve the regulatory purpose is always preferable to a more onerous one, all other things being equal. Consideration should be given to ensuring that the necessary technical expertise is drawn on to address relevant issues and consider alternative options, and the most cost-effective way of delivering an effective solution. In addition, the process should be cost-effective in the sense that matters arising should be dealt with expediently and the compliance burden imposed on businesses should be proportional to the expected regulatory benefit. This is because, among other things, the compliance and administration costs associated with implementing regulation can have a bearing on productive efficiency.

- (5). Do you agree with the implementation principles proposed above? If not, please explain.
- (6). Are there other implementation principles that the Commission might apply in performing its functions under Part 4 of the Act? If so, please discuss.

CHAPTER 5: INPUT METHODOLOGIES

5.1 INTRODUCTION

198 The Act requires the Commission to determine upfront regulatory methodologies, rules, processes, requirements and evaluation criteria (collectively and/or individually referred to as “input methodologies”) that will apply (to varying degrees) to the inquiries and various regulatory instruments provided for in Part 4 of the Act.

199 This chapter sets out the Commission’s preliminary views on:

- a) the purpose and scope of input methodologies, including their role under Part 4 of the Act (paragraphs 200-220);
- b) the process for determining input methodologies (paragraphs 221-237);
- c) how the key high-level methodologies relate to the building blocks approach to incentive regulation (paragraphs 238-256);
- d) the types of issues relevant to selecting methodologies for asset valuation, depreciation and revaluations, cost of capital, tax, cost allocation and pricing methodologies (paragraphs 257-316); and
- e) the relationship between input methodologies and the regulatory instruments contained in the Act (paragraphs 317-325).

5.2 PURPOSE AND SCOPE OF INPUT METHODOLOGIES

5.2.1 Purpose and Content of Input Methodologies

200 Part 4 of the Act includes subpart 3 which relates to input methodologies. Section 52R provides that the purpose of subpart 3 is:

to promote certainty for suppliers and consumers in relation to the rules, requirements, and processes applying to the regulation, or proposed regulation, of goods or services under this Part.

201 Consistent with this purpose, the definition of “input methodology” in section 52C is broad. It defines an input methodology as follows:

input methodology means a description of any methodology, process, rule, or matter that includes any of the matters listed in section 52T and that is published by the Commission under section 52W; and, in relation to particular goods or services, means any input methodology, or all input methodologies, that relate to the supply, or to suppliers, of those goods or services.

202 This definition is elaborated on in section 52T which provides that:

- (1) *The input methodologies relating to particular goods or services must include, to the extent applicable to the type of regulation under consideration:*
 - (a) *methodologies for evaluating or determining the following matters in respect of the supply of the goods or services:*
 - (i) *cost of capital:*
 - (ii) *valuation of assets, including depreciation, and treatment of revaluations:*
 - (iii) *allocation of common costs, including between activities, businesses, consumer classes, and geographic areas:*
 - (iv) *treatment of taxation; and*

- (b) *pricing methodologies; and*
 - (c) *regulatory processes and rules, such as:*
 - (i) *the specification and definition of prices, including identifying any costs that can be passed through to prices (which may not include the legal costs of any appeals against input methodology determinations under this Part or of any appeals under section 91 or section 97); and*
 - (ii) *identifying circumstances in which price-quality paths may be reconsidered within a regulatory period; and*
 - (d) *matters relating to proposals by a regulated supplier for a customised price-quality path, including:*
 - (i) *requirements that must be met by the regulated supplier, including the scope and specificity of information required, the extent of independent verification and audit, and the extent of consultation and agreement with consumers; and*
 - (ii) *the criteria that the Commission will use to evaluate any proposal.*
- (2) *Every input methodology must, as far as is reasonably practicable,—*
- (a) *set out the matters listed in subsection (1) in sufficient detail so that each affected supplier is reasonably able to estimate the material effects of the methodology on the supplier; and*
 - (b) *set out how the Commission intends to apply the input methodology to particular types of goods or services; and*
 - (c) *be consistent with the other input methodologies that relate to the same type of goods or services.*
- (3) *Any methodologies referred to in subsection (1)(a)(iii) must not unduly deter investment by a supplier of regulated goods or services in the provision of other goods or services.*

203 Both section 52C and section 52T(1) provide that input methodologies must *include* the matters set out in section 52T(1). This means that the list in section 52T(1) is not exhaustive. The Commission may specify input methodologies on other matters.

204 For example, input methodologies will likely need to cover cost allocation in a general sense, and not just in respect of the allocation of common costs (as referred to in section 52T(1)(a)(iii)). Also, requirements and evaluation criteria for capital and operating expenditure forecasts to be included in customised price path proposals are not specifically cited in section 52T. However, specifying such requirements and criteria will clearly be an important part of these determinations.

5.2.2 Form of Input Methodologies

205 The Act does not specify that all of the matters set out in section 52T must be contained in one input methodology determination. On the contrary:

- the requirement in section 52T(2)(c) that “every input methodology must...be consistent with the other input methodologies that relate to the same type of goods or services” supports the view that the Commission may set a number of methodologies for a regulated sector; and
- the reference to “any input methodology, or all input methodologies” in the definition of input methodology in section 52C, makes it clear that the Commission could set one input methodology or several input methodologies for a regulated sector, provided the Commission covers all the matters set out in section 52T(1).

206 This is consistent with how the legislation treats section 52P determinations (which are discussed in the next chapter). Section 52P(4) provides that it is not necessary for a single determination to address all matters relating to particular regulated goods or services, or to a supplier of regulated goods or services.

5.2.3 *How Input Methodologies Apply*

207 Section 52S specifies that published input methodologies apply as follows:

Every relevant input methodology relating to the supply of particular goods or services that is published under section 52W must be applied:

- (a) *if the goods or services are regulated, by every regulated supplier of the goods or services in accordance with the relevant section 52P determination; and*
- (b) *in all cases, by every person entitled or required under this Act to recommend, decide, or determine:*
 - (i) *whether or how regulation under this Part should apply to the goods or services; or*
 - (ii) *the prices or quality standards applying to the goods or services.*

208 Section 52U(3) provides that:

The Commission must determine input methodologies for any goods or services that are the subject of an inquiry as soon as practicable after the Commission is satisfied that the parts of the test for the regulation of goods or services set out in paragraphs (a) and (b) of section 52G(1) are satisfied.

209 The input methodology determinations published in accordance with section 52W of the Act will contain the relevant methodologies, processes, rules and matters applicable to the particular sector, according to the type of regulation. Initially, input methodology determinations are only required to be made for those services already subject to regulation under Part 4—namely specified electricity lines, gas pipeline and airport services.

210 Section 52C provides that input methodologies relate to “the supply, or to suppliers, of [particular] goods or services.” This implies that not all input methodologies must apply to all regulated suppliers. Instead, they will apply on a sectoral basis to the extent relevant. For example, suppliers of airport services should be subject to the same input methodologies as other suppliers of airport services; suppliers of gas pipeline services should be subject to the same input methodologies as other suppliers of gas pipeline services.

211 Not all input methodologies will necessarily apply to all sectors. The input methodologies that apply to a particular sector will depend on the type or types of regulation that the sector is subject to. For example, given that only information disclosure regulation currently applies to airport services (refer to figure 1 and chapter 10), the input methodologies that apply to those services may need to be different from those that apply to electricity distribution or gas pipeline services (where some services are also subject to price-quality regulation). Consequently, matters related to customised price-quality path proposals will not be relevant to regulated airport services.

212 Section 52T(1) provides that input methodologies must include certain matters “to the extent applicable to the type of regulation.” This suggests that not all input methodologies will apply to all types of regulation. In other words, some may apply to

information disclosure regulation, others may apply to default/customised price-quality regulation. For example, the Commission notes that suppliers who are subject only to information disclosure regulation do not have to apply pricing methodologies or methodologies for evaluating or determining the cost of capital. However, the Commission may still use these methodologies to monitor and analyse information, and may require suppliers to disclose information about the pricing and cost of capital methodologies that they do in fact use (section 53F).

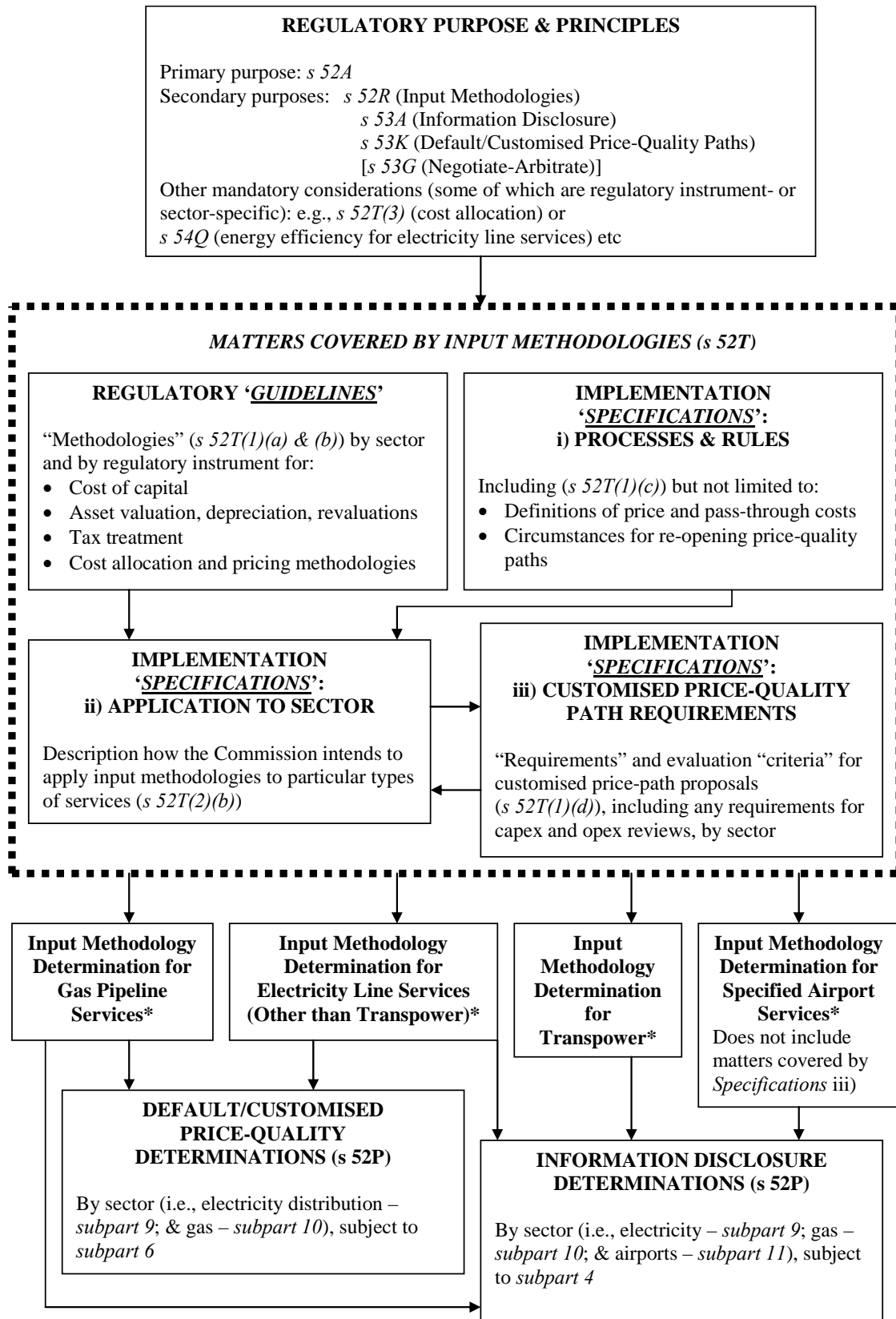
- 213 Given the different regulatory provisions relating to Transpower (discussed in chapter 8), and given that potentially a distinct regulatory instrument may apply to Transpower in future (i.e., individual price-quality regulation), the Commission considers that it may need to set a separate input methodology determination (or determinations) to apply specifically to services supplied by Transpower. Also, although different provisions do not apply to gas transmission and distribution services, there may be valid reasons for making distinct determinations in respect of such services.

5.2.4 Role of Input Methodologies in Part 4

Categorising matters covered by input methodologies

- 214 Given the wide range of matters to which input methodologies may relate, and the discretion of the Commission to determine the form the input methodologies may take, the Commission considers it helpful to categorise the matters covered by input methodologies as set out in section 52T of the Act. In the Commission's view, this categorisation will be of particular use while consultation on input methodologies is being undertaken in accordance with section 52V, prior to input methodology determinations being published in accordance with section 52W.
- 215 Because the "methodologies" referred to in section 52T(1)(a) and (b) only form a part of what can comprise an "*input methodology*", the Commission considers that, the term "Guidelines" provides a useful way of distinguishing between the *high-level* approaches to cost of capital, asset valuations, tax, and so on, and the implementation details of those approaches, which can be given the term "Specifications". Consequently:
- *Regulatory 'Guidelines'*: include methodologies by regulatory instrument and/or by type of services (i.e., by sector) for cost of capital, asset valuation, depreciation and revaluations, tax treatment, as well as cost allocation and pricing methodologies (i.e., as referred to in section 52T(1)(a) and (b)); or
 - *Implementation 'Specifications'*: include:
 - i) "regulatory processes and rules" (i.e., as referred to in section 52T(1)(c));
 - ii) how the Commission intends to apply the relevant input methodologies to each sector (i.e., as referred to in section 52T(2)(b)), which will initially encompass electricity lines, gas pipelines and certain airport services; and
 - iii) sector-specific "requirements" and evaluation "criteria" relating to customised price-quality path proposals from regulated suppliers (i.e., as referred to in section 52T(1)(d)), and which will initially only be applicable to electricity distribution services and gas pipeline services.

Figure 2 Role of Input Methodologies in Part 4



* Input methodology determinations developed and published in accordance with s 52V and s 52W, by 30 June 2010 (s 52U)

216 Figure 2 on the previous page shows this categorisation of the various matters relating to input methodologies as part of the wider Part 4 regulatory regime. Matters relating to input methodologies can include all those matters within the thick dotted line.

Input methodology determinations

217 Input methodology determinations for services subject to default/customised price-quality regulation would include the relevant high-level and detailed implementation matters covered by both the Regulatory Guidelines and the Implementation Specifications. However, any input methodology determination (or determinations) relating to specified airport services will not include the matters referred in the box labelled Implementation Specifications iii.

Input methodologies and regulatory instruments

218 Figure 2 also shows the relationship between input methodology determinations, and the section 52P determinations specifying how the relevant forms of regulation apply to suppliers of regulated services. The section 52P determinations will specify the input methodologies that apply.

219 As is discussed in chapters 7 and 9, there is no statutory requirement for input methodologies to apply to the initial default price-quality paths for electricity distribution services (i.e., section 54K(2)&(3)) or for gas pipeline services (i.e., section 55F(3)&(4)). Nonetheless, consistency with relevant input methodologies may be important, to the extent practicable given the different analytical approaches that Part 4 contemplates being used to set default and customised price-quality paths (section 6.6 below).

220 Given that, at this stage, neither negotiate/arbitrate regulation (i.e., subpart 5 of Part 4) nor individual price-quality regulation (i.e., subpart 7) applies to any services, these regulatory instruments are not shown in Figure 2. The application of input methodologies to regulatory instruments is discussed further below (sections 5.4 and 5.9).

- (7). Do you have any views on the potential form and the extent of the role of input methodologies as applied to the regulatory instruments under Part 4?
- (8). What matters should be covered by the “processes and rules” referred to in section 52T(1)(c)?

5.3 PROCESS FOR DETERMINING INPUT METHODOLOGIES

5.3.1 Statutory Process and Timeframes

221 The process for determining input methodologies is contained in section 52V:

- (1) *When the Commission begins work on an input methodology, it must publish a notice of intention to do so that:*
 - (a) *outlines the process that will be followed; and*
 - (b) *sets out the proposed time frames.*
- (2) *During the course of its work on an input methodology, the Commission:*
 - (a) *must publish a draft methodology; and*
 - (b) *must give interested persons a reasonable opportunity to give their views on that draft methodology; and*
 - (c) *may hold 1 or more conferences; and*
 - (d) *must have regard to any views received from interested persons within any time frames set.*
- (3) *Despite subsections (1) and (2), any work done or action taken (including any consultation) by the Commission on input methodologies before the commencement of this section may be treated by the Commission and any person consulted as work done or action taken under this section.*
- (4) *The Commission must consult with interested parties before deciding to treat earlier work or action as work or action done under this section.*

222 The Commission must determine input methodologies in respect of regulated electricity lines, gas pipelines and airport services no later than 30 June 2010, although there is provision for a six month extension. Section 52U provides that:

- (1) *The Commission must determine input methodologies for the goods or services regulated under subparts 9 to 11 no later than 30 June 2010.*
- (2) *The Minister may, on the written request of the Commission, extend the deadline referred to in subsection (1) once, by a period of up to 6 months, in which case notice of the extension must be given in the Gazette.*
- (3) *The Commission must determine input methodologies for any goods or services that are the subject of an inquiry as soon as practicable after the Commission is satisfied that the parts of the test for the regulation of goods or services set out in paragraphs (a) and (b) of section 52G(1) are satisfied.*

5.3.2 Commission's Proposed Process for Determining Input Methodologies

223 In accordance with section 52V(1) on 11 December 2008 the Commission published a notice of intention (Intention Notice) advising that it had begun work on input methodologies. The Intention Notice outlined the process that will be followed when developing input methodologies and the proposed timeframes.

Table 2 Process Outlined in Intention Notice

	Process	Indicative Timeframe
1	This Discussion Paper published for consultation.	December 2008
2	Guidelines Discussion Paper published for consultation. This paper will discuss the methodologies for evaluating or determining the cost of capital, asset valuation, allocation of common costs, the treatment of taxation, pricing methodologies and cost of capital, as set out in section 52T(a) and (b) of the Act.	Q2 2009
3	Cross submissions invited in response to the submissions received on the Discussion Paper and any matters arising at the conference.	Directly after submissions
4	Conference on the Regulatory Framework and Principles Paper and Discussion Paper.	Q3 2009
5	Draft input methodologies for each regulated sector published for consultation.	Q4 2009 / Q1 2010
6	Determination of input methodologies for each regulated sector, in accordance with section 52W of the Act.	By 30 June 2010

224 This paper expands on the process outlined in the Intention Notice and provides greater detail on each of the main steps involved. The Commission currently envisages that the input methodologies will be determined in three phases, with consultation with interested parties in each phase. The detail and form of the input methodologies will be further developed and elaborated upon at each phase.

225 The three phases are as follows:

Phase I: Development of Guidelines.

Phase II: Draft Determinations.

Phase III: Determinations.

226 These phases are discussed in further detail below.

Phase I

227 In Phase I of the project, the Commission will develop and consult on the Commission's preliminary view of how the Guidelines would be applied for each of the regulated sectors. These Draft Guidelines will cover matters relating to the methodologies for cost of capital, asset valuation, depreciation and revaluations, treatment of tax, cost allocation and pricing methodologies for each sector.

228 Consultation with interested parties will be undertaken through the release of the Guidelines Discussion Paper, inviting written submissions from interested parties, inviting cross-submissions, before holding a public conference on this Discussion Paper and the Guidelines Discussion Paper.

Phase II

- 229 In Phase II of the project, the Commission will consider issues raised during the consultation on the Guidelines Discussion Paper and consult on its Draft Determinations for Input Methodologies (“Draft Determinations”) for each of the regulated sectors. These Draft Determinations Papers will set out the Commission’s preliminary view on both the Guidelines and the Specifications.
- 230 Consultation with interested parties will be undertaken through the release of the sector-specific Draft Determinations, inviting written submissions from interested parties, and inviting cross-submissions following the publication of all submissions on the Commission’s website. While a public conference will not be held during this phase, workshops with industry parties in relation to developing the detailed Specifications may be held on specific matters.

Phase III

- 231 In Phase III of the project, the Commission will revise its Draft Determinations to take account of issues raised in consultation, consult on the technical drafting of the Determinations for Input Methodologies (“Determinations”), publish its Determinations in the Gazette, and release its Determinations Reasons Papers.
- 232 Consultation with interested parties will be undertaken through the release of the final draft of the Determinations for comment on the technical drafting.

Proposed Process

- 233 The table below summarises the main consultative stages the Commission intends to follow, as far as possible, when making input methodology determinations. It should be noted that the work programme is in its early stages and, as a result, both the order and timing of the tasks set out below are indicative only and may change.

Table 3 Proposed Process to Determine Input Methodologies

Phase	Key Step	Indicative Date
Phase I	Release Guidelines Discussion Paper	Q2 2009
	Submissions Due on Guidelines Discussion Paper	Q2 2009
	Cross-submissions Due	Q3 2009
	Guidelines Conference	Q3 2009
Phase II	Release Draft Determinations Papers for all sectors	Q4 2009 / Q1 2010
	Submissions Due on Draft Determinations Papers	Q1 2010
	Cross-submissions Due on Draft Determinations Papers	Q1 2010
	Workshops on Specifications (if required)	Q1 2010
Phase III	Consultation on Technical Drafting of Determinations	Q2 2010
	Submissions Due on Technical Drafting of Determinations	Q2 2010
	Finalise Input Methodology Determinations	Q2 2010

(9). Do you have any views on the proposed process to determine input methodologies? If so, please explain.

5.3.3 Process for Amending Input Methodologies

234 Once set, the Commission may amend input methodologies under section 52X, which provides that:

If the Commission proposes to amend an input methodology by making a material change, section 52V applies as if the amendment were a new input methodology.

235 This implies that the Commission may make non-material amendments without having to go through the process set out in section 52V (which expressly includes consultation).

236 Under section 52Y(1), the Commission must review input methodologies every seven years:

The Commission must review each input methodology no later than 7 years after its date of publication and, after that, at intervals of no more than 7 years.

237 Section 52Y provides that section 52V applies “as if the review were a new input methodology” and section 52W applies “if, following a review, an input methodology is replaced or amended.”

5.4 OVERVIEW OF THE KEY COMPONENTS OF THE REGULATORY GUIDELINES

5.4.1 *Input Methodologies and Regulatory Guidelines in a Building Blocks Context*

- 238 Appropriately assessing the revenue required to provide regulated services efficiently, for the level of quality demanded by consumers, is a fundamental step in promoting outcomes that are consistent with those in workably competitive markets. Regulators often achieve this by directly estimating the efficient costs faced by a regulated business, because an efficient firm operating in a competitive setting would, in the long run, expect to recover in revenues no more than they incur in efficient costs, including a normal return.
- 239 If these costs are not appropriately assessed by regulators, then over time the prices charged by regulated firms will be too high or too low, on average, relative to the firm's operating and capital costs. Inaccurate methodologies for estimating the main cost components may therefore reduce the incentives on firms to minimise costs (i.e., productive inefficiency), or give them an incentive to under- or over-capitalise in the market over time (i.e., dynamic inefficiency), which would result in inefficient prices for these services (i.e., allocative inefficiency). This would clearly be at odds with the long-term benefit of consumers.
- 240 A firm is earning sufficient revenue if the future earnings over its lifetime are sufficient to cover efficiently incurred costs (including the risk-adjusted cost of capital) in present value terms. Regulators in overseas jurisdictions—such as Australia and the UK—typically employ a 'building blocks' approach to assist in setting regulated price or revenue caps when implementing CPI-X incentive regulation, as is discussed in chapter 2 (paragraphs 71-72 above). Each building block relates to a different type of cost facing the firm, and regulators aim to provide firms with an opportunity to recover these costs. With this in mind, the building block approach is consistent with the NPV=0 approach and the FCM concept, applied on an *ex ante* basis, as is discussed in the previous chapter (paragraphs 190-192 above).
- 241 The Commission highlights that the "methodologies" referred to in section 52T(1)(a)—which the Commission has, along with the "pricing methodologies" referred to in section 52T(1)(b), categorised as Regulatory Guidelines (paragraph 215 above)—relate to a number of the key components generally included in the building blocks approach (e.g., cost of capital, asset value, depreciation and tax). Indeed, in the Commission's view, most of the key components of the Regulatory Guidelines are likely to combine to underpin the determination of customised (and potentially individual) price-quality paths in a similar fashion to building blocks.
- 242 As noted above (paragraphs 215), the Implementation Specifications would, among other things, include the specific requirements of how the key components of the Guidelines are to be applied by regulated businesses for the purpose of preparing any customised price-quality path proposals that they submit to the Commission. In addition, the Implementation Specifications would include how the components are to be applied by the Commission for the purpose of evaluating such proposals. (Both of these matters are included in the box labelled "Implementation 'Specifications' iii)" in Figure 2).

5.4.2 Significance of the Building Blocks Approach to Other Regulatory Instruments

- 243 The similarity between the key components of the Regulatory Guidelines and the building blocks approach is not necessarily true to the same extent for all the types of regulation administered under Part 4 of the Act. Some input methodologies will not apply, or may apply in different ways, to certain regulatory instruments, particularly given that the specific purpose statements for a number of the instruments differ (as is discussed further in the next chapter).
- 244 For example, given the statutory constraints on the analytical approach that the Commission is able to use to set rates of change (i.e., X-factors) for default price-quality paths (i.e., section 53P), the key components in the Guidelines might only be relevant to establishing appropriate starting prices (i.e., the ‘partial’ building blocks approach referred to in chapter 2). Similarly, the Guidelines would be applicable to regulated businesses subject to information disclosure requirements insofar as they allow interested parties to assess the performance of those businesses. The Commission’s preliminary views on how the key components of the Guidelines are likely to relate to regulatory instruments other than customised (or potentially individual) price-quality regulation are provided below (paragraphs 317-325).
- 245 Nevertheless, building block approaches are generally applied by regulators in a manner consistent with the NPV=0 approach and, as noted above (paragraphs 193-194), the Commission considers that, along with FCM, NPV=0 is a useful concept for deciding how to deal with particular issues in an objective and rigorous manner. Consequently, in the past, NPV=0 has been applied by the Commission in the context of different regulatory instruments. As such, the Commission considers that an understanding of the building blocks approach provides some important insights into how the key components of the Guidelines might be developed, and how the input methodologies might be determined. Therefore, the discussion in the remainder of this section briefly describes the key features of the building blocks approach.

5.4.3 FCM, NPV=0 and the Building Blocks Approach

- 246 As is explained in Chapter 4, the application of the FCM concept is intended to ensure that over the lifetime of the relevant assets a regulated business is compensated for its investments and its expenditure such that its real financial capital is at least maintained in present value terms. In this respect, consistent with promoting the three dimensions of efficiency, it is important that the investments and expenditures in question are efficient, to the extent practicable.
- 247 Application of the FCM concept assists with specifying price controls for discrete regulatory periods (such as may be the case in implementing price-quality regulation under Part 4), or in assessing returns over time (such as may be undertaken through information disclosure regulation or as part of a Part 4 inquiry), recognising that the overall objective is to allow NPV=0 to be maintained over time-frames that span more than a single regulatory period.
- 248 Where CPI-X price or revenue cap regulation is implemented using a building blocks approach, regulators typically assess whether revenues are in line with costs over regulatory control periods of about five years. This is because these assessments require forecasts of relevant parameters such as capital and operating expenditure, which are difficult to forecast with accuracy far into the future.

249 NPV=0 and the FCM concept are relevant to setting regulated price or revenue caps in two key respects, namely:

- implementing the building blocks approach to establish allowable revenues over the forthcoming regulatory control period, which involves applying the NPV=0 approach on an *ex ante* basis for that control period (paragraphs 251-256 below); and
- establishing the opening value of the RAB at the beginning of the forthcoming regulatory control period (paragraphs 275-277 below), which involves applying the NPV=0 approach over the lifetime of the assets employed in supplying controlled services, to the extent practicable.

5.4.4 *Implementing the Building Blocks Approach*

250 Regulated firms are required to invest in a number of different types of asset in order to provide regulated goods and services. Over time, they recover the costs of those investments (including the return on and of capital) through regulated revenues. The RAB at any point in time generally represents the present value of future payments to capital that the regulated firm can expect to recover through those revenues.

251 Consequently, application of the NPV=0 approach over any control period implies that the net present value (NPV) of the net cash flows of the regulated business, taken together with the RABs at the beginning and end of the relevant period, should be zero (calculated on an *ex ante* basis). This ensures that the regulated business has the opportunity to earn a normal economic return over that period, based on the RAB at the beginning of the period.⁹⁷

252 The building blocks approach therefore involves determining allowable regulated revenues that are expected to recover the following ‘building block’ cost components faced by the regulated business, namely:

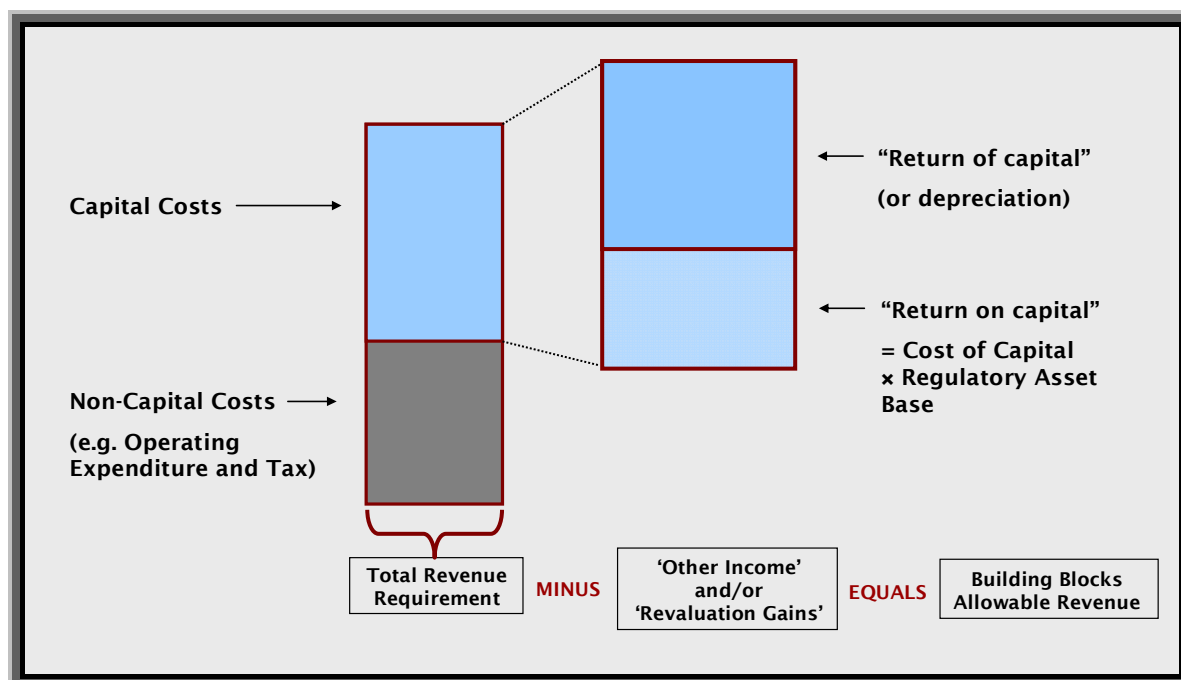
- payments to capital, comprising:
 - a ‘return on’ efficiently invested capital (i.e., the RAB—updated each year for depreciation and efficient capital expenditure—multiplied by the Regulated Rate of Return or the WACC); and
 - a ‘return of’ efficiently invested capital (i.e., depreciation of the RAB); and
- non-capital costs (e.g., operating expenditure and tax).

253 As shown in Figure 3 below, the RAB drives two of the fundamental building blocks that make up the company’s revenue requirement: the return on capital (i.e., the return on the RAB) and the depreciation allowance (i.e., the return of the RAB). These two capital-related building blocks are then added to the projected level of non-capital costs to calculate the total revenue requirement for the business that is expected to be recovered from charges to consumers of the regulated services. Other income and

⁹⁷ Note that an *ex post* assessment of returns might find that the present value of excess returns over the prior control period was greater than zero, reflecting efficiency gains that the business has been permitted to retain for the short to medium term.

revaluation gains are then subtracted from this total to determine the amount of revenues that can be earned through regulated activities.⁹⁸

Figure 3 Building Blocks Allowable Revenue



254 Consequently, the regulatory decision as to how to value the RAB is of particular importance as, in the context of price-quality regulation, the RAB will be a key determinant of prices that may be charged for regulated services in the future. (Likewise, in the context of information disclosure regulation, the RAB will be a key factor impacting the profit levels disclosed by regulated businesses over time). Hence, the decision on the RAB will most likely have the greatest impact on the balance that the regulator strikes between the interests of the consumers of the regulated services and the interests of the suppliers of the regulated services.

255 The calculation for the building blocks allowed revenue for a regulated business can be represented as follows:

⁹⁸ This may include any income from non-regulated activities (such as retail activities at regulated airports) or capital contributions from third parties towards a regulated activity. This is because the building blocks allowable revenue only relates to income raised through directly charging for the regulated service.

$$\begin{aligned}
& \text{Regulatory Asset Base} \times \text{Regulated Rate of Return} \\
& + \text{Depreciation} \\
& + \text{Operating Expenditure} \\
& + \text{Tax} \\
& - \text{Revaluation Gains (or + Revaluation Losses)}^{99} \\
& - \text{Other income} \\
\hline
& = \text{Building Blocks Allowable Revenue}
\end{aligned}$$

256 Each building block cost component is generally intended to reflect realistically achievable efficiencies for the particular component in question during the period of analysis (e.g., operating expenditure). These are then aggregated together to determine the allowable revenue. This calculation is done for each year to determine the revenue in each year, although the allowed revenue may then be smoothed over the entire regulatory control period. Then, depending on what form of price (or revenue) cap is to be applied, these allowable revenues are transformed into a CPI-X price/revenue path.

- (10). How should the financial capital maintenance approach apply to input methodologies?
- (11). What do you consider to be the main interdependencies between the key components of the Regulatory Guidelines?

5.4.5 Cost Allocation between Business Units Supplying Regulated or Unregulated Services

257 A brief overview of the key components of the building blocks calculation is set out below (paragraphs 260-303). However, first it is important to note that, in applying the building blocks approach, costs will need to be appropriately allocated to the services (regulated or unregulated) that cause them. Regulated firms may supply different naturally monopolistic services (e.g., electricity and gas distribution services), but might also provide some competitive or contestable services as well (e.g., electrical contracting services). This is particularly important with regard to the allocation of common costs, as cross-subsidies of any type between business units can result in persistent excess returns for businesses and are therefore likely to be less consistent with competitive market outcomes and the long-term benefit of consumers.

258 The Commission highlights that, apart from the general provisions in Part 4 relating to input methodologies, section 52T(3) specifically requires that any methodologies relating to the allocation of common costs (including between activities, businesses, consumer classes, and geographic areas)—must not unduly deter investment by a

⁹⁹ Where there is a revaluation of assets (if any), this gain should be treated as income, and where there is a revaluation loss, it should be recognised as an expense (e.g., Commerce Commission, *supra* n 86, paragraphs 261-269, 285-287 and Appendix F).

supplier of regulated services in the provision of other services. Likewise, the 2006 GPS also refers to investing in related businesses and in other infrastructure and services. In particular, sections 7(c) and 8(a) of the 2006 GPS seek, on the one hand, to provide firms with the confidence that their regulated business units will not be disadvantaged if they invest in other services while, on the other hand, ensuring that consumers are not disadvantaged by firms undertaking such investments (paragraphs 97-98 above).

259 Therefore, as is discussed further below (paragraphs 304-307), appropriate methodologies for allocating costs between regulated and unregulated business units (as well as between regulated business units) will be an important part of the Guidelines. In particular, the choice of cost allocation methodologies will have a significant impact on the extent to which businesses have incentives to innovate and to invest (including in replacement, upgraded, and new assets), as well as on the extent to which benefits of investing in related businesses are shared with consumers.

(12). How might cost allocation methodologies prevent inefficient cross-subsidisation from occurring, while not unduly deterring investment by a supplier of regulated services in the provision of other services?

5.5 ASSET VALUATION, DEPRECIATION AND REVALUATIONS

5.5.1 *Types of Assets*

260 Regulated businesses are required to invest in a variety of asset types in order to supply regulated services, such as system fixed assets, non-system fixed assets, land and easements.¹⁰⁰ Fixed assets are assets that are tangible in nature and many have a relatively long useful life. System fixed assets are those directly employed in supplying regulated services. For example, for an EDB, system fixed assets include lines and transformers. By contrast, non-system fixed assets include assets attributable to the regulated business, but not directly needed to supply the regulated services, such as office equipment and motor vehicles. Given the nature of regulated industries, non-system fixed assets often have shorter lifetimes than system fixed assets.

261 Land and easements can be system or non-system fixed assets, and have certain unique characteristics. Notably, unlike other fixed assets, they are usually neither subject to physical deterioration (and therefore do not need replacing) nor to technological obsolescence. However, whereas land can be valued at the opportunity cost of selling that land for another use, easements typically have no such market.

262 In addition, firms that supply regulated services often own intangible assets as well (such as goodwill). However, regulators do not generally recognise intangible assets in the RAB of regulated firms. For example, because goodwill may be largely associated with asset transaction prices, recognising goodwill would likely lock in some degree of excess returns going forward.

¹⁰⁰ An easement is a property right to do something, or to prevent someone else from doing something, usually in a particular geographic area.

- 263 Given the different characteristics of the various types of assets, the asset valuation methodologies applied by regulators to value different asset types are also sometimes different, yet all methodologies can nonetheless still promote, or be consistent with, the overall regulatory purpose and principles. For instance, whereas opportunity cost-based valuation is sometimes used to value land, regulators typically use prescriptive accounting-based approaches to value system fixed assets.
- 264 Given that the value of non-system fixed assets is usually only a small proportion of the overall RAB, less-prescriptive valuation approaches consistent with generally accepted accounting practice (GAAP) are sometimes applied (e.g., 'fair value'). Doing so can reduce the administrative costs of implementing regulation, while still promoting the overall statutory objectives.
- 265 In determining the RAB, regulators must also consider whether and, if so, how to deal with the treatment of:
- works under construction, which may be included in the RAB prior to commissioning, or following commissioning through the application of a finance during construction factor; and
 - net working capital, which relates to general issues around the timing of cash flows related to other capital requirements (i.e., not related to the financing of fixed assets).

5.5.2 Opportunity Cost Valuation

- 266 The cost of a resource (e.g., the asset base) is often measured by economists according to the amount that it could earn in its most valuable alternative use, as this is the amount that must be foregone when a resource is used in a particular way. As is noted above (paragraph 33), this is commonly known as a resource's opportunity cost.
- 267 Opportunity cost valuation relies on being able to observe the price of a regulated asset were it to be used usefully for another purpose. Where feasible, it leaves investors indifferent as to whether they keep assets in the existing activity (whether regulated or not) or shift them to the next best alternative. As a consequence, where the current opportunity cost of an asset is directly observable in a developed 'second hand' market, it may be possible to value non-specialised regulated assets on such a basis (e.g., land). However, it is important to note that the alternative use in question should be a feasible one.
- 268 Nevertheless, it would not be appropriate for regulators to value assets according to their current opportunity cost if the investment is considered to be 'sunk', which is typically the case with many of the system fixed assets employed by regulated firms with natural monopoly characteristics (paragraph 49 above). This is because these assets will likely have little or no value in an alternative use, and the current opportunity cost of the assets is consequently low or even nil.
- 269 If sunk assets were to be valued at their current opportunity cost, and this valuation of the RAB was to be used as the basis for regulated prices, then the regulated firm would only realise a return in the period in which the capital cost was incurred; it would be unable to make a return in subsequent years. The asset would consequently become 'stranded' (i.e., incapable of earning a normal return), and yet be so specialised as not to be employable productively in other uses. If this were to happen, investors might be unwilling to replace the asset when it wears out, believing that the value of their future

investments would also be expropriated.¹⁰¹ Continuity of supply would therefore be put in jeopardy if sunk assets were valued at their current opportunity cost, which would not be consistent with promoting dynamic efficiency.

5.5.3 Accounting-Based Valuation Methodologies

- 270 Regulators usually solve this problem by assigning a value to the assets that exceeds their current ‘alternative use’ opportunity cost, on the grounds that continuity of supply and dynamic efficiency are very important to the long-term benefit of consumers in a capital-intensive, utility-type industry. However, unlike firms in workably competitive markets—where assets can be valued based on the present value of the future cash flows associated with the expected market prices for supplied services¹⁰²—a circularity arises between prices and the ‘market’ value of assets owned by unregulated firms with substantial market power, such as a natural monopoly. This means that the apparent market values observed when natural monopoly businesses are traded can reflect expectations of future monopoly profits arising from unconstrained payments to capital.
- 271 In practice, regulators typically address this circularity problem by defining the regulated business’s RAB with reference to an external valuation standard—usually a form of accounting-based approach—and not to the potential earnings of the firm if it was unregulated.¹⁰³ Once the RAB is determined, regulated payments to capital then depend on that asset value, so that the direction of causality between asset values and prices is reversed in comparison to a competitive market.
- 272 Key types of accounting-based approaches include historic cost-based methodologies, and replacement cost-based methodologies. ‘Historic cost’ approaches are based on the original cost of the existing assets and can be applied with or without indexation. It is important to note that, where a historic cost approach is used, the historic cost of the RAB is not necessarily the same as the accounting book value of the regulated firm, as the book value may reflect past transaction values—thereby capitalising expectations of monopoly rents. Those approaches that do not involve indexation are simply referred to as Depreciated Historic Cost (DHC), whereas those that are indexed—often by the CPI—are known as Indexed Historic Cost (IHC).
- 273 ‘Replacement cost’ based approaches, such as Optimised Depreciated Replacement Cost (ODRC), are instead based on the lowest cost of purchasing modern equivalent assets (i.e., MEAs) today that can deliver the same set of services as the existing assets. Optimised Deprival Value (ODV) is a well-known valuation methodology that has been used in New Zealand by regulated and unregulated firms, and in practice is largely

¹⁰¹ For example, M. Armstrong, S. Cowan and J. Vickers, *Regulatory Reform: Economic Analysis and British Experience*, Cambridge, Mass.: MIT Press, 1994, pp 85-86, and 186-87.

¹⁰² This is because, as is discussed above (paragraph 32), in a competitive market, future prices—and consequently future profits—are competed down to a level that broadly reflects the costs facing a firm subject to competitive pressures.

¹⁰³ For example: D. Johnstone, Replacement cost asset valuation and regulation of energy infrastructure tariffs, *Abacus*, Vol. 39, No. 1, pp. 1-41, 2003.

derived from ODRC and therefore typically results in similar valuation outcomes.¹⁰⁴ However, despite the similar outcomes, the concept underpinning a deprival value approach is that the resulting value should be equal to the loss to the owner if they were deprived of the assets and then took action to minimise their loss.

- 274 The Commission highlights that all these methodologies can be implemented in a manner capable of producing outcomes consistent with the application of an NPV=0 approach, as long as revaluation gains and losses are appropriately taken into account (paragraphs 295-298 below).¹⁰⁵ Various options for valuing assets employed in supplying regulated services are shown in table 4 below (which is not intended to be exhaustive).

Table 4 Asset Types and Possible Valuation Methodology Options

Asset Type	Asset Valuation Methodology Options						
	Opportunity Cost	IHC	DHC	ODRC	ODV	GAAP	N/A
Land and other non-specialised assets	✓	✓	✓				
Easements		✓	✓				
System Fixed Assets		✓	✓	✓	✓		
Non-System Fixed Assets		✓	✓	✓	✓	✓	
Goodwill and transaction values							✓
Other intangibles							✓

¹⁰⁴ ODV is equivalent to ODRC, except where it would not be rational from an economic perspective to replace an asset. In the latter case, ODV is equal to the economic value (EV) of the asset, where EV is defined as the greater of scrap value or value to users.

¹⁰⁵ For more detail on the valuation methodologies referred to in this section, refer to: Commerce Commission, *Review of Asset Valuation Methodologies: Electricity Lines Businesses' System Fixed Assets, Discussion Paper*, Wellington, 1 October 2002; Commerce Commission, *Regulation of Electricity Lines Businesses, Implementing Valuation Choice for System Fixed Assets, Draft Decisions and Discussion Paper*, Wellington, 24 December 2004.

- (13). Do you consider that the classification and description of the different types of regulated assets is appropriate? Please explain.
- (14). Are there any other asset valuation methodology options the Commission should consider for valuing these or other asset types? Please discuss.
- (15). An asset valuation methodology may be employed for different sectors and under different regulatory instruments. It will also need to be cognisant of any relevant regulatory purpose statements. In this context, what are your preferred options and what are their relative pros and cons?

5.5.4 Establishing the Opening RAB and Rolling Forward the RAB

275 There are two key decisions that regulators need to make in respect of the RAB, namely:

- establishing the ‘opening’ value of the RAB at the beginning of each regulatory period; and
- updating or ‘rolling forward’ the RAB during the regulatory period (i.e., by taking into account capital expenditure, depreciation and possibly indexation).

276 The asset valuation methodologies applied by regulators for these two decisions need not be the same. It may be possible to apply a different methodology for additional investments to that used for existing assets. For example, the opening RAB could be established using ODV—either once (as at a particular date), or periodically (as at the beginning of every regulatory period). Subsequently, however, that opening value could be the deemed DHC value at that point in time, and capital expenditure and depreciation could be used to roll forward the RAB in accordance with DHC in future years.¹⁰⁶

277 Equally, the asset valuation methodology that is used to establish the RAB could potentially differ across sectors depending on a number of factors. For example, the use of an historic cost-based approach—particularly for establishing opening values of the RAB—may be constrained in some instances by the availability of reliable and consistent data.

278 Establishing an opening RAB midway through the lifetime of the assets employed to supply regulated services is always a problematic task for regulators (paragraph 172 above). The decision is primarily a matter of regulatory judgement, informed by the need to promote statutory objectives.

¹⁰⁶ For instance, the Commission took such an approach in its administrative settlement with Transpower (paragraph 112 above).

- 279 In the context of Part 4 of the Act, the Commission considers that application of the NPV=0 concept assists in exercising this judgement, because the concept acts as a check that the initial RAB should not be:
- too high, thereby generating windfall profits and transferring wealth away from consumers (paragraph 166 above); or
 - too low, such that efficient sunk capital does not generate at least a normal economic return, as this might dampen incentives for investment in the future, which would not be to the long term benefit of consumers (paragraph 150 above).
- 280 Overall then, the Commission considers that it should set an initial RAB for each business that is (as far as possible) consistent with NPV=0 over the lifetime of the assets.
- 281 Subsequently, once the opening RAB is established on this basis, that RAB will typically be equal to the present value of the future stream of payments to capital that the firm is expected to earn (depending on how any revaluations associated with that opening valuation are treated). Over time, the RAB will then evolve over the regulatory period according to:
- the value of any additions to the RAB in each period (i.e., capital expenditure),
 - the amount of capital that is returned to the regulated business in each period (i.e., depreciation), and
 - the way in which inflation (or other revaluations) are dealt with (i.e., indexation).

5.5.5 Investment Efficiency Incentives and Capital Expenditure Reviews

- 282 NPV=0 requires that regulated businesses receive compensation for their efficient investments only. To avoid incentives for cost padding and to promote productive and dynamic efficiency, historic cost-based and replacement-cost based asset valuation methodologies are often implemented with some form of retrospective mechanism for assessing whether the opening or current configuration of assets employed by a regulated business is efficient (such as optimisation techniques or ‘prudency’ tests). Such ex post mechanisms can form part of the valuation methodology itself, and are therefore particularly relevant to establishing opening RABs under any regulatory instrument. These mechanisms may be undertaken in addition to *ex ante* reviews of capital expenditure, which might be able to be performed as part of “rolling forward” the RAB when implementing price-quality regulation.
- 283 Optimisation techniques assess efficient investment by ‘optimising out’ inefficient parts of the asset base with the benefit of hindsight, often based on current information about demand and other relevant factors. The process of optimisation is usually applied as part of replacement cost and deprival valuation methodologies, hence the term ‘optimised’ in both ODRC and ODV.
- 284 In contrast, while assets could, in theory, be optimised under an historic cost approach, the scope for optimising historic cost valuations may be limited in practice (particularly in response to technological change). Some technologies would almost certainly not have existed at the time an asset was purchased, and hence determining its optimised cost would not be possible. Thus, optimising the historic cost of system fixed assets

might be limited to identifying and removing redundant assets, or writing down the value of those assets which are clearly ‘gold-plated’. Instead, the possible tests that could be used include:

- a ‘used and useful’ test for existing assets;
- a prudency test (possibly for investments over a certain materiality threshold);¹⁰⁷ and/or
- an economic value (EV), or impaired asset, test.

285 In making decisions on optimisation, prudency or other retrospective review mechanisms, regulators need to be mindful of any disincentive effects that might arise from undertaking ex post reviews of expenditure actually incurred during the prior regulatory period. Disincentives might arise if the likely outcomes of such a review were to be highly uncertain. On the other hand, it is also important that, where practicable, regulated businesses should be accountable for making investments where they have been explicitly provided for in regulated revenues and prices (paragraph 188 above).

286 In respect of ex ante capital efficiency reviews for the forthcoming regulatory period, regulators may be required to pre-approve investments, assuming that the businesses will fully spend the associated capital expenditure allowance. Setting an appropriate allowance for efficient capital expenditure will ensure that the businesses have the ability to invest in the appropriate replacement, upgraded and new infrastructure, thereby promoting dynamic efficiency.¹⁰⁸

287 Capital expenditure assessments will incur regulatory and compliance costs. Equally, absent ex ante approval, businesses will be exposed to uncertainty as to whether or not their investments will be added to the RAB and, consequently, investors may require a higher expected rate of return to compensate them for this risk. As with approaches to ex post optimisation or efficiency reviews, the appropriate approach to ex ante capital expenditure reviews will need to balance these concerns.

- (16). What issues do you consider relevant in terms of potential mechanisms for promoting efficiency and accountability of investments?
- (17). What are the pros and cons of the various *ex post* or *ex ante* optimisation techniques, prudency reviews, or capital expenditure reviews, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?

¹⁰⁷ The concepts of ‘used and useful’ assets and ‘prudency’ tests have been applied in US regulated industries where historic cost approaches are used.

¹⁰⁸ It may be possible, however, to minimise the regulator’s involvement in *ex ante* capital efficiency assessments, depending on the nature of the regulatory instrument. If suppliers and customers with strong countervailing power could agree on matters such as the prudency of the investment, the allocation of risks associated with possible stranding, and how customers pay for the agreed investments, the regulator’s role might be reduced (e.g., resolving disputes only, as might be the case under a negotiate-arbitrate regime, or playing an informational role, as might be the case under information disclosure).

5.5.6 Depreciation

- 288 Including an allowance for depreciation in the building blocks allowable revenue is intended to ensure that the businesses have a return of the capital they have invested in the controlled assets, consistent with $NPV=0$. The calculation for depreciation in determining regulated revenue usually includes an allowance for depreciation on both the assets in the opening RAB and assets that are assumed to be added during the control period (i.e., the projected capital expenditure allowance).
- 289 Depreciation can be calculated in a number of different ways, all of which can be consistent with $NPV=0$ as long as the depreciation profile used over the life of the assets recovers the initial capital outlay. The most common form of depreciation is ‘straight line’ depreciation, though this choice is based on the ease of application for accounting purposes rather than having any particular economic basis. The asset lives used are usually based on the expected physical lives of the assets.
- 290 Both reductions in demand and rapid technological change can lead to assets becoming stranded. As noted above (paragraph 269), asset stranding occurs when a business is unable to earn any return on a part of its sunk investment (i.e., investments that once constructed and installed have no alternative use). Whether the business is able to recover the costs of its investment will depend on other factors, such as whether, particularly if it is regulated, the business can recover the costs of its investment from other consumers.
- 291 If regulatory depreciation is based on the technical lives of assets, but economic stranding occurs before the assets are fully depreciated, it is unlikely the investor would fully recover its costs, and this could deter investment. Conversely, if assets have already been fully depreciated before the end of their economic lives, the owner might have little incentive to keep them in service.

- (18). What are the pros and cons of potential approaches to depreciation, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?
- (19). How might the Commission assess the likelihood of, and then deal with the prospect of, asset stranding?

5.5.7 Indexation and Revaluations

- 292 The choice of valuation methodology and other regulatory parameters can affect the extent of investment risks, and the allocation of risks between investors and consumers. Some risks, such as from unanticipated inflation, cannot be avoided by investor action. For these risks, investors should be compensated. If investors were not compensated for such risks, future investments might not occur.
- 293 There are two ways in which regulators can maintain the value of a business’s investments in real terms, consistent with $NPV=0$. One way is to allow the firm a nominal rate of return on an un-indexed RAB. The alternative is to index the RAB and

allow a rate of return each year that is adjusted in a manner consistent with the indexation approach.¹⁰⁹

- 294 Regulators can choose to roll the RAB forward on an indexed basis using some measure of inflation, usually the CPI or a measure of asset price inflation. The main advantage that indexing the asset base to inflation has is that it provides a regulated (average) pricing profile that is more likely to be consistent with allocative efficiency (at the aggregate level) than a non-indexed approach, by ensuring that today's consumers pay a similar amount for the asset in real terms as those of tomorrow.¹¹⁰ On the other hand, not indexing the RAB can provide firms with greater cash flows in earlier years following an investment. However, the use of an un-indexed approach can also suggest the need for larger changes in prices when significant assets come to be replaced.
- 295 Since the real value of the investment is being protected through additions to the RAB (and will be returned in later years through the 'return of' capital), the use of indexation must be accompanied by an adjustment to the way the rate of return is calculated (i.e., the 'return on' capital) if the overall returns are to be consistent with NPV=0. For example, the use of CPI indexation is usually accompanied by the use of a real WACC. However, where a nominal WACC is applied with CPI-indexation, then the CPI-related revaluation gains should be reflected as income for consistency with NPV=0.
- 296 The same principle applies, however, even where a revaluation occurs for reasons other than economy wide inflation, and where the extent of the revaluation differs from the change in the CPI. Because the use of a nominal WACC with a non-revalued asset base preserves NPV=0, any positive revaluations must be treated as income. The converse also applies—if the business suffers a devaluation (for reasons unrelated to the removal of any gold-plating), then that revaluation loss should be reflected as an expense.
- 297 Where a replacement (or current) cost-based valuation approach such as ODV is used, revaluations will be more closely related to asset-specific price indices than to the CPI. For instance, revaluations based on ODV may result in asset values increasing by more or less than the rate of the CPI. (Replacement cost-based valuation approaches like ODV can also result in a devaluation in nominal terms, where improvements in technology are significantly reducing the cost of modern equivalent assets). In either case, it is still possible for NPV=0 to be preserved, as long as revaluation gains (or losses) are appropriately treated as income, and calculated in a manner consistent with the way that the WACC is specified. However, in the case of ODV, making appropriate adjustments can be highly complex.¹¹¹

¹⁰⁹ For example, Shuttleworth, *supra* n 92, pp. 13-15.

¹¹⁰ This is because, where all other things are equal (e.g., consumer preferences do not change), the efficient Ramsey prices (paragraph 162 above) for a regulated monopolist subject to a normal profit constraint will be constant prices in real terms (e.g., W. Baumol, Optimal depreciation policy: pricing the products of durable assets, *Bell Journal of Economics and Management Science* 2, 1971, 638-656; and W. Rogerson, Optimal depreciation schedules for regulated utilities, *Journal of Regulatory Economics* 4, 1993, pp. 5-33).

¹¹¹ For example, refer: Commerce Commission, *Regulation of Electricity Lines Businesses, Review of the Information Disclosure Regime, Companion Paper to the Exposure Draft of the Revised Information Disclosure Requirements*, 20 December 2007, Chapter 5.

298 It is worth noting that there is a key exception to the principle that revaluation gains should be recognised as income. That is where the RAB increases as a result of ‘finding’ assets that have always existed, but had not been included in the business’s asset register. Such ‘found assets’ do not represent a revaluation gain, because the construction and installation cost of any found asset will not have been previously recognised or reflected in revenue at all.¹¹²

(20). What are the pros and cons of potential approaches to indexing the regulatory asset base, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?

5.6 COST OF CAPITAL AND THE REGULATED RATE OF RETURN

299 The regulated rate of return provides investors with a return *on* the efficient capital employed in supplying regulated services. Setting an appropriate regulated rate of return is a key aspect of ensuring that NPV=0 is applied and that businesses have incentives to invest in relation to the regulated services. In setting an appropriate regulated rate of return, regulators seek to compensate regulated businesses for their cost of capital, taking account of the systematic risks that the businesses are required to bear and must be compensated for (i.e., the WACC), as well as taking into account, if necessary, any non-systematic risks not taken into account in the Capital Asset Pricing Model (CAPM) used to set the WACC.

300 The appropriate WACC to use will be influenced by a wide variety of choices made for the other components of the building blocks approach. The most notable of these relates to the way a firm’s tax liability is remunerated, and the way investors are compensated for inflation.¹¹³ However, other regulatory decisions—such as when and how to review the efficiency of investment—might also be expected to have a bearing on the specification of the Regulated Rate of Return. (The way that inflation is treated is discussed in paragraphs 293-294 above; tax treatment is discussed in the next section.)¹¹⁴

(21). What industry-specific or instrument-specific issues do you consider to be relevant when determining guidelines for the cost of capital for services subject to regulation under Part 4?

¹¹² For example: M. Lally, *The Weighted Average Cost of Capital for Electricity Lines Businesses*, School of Economic and Finance, Victoria University of Wellington, 4 August 2003, p. 59.

¹¹³ For example: Oxera, *Which WACC When?, A Cost of Capital Puzzle*, Oxera Agenda, September 2005.

¹¹⁴ Prior to the introduction of the CAA, the Commission had been consulting on generic guidelines for the cost of capital (e.g., refer: Commerce Commission, *Progress Update on the Cost of Capital Guidelines*, Wellington, 29 July 2008). In addition to consulting on and setting input methodologies relevant to the costs of capital for the services automatically subject to regulation under Part 4, the Commission intends consulting further and subsequently finalising the generic guidelines for cost of capital.

5.7 TAX

- 301 The building block allowable revenues also need to provide regulated businesses with compensation for the cost of tax. While some regulators describe and/or include tax as part of the cost of capital (i.e., through a pre-tax implementation of the WACC formula), others describe and/or treat tax as a non-capital cost, more akin to operating expenditure (i.e., by using a post-tax WACC, and modelling tax as a cash flow item). Indeed, some approaches to the cost of capital abstract from tax entirely (a so-called ‘vanilla’ WACC, where tax is entirely remunerated through regulatory cash flows).
- 302 A key issue that arises is that statutory financial accounts and tax accounts are generally prepared with different objectives to those of regulators. For example, one of the most fundamental differences between these accounts and ‘regulatory accounts’ arises when regulators ascribe a value to RAB that differs from the accounting (or ‘book’) value of those assets, and this in turn is different from the value of the assets recognised by the tax authority. In addition, tax depreciation rules typically differ markedly from regulatory depreciation approaches.
- 303 Some regulators apply a tax payable approach to assess tax costs, as this generally seeks to estimate the actual tax liability to the tax authority associated with the efficient provision of regulated services.¹¹⁵ However, an alternative to the tax payable approach is the so-called deferred tax approach. Under this approach the RAB is adjusted to compensate consumers in present value terms for differences between the tax expense provided for in regulated revenues and the tax paid to the tax authority. Both approaches can potentially be implemented consistent with NPV=0.¹¹⁶

(22). What are the pros and cons of the potential approaches to tax, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?

5.8 COST ALLOCATION AND PRICING METHODOLOGIES

5.8.1 Operating Expenditure

- 304 Under the building blocks approach, an allowance for operating expenditure is provided to cover the efficient costs of maintaining and operating the assets employed in supplying regulated services, and other costs associated with the provision of those services. Operating expenditure is made up of both direct costs (generally direct maintenance and operation of the network assets and direct marketing for the network) and indirect costs (generally costs that are only indirectly related to the supply of a particular service or set of services, such as corporate overheads). As with capital expenditure, regulators often undertake an *ex ante* review of efficient levels of operating expenditure.

¹¹⁵ The Commission has generally applied a form of the tax payable approach in performing its regulatory functions to date in the electricity, gas and airports sectors. (For instance, even though an ‘effective’ tax rate approach was applied in the airports inquiry, this is intended to proxy the tax payable approach).

¹¹⁶ For a more detailed discussion of the tax payable and deferred tax approaches, refer: Commerce Commission, *supra* n 86, Chapter 9.

5.8.2 Pricing Methodologies

305 Determining the overall revenue requirement for regulated businesses through a building blocks approach (i.e., taking into account overall efficient levels of operating expenditure) is not necessarily the only concern of regulators, however. Clearly, the building blocks will combine to determine the costs of production, including any gains in productivity that may be achieved realistically in future. This process promotes both productive and dynamic efficiency, and to the extent that the prices for services, on aggregate, will reflect total efficient costs, it will lead to improvements in allocative efficiency. Nevertheless, the way that these costs are recovered across services will likely have a more significant bearing on allocative efficiency (paragraph 173 above). Therefore, regulators sometimes set guidelines, principles or rules that impact the methodologies that regulated business can apply to determine the prices for regulated services, possibly differentiated by consumer class, geographic area, or type of service.

5.8.3 Cost Allocation Approaches

306 In determining either overall levels of operating expenditure, or in establishing pricing methodologies for subsets of services, a key issue for regulators is the allocation of common costs. As is discussed above (paragraphs 257-259), for multi-utility firms supplying both regulated and unregulated activities, or supplying different types of regulated services, an appropriate approach to the allocation of common costs to those services must also be determined. For instance, while direct operating expenditure is often directly attributable to regulated business units, indirect operating expenditure may be common between business units. Also, within business units, it may be difficult to specifically attribute even direct operating expenditure to particular services or sets of services.

307 There are a number of different approaches that can be employed to allocate costs between regulated and regulated/contestable business units in order to establish overall regulated revenue, as well as within business units (by geographic area or consumer class) as part of developing methodologies to set prices. Different cost allocation approaches may be appropriate at the business unit level from those applied in determining pricing methodologies.

308 As noted above (paragraphs 162 and 174), the most allocatively efficient method for allocating costs is to do so in a way in which the contribution that each product, function or activity makes to costs is determined using information on the relative price elasticities of demand (i.e., Ramsey pricing). However, there are a number of difficulties implementing Ramsey prices in practice, with the main issue relating to the complexity associated with taking demand information into account when determining allocatively efficient prices.

309 Nevertheless, regulators often allocate costs in ways that are consistent with the principles of Ramsey pricing. In particular, cost allocation methodologies usually act to minimise cross-subsidies and any 'double counting' of costs, while ensuring that firms have the opportunity to recover their efficient investments. In addition, Ramsey pricing principles imply that price differentiation between customer classes and across geographical regions may be both necessary and desirable. These issues have been addressed by regulators in overseas jurisdictions, in which a number of different approaches have been devised and implemented in order to allocate costs. Although none of these methodologies can be claimed to entirely share the efficiency properties

of Ramsey pricing, they are usually intended to improve the efficiency with which costs are allocated across business units and services.

- 310 The most straightforward of these approaches tend to be accounting- or activity-based, such as the fully allocated or fully distributed cost (FAC or FDC) methods. Under these approaches, the total costs incurred by an entity are allocated across all the services it provides, or activities it undertakes, according to a consistent rule or principle (e.g., directly attributable costs, equi-proportionate mark-up or attributable revenue generated by each service).¹¹⁷ While these cost allocation approaches have the benefit of simplicity, they are often criticised by economists. The reason that these approaches are criticised is that costs are allocated, and regulated prices calculated, in an arbitrary way (without the use of demand relationship data).¹¹⁸
- 311 In industries with economies of scale and scope, efficient prices should lie between the incremental cost and the stand alone cost of supplying the relevant service (and of every group of services including that service).¹¹⁹ Prices that lie outside these bounds—being greater than the stand alone cost (a price ceiling) or less than the incremental cost (a price floor)—involve a “cross-subsidy”; whereas prices that lie within these bounds are defined as “subsidy-free”.
- 312 In order to produce a lower bound for subsidy-free prices, regulators tend to estimate a long-run incremental cost (LRIC) of supplying a service (or services). At a general level, this relates to the incremental cost of a service (or services) expressed on a per unit basis over the quantity of service provided, although there are a number of variations in approach. For example, an avoidable cost allocation methodology (ACAM) is similar, in that it allocates costs on the basis of the total costs that would be avoided if a specified output, function, activity or set of the same was not undertaken.¹²⁰ In contrast, the upper bound of the subsidy-free pricing range is provided by estimating

¹¹⁷ Albeit it is not different in kind, activity-based costing (ABC) may offer a more detailed approach by being more explicit around cost-causality. Instead of viewing a firm as delivering some given services it approaches the entity as engaging in various activities—an intermediate step look at the purpose of a given set of resource expenditures. This is via linking expenses (to the extent at all possible) to activities prior to any allocation. However, it would not, by the nature of its internal structure, be suitable for indirect costs that cannot be attributed to particular services (i.e., common costs).

¹¹⁸ R. Braeutigam, An analysis of fully distributed cost pricing in regulated industries, *Bell Journal of Economics* 11, 182-196, 1980.

¹¹⁹ Baumol et al, *supra* n 18, pp. 508-509.

¹²⁰ One implementation of the ACAM approach was mandated as part of the Electricity (Information Disclosure Regulations 1999, and this approach has been temporarily carried over by the Commission to the current Electricity (Information Disclosure) Requirements 2008 (paragraph 115 above). (By contrast, neither the gas or airports information disclosure regulations mandate any cost allocation methodology). In its October 2005 Decision Paper on electricity lines information disclosure, the Commission outlined a number of concerns with the ACAM methodology (as prescribed in the disclosure regulations for electricity lines businesses), namely that it would allow firms which provide two types of regulated services (e.g., electricity and gas distribution services) to: (a) double-count a significant portion of their common costs, by treating each of those networks as “stand-alone”; (b) retain all of the efficiency benefits that might be achieved through economies of scope; and (c) to subsidise the cost of providing any competitive services supplied by the firm (i.e., Commerce Commission, *Regulation of Electricity Lines Businesses – Review of the Information Disclosure Regime – Decision Paper*, 13 October 2005, paragraph 226).

the stand alone cost (SAC) of supplying the service (and/or services). This is defined as the cost that would be incurred if a given services (or set of services) were provided efficiently in isolation (i.e., with the entire common cost allocated to that service or services).

- 313 Given the practical difficulties involved, regulators generally need to exercise a significant amount of judgement in specifying any cost allocation approach, particularly at the level of methodologies for price setting. In particular, because firms are often expected to have better demand data than regulators, regulated firms will likely argue that the imposition of cost allocation methodologies for deriving regulated prices, within appropriate bounds for subsidy-free prices, may do more economic harm than good.
- 314 However, the assumption that firms are potentially in the best position to determine consumer demand characteristics, and have the appropriate incentives to act on those demand characteristics, might not be correct in practice. For instance, the incentives to act in such a manner might be distorted—such as where ownership of the firm is vested in some consumers, but not others. In addition, in the absence of competitive market incentives, firms might not consider it necessary to address legacy pricing issues (i.e., past pricing policies, or the pricing policies of businesses that the firm has acquired).
- 315 Although quantitative data on the price responsiveness of consumers might not be available, qualitative information might suggest whether observed prices are likely to have been set in a manner more or less consistent with allocative efficiency. For instance, applying Ramsey pricing principles, it may be clear that prices cannot be justified on efficiency grounds where:
- consumers that are similarly price-responsive face materially different prices for a service with the same underlying cost and quality; or
 - consumers that are more price-responsive face higher prices for a service with the same underlying cost and quality, than less price-responsive consumers of that service.
- 316 Whether the potential net benefits from addressing such pricing concerns will be significant is likely to depend on how prescriptive any pricing methodologies mandated by the regulator might be. This is because greater prescription may increase compliance costs (particularly if changes are required to information systems).

(23). What are the pros and cons of potential approaches to cost allocation, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments? Consider the potential approaches at both the business unit level and when establishing pricing methodologies.

5.9 RELATIONSHIP BETWEEN THE GUIDELINES AND OTHER REGULATORY INSTRUMENTS

5.9.1 *Default Price-Quality Regulation*

- 317 The discussion in the previous sections has focused on the key components of the Guidelines primarily in the context of a building blocks approach. In this respect, the discussion is particularly relevant to customised (and possibly individual) price-quality regulation under Part 4 of the Act.
- 318 Section 52T(2)(c) provides that every input methodology must, as far as is reasonably practicable, be consistent with the other input methodologies that relate to the same type of goods or services. Therefore, the input methodologies that apply to the default price-quality paths for a sector will be expected to be consistent with the input methodologies that apply to any customised price-quality paths (and information disclosure requirements) for that sector, to the extent practicable. However, as is discussed in chapter 6, default price-quality regulation is more in keeping with an index-based approach to incentive regulation, rather than a “full” building blocks approach (paragraphs 75-76 above).
- 319 There are two ways in which the key components of the Guidelines may apply to default price-quality paths, both of which arise out of the need to assess the profitability of businesses. The first, and most obvious, concerns the setting of starting prices for the price path (i.e., the P_0 adjustment), provided those prices are not simply those that applied at the end of the preceding regulatory period. If such is not the case, then the prices determined by the Commission will be based on the current and projected profitability of each supplier, which may therefore involve a number of input methodologies. The second way in which the means of assessing the profitability of businesses may affect the price path arises because the Commission can set an alternative rate of change for a particular supplier if, in the Commission’s opinion, this is necessary or desirable to minimise undue financial hardship to the supplier or minimise price shocks to consumers.
- 320 Thus, the input methodologies may, to a greater or lesser extent, be used as part of a ‘partial’ building blocks approach when setting default price-quality paths. The Commission is not, however, limited in terms of the number of building blocks it applies in setting the price path, albeit the purpose of the sub-part is to provide a low-cost way of setting price-quality paths relative to customised proposals.
- 321 The Commission is required to promote outcomes that are consistent with those in workably competitive markets, which implies that the default price-quality terms should be set bearing in mind the NPV=0 approach over the forthcoming regulatory period. However, given the statutory constraints on the Commission’s approach to setting the X-factor, such as the use of productivity analysis, it is unlikely that such a price path will be capable of rendering all regulated businesses ex ante NPV=0.
- 322 One reason is that there will be differences in the ability of firms to achieve expected industry-wide productivity gains. Moreover, a number of firms may face business-specific environmental factors such that they are disadvantaged (or advantaged) by control terms based on industry-wide forecasts of future changes in costs. For example, some businesses are likely to be at very different stages of the investment cycle and it may therefore make sense to take into account capital expenditure plans when setting starting prices for each business. However, any firms that expect the default control

terms to produce an NPV<0 outcome for their business can apply for a customised price path.

- 323 The Commission highlights that the choice of an appropriate asset valuation methodology, as part of the input methodology determination for sectors subject to default/customised price-quality regulation, may be influenced by the fact that productivity analysis forms an important part of setting default price-quality paths.¹²¹

(24). What implications do the statutory constraints on setting (and resetting) default price-quality paths have for selecting the appropriate asset valuation methodology?

5.9.2 Information Disclosure and Negotiate-Arbitrate Regulation

- 324 As discussed in Chapter 6, information disclosure regulation under Part 4 is intended to provide a means of assessing whether the section 52A purpose statement is being met. It is implicit in the design of Part 4 that the Guidelines will influence what information will be required and how it will be disclosed (e.g., suppliers will likely be required to provide information on different performance indicators and to disclose information in accordance with set input methodologies when preparing financial regulatory accounts). Where applicable, some of that information may also be used in setting default price-quality paths, and therefore it will be important to ensure that the underlying Guidelines can be applied to both information disclosure regulation and default price-quality regulation.
- 325 Negotiate-arbitrate regulation is generally intended to encourage parties to negotiate a settlement on matters such as investments, quality of service, prices, and terms of access. The applicable components of the Guidelines and the associated input methodologies will therefore provide a framework upon which to base the requirements for the application of negotiate/arbitrate regulation.

¹²¹ For example, refer: Commerce Commission, *supra* n 105, paragraphs 113-118.

CHAPTER 6: REGULATORY INSTRUMENTS AND INQUIRES

6.1 INTRODUCTION

326 Part 4 of the Act provides for a set of regulatory instruments with which the Commission can regulate the supply of certain goods or services. These instruments are:

- information disclosure regulation;
- negotiate/arbitrate regulation;
- default/customised price-quality regulation; and
- individual price-quality regulation.

327 This chapter provides an overview of each of the regulatory instruments and discusses the relevant statutory provisions. It refers (where applicable) to:

- the specific purpose statement for Part 4, as well as the purpose statements that are specific to each regulatory instrument;
- the sectors that are subject to specific regulatory regimes under Part 4;
- the statutory process for making determinations on how a type of regulation applies to suppliers of regulated goods or services (note: the sector-specific considerations and timeframes for making determinations are discussed in later chapters);
- the obligations of suppliers of regulated goods or services under the various regulatory regimes;
- the Commission's preliminary views on its interpretation of relevant subparts of Part 4 of the Act; and
- specific areas where the Commission seeks feedback from interested parties.

328 This chapter outlines how the regulatory instruments may be applied. Each of the instruments is then discussed separately in the following chapters.

6.1.1 *Transitional Arrangements*

329 The Act includes arrangements to allow for transition to the new regulatory regime. Transitional arrangements for particular sectors are discussed in the relevant sector-specific chapter.

6.2 REGULATORY INSTRUMENTS

- 330 The types of regulation that may be applied under Part 4 differ from those under the old Parts 4 and 4A. Previous options included control of prices, revenues and quality following a breach of thresholds, and an information disclosure regime for electricity lines services. The Commission also entered into administrative settlements with ELBs instead of declaring control (see paragraphs 111-112).
- 331 The types of regulation that may now be applied under Part 4 are:
- information disclosure regulation;
 - negotiate/arbitrate regulation;
 - default/customised price-quality regulation; and
 - individual price-quality regulation.
- 332 The types of regulation set out above may be applied by themselves, or in combination - the only exception being that both types of price-quality regulation may not apply simultaneously. The ability to apply these instruments in combination is a design feature of Part 4, so that the overall regulatory package applying to a sector may be made 'fit for purpose'.
- 333 Regulation may only be applied where the 'test for regulation' in section 52G is satisfied (that section is discussed in further detail below). This test is incorporated within the inquiry provisions of Part 4. Under these provisions, the Commission has the ability to undertake an inquiry into particular goods or services supplied in markets where there is potential for the exercise of substantial market power. Regulation is already imposed for certain sectors in the Act, i.e., electricity lines services, gas pipeline services, and specified airport services. Subparts 9 to 11 of Part 4 set out the regulatory provisions for these sectors.
- 334 As the inquiry process determines whether or not regulation should be imposed, the potential 'threat' of an inquiry can influence the behaviour of market participants.

6.3 INQUIRIES

335 An inquiry must be undertaken by the Commission as a first step before new goods or services may be regulated. Inquiries must follow a specified process. An inquiry is also required before amendments can be made to the types of regulation that apply to regulated goods or services.

336 Unless initiated by the Minister, there are no statutory obligations on the Commission to undertake any inquiries. However, section 52H provides that the Commission may hold an inquiry on its own initiative.

6.3.1 Purpose

337 There is no additional purpose statement that applies to the inquiry provisions of subpart 2 of Part 4. Only the overall regulatory purpose statement in section 52A applies (paragraph 146).

6.3.2 Scope of Application

338 Under section 52H, inquiries can be initiated by the Commission on its own initiative or as required by the Minister.

6.3.3 Inquiry Process

Overview

339 Before the Commission can recommend regulation of the supply of particular goods or services to the Minister (other than those which are specifically regulated under the Act), it must satisfy the test for regulation set out in section 52G of the Act. It is the Minister's decision to recommend regulation to the Governor-General.

Commission's Obligations

340 Under section 52J, at the start of the inquiry, the Commission is required to publish in the *Gazette* a notice setting out the Minister's requirements or, if the inquiry is initiated by the Commission, the terms of reference for the inquiry, including indicative time frames and key steps.

341 During the course of an inquiry, the Commission is required to consult with interested parties and publish a proposed recommendation for consultation.

342 Section 52I sets out the detailed requirements that apply to the Commission when undertaking an inquiry:

- (1) *In conducting an inquiry into particular goods or services, the Commission must consider:*
 - (a) *whether the test in section 52G is satisfied in relation to the goods or services; and*
 - (b) *if that test is satisfied, whether the goods or services should be regulated; and*
 - (c) *if so, how the goods or services should be regulated, including:*
 - (i) *how the goods or services should be defined; and*
 - (ii) *which type or types of regulation (as set out in section 52B(2)) the goods or services should be subject to; and*

- (iii) *how that type or those types of regulation should apply to suppliers of the goods or services.*
- (2) *As part of an inquiry into particular goods or services, the Commission:*
 - (a) *must determine (and then apply) input methodologies for the supply of the goods or services, in accordance with subpart 3; and*
 - (b) *must, when carrying out the analysis required by section 52G(1)(c), undertake a qualitative analysis of all material long-term efficiency and distributional considerations.*
- (3) *As part of that qualitative analysis, the Commission must, as far as practicable,—*
 - (a) *quantify material effects on allocative, productive, and dynamic efficiency; and*
 - (b) *quantify material distributional and welfare consequences on suppliers and consumers; and*
 - (c) *assess the direct and indirect costs and risks of any type of regulation considered, including administrative and compliance costs, transaction costs, and spill-over effects.*
- (4) *As part of an inquiry, the Commission must, when considering which type of regulation might be imposed:*
 - (a) *assess the benefits of imposing different types of regulation in meeting the purpose of this Part against the costs of imposing those types of regulation; and*
 - (b) *consider what would be the most cost-effective type or types of regulation in the circumstances.*
- (5) *During an inquiry, the Commission may have regard to any other matters it considers necessary or desirable for the purpose of the inquiry.*

343 Section 52I(2) requires the Commission to undertake a “qualitative analysis of all material long-term efficiency and distributional considerations.” Under section 52I(3), as part of that qualitative analysis, the Commission must, as far as practicable, quantify “material effects on allocative, productive, and dynamic efficiency.” These terms are discussed in Chapter 2.

344 Section 52K specifies how the Commission must go about making its recommendation to the Minister. If regulation is recommended then the recommendation must include the type or types of regulation that should apply and the input methodologies that apply:

- (1) *At the end of an inquiry, having considered the matters in section 52I, the Commission must make a recommendation to the Minister on whether, in its opinion, the goods or services should be regulated.*
- (2) *If the recommendation is that particular goods or services should be regulated, the recommendation must state the following:*
 - (a) *how the goods or services should be specified:*
 - (b) *which type or types of regulation should apply to the goods or services:*
 - (c) *what input methodologies apply:*
 - (d) *if information disclosure regulation is recommended, the material provisions of the information disclosure requirements:*
 - (e) *if negotiate/arbitrate regulation is recommended, the material provisions of the negotiation process and arbitration process:*
 - (f) *if default/customised price-quality regulation is recommended, the default price path and quality standards:*
 - (g) *if individual price-quality regulation is recommended, the material provisions to apply.*

- (3) *The Minister must publish the Commission's recommendation, and may do so in whatever way he or she considers appropriate.*
- (4) *To avoid doubt, a recommendation by the Commission is not a determination of the Commission.*

Test for Regulation

345 As required under section 52I, the 'test for regulation' in section 52G must be met before regulation can be imposed. Section 52G provides as follows:

- (1) *Goods or services may be regulated under this Part only if—*
 - (a) *the goods or services are supplied in a market where there is both—*
 - (i) *little or no competition; and*
 - (ii) *little or no likelihood of a substantial increase in competition; and*
 - (b) *there is scope for the exercise of substantial market power in relation to the goods or services, taking into account the effectiveness of existing regulation or arrangements (including ownership arrangements); and*
 - (c) *the benefits of regulating the goods or services in meeting the purpose of this Part materially exceed the costs of regulation.*
- (2) *In any consideration of this test, the part of the test in subsection (1)(c) need not be considered unless the parts of the test in subsection (1)(a) and (b) are satisfied.*

346 Section 52I(1)(b) emphasises that the Commission has discretion whether to recommend regulation in particular circumstances, even when the test for regulation is satisfied.

347 Prior to the passage of the CAA, the test was set out in section 52. That section provided that:

Goods or services may be controlled if:

- (a) the goods or services are, or will be, supplied or acquired in a market in which competition is limited or is likely to be lessened; and
- (b) it is necessary or desirable for those goods or services to be controlled either:
 - (i) in the interests of persons acquiring the goods or services (whether directly or indirectly), if the goods or services are acquired from a person who faces limited or lessened competition for the supply of those goods or services; or
 - (ii) in the interests of suppliers, if the goods or services are supplied to a person who faces limited or lessened competition for the acquisition of those goods or services.

348 When comparing the two tests, it is apparent that the new test requires additional elements to be satisfied and restricts the circumstances in which regulation can be imposed. For example:

- a) it is no longer sufficient that the goods or services are supplied in a market in which competition is limited or is likely to be lessened, there must also be little or no likelihood of a substantial increase in competition in that market;
- b) it is no longer sufficient that it be necessary or desirable for goods or services to be controlled, there is now an express requirement that there must be scope for the exercise of substantial market power in relation to the goods or services;

- c) even if the first two aspects of the test are satisfied, before recommending regulation, the Commission must then quantify the factors listed at section 52I(3); and
- d) the benefits of regulating the goods or services in meeting the purpose of Part 4 materially exceed the cost of regulation.

Ministerial Recommendations

- 349 Section 52L describes the process that then occurs at Ministerial level, including requirements to consult with the relevant sector Minister (such as the Minister of Energy or the Minister of Transport). This section also sets out the procedure that applies where the Minister makes a proposal that is contrary to the Commission's recommendation.
- 350 Under section 52M, the Minister has the final decision on whether and, if so how, regulation should apply to the goods or services.

Order in Council

- 351 The Governor-General may, on the recommendation of the Minister, make an Order in Council imposing regulation on particular goods or services. Section 52N sets out the required (and permitted) content of the Order in Council imposing regulation.
- 352 Under section 52O, an Order in Council may not be revoked or significantly amended unless the Commission has held an inquiry into the goods or services. "Significantly amended" means amended in a way that:
- (a) *alters the type or types of regulation applying to the goods or services; or*
 - (b) *materially alters the goods or services to which the regulation applies, so that either—*
 - (i) *the goods or services, or any of them, are no longer regulated; or*
 - (ii) *goods or services that were not identified in the original order are now subject to regulation.*
- 353 Section 52O(3) provides that an Order in Council made under section 52N may be amended in any other material way only after the Commission has consulted with interested parties, but may be amended in a non-material way without prior consultation.

Determinations

- 354 At the end of the inquiry process, the Commission must make determinations under section 52P specifying how the relevant forms of regulation apply to suppliers of regulated goods or services. Determinations must be made as soon as practicable after an Order in Council is made.
- 355 The Commission must also make determinations for services already declared to be regulated under the Act. These determinations must be made in accordance with the time frames specified in subparts 9 to 11 of Part 4.

356 Under section 52P(3), determinations must:

- (a) *set out, for each type of regulation to which the goods or services are subject, the requirements that apply to each regulated supplier; and*
- (b) *set out any time frames (including the regulatory periods) that must be met or that apply; and*
- (c) *specify the input methodologies that apply; and*
- (d) *be consistent with this Part [Part 4].*

357 If necessary, under section 52P(4), the Commission may make multiple determinations to address all matters relating to particular regulated goods or services, or to a supplier of regulated goods or services, and different parts of any determination may come into effect at different times, i.e., requirement ‘X’ may come into effect on date ‘A’ and requirement ‘Y’ may come into effect on date ‘B’.

358 Under section 52P(8), each supplier must comply with the requirements imposed by the determination. This may include requirements for a supplier to comply with requirements set out in any other determination (section 52P(6)).

359 Provisions for amendments to section 52P determinations are set out in section 52Q as follows:

- (1) *A section 52P determination may be amended in a material way only after the Commission has consulted with interested parties, but may be amended in a non-material way without prior consultation.*
- (2) *However, the Commission is not required to conduct an inquiry before amending a determination.*
- (3) *An amendment forms part of the determination it amends.*
- (4) *An amendment comes into force on the date specified in the amendment, which must be (except in the case of an amendment relating to a customised price-quality path that takes effect under section 53ZA(3)) a date on or after the date on which it, or a summary of it, is published in the Gazette.*

6.3.4 Summary of Inquiry Process

360 In summary, there are several steps that must be taken before regulation is imposed:

- first, the Commission must hold an inquiry into whether, and if so how, to regulate the goods or services (this will involve satisfying the test in section 52G);
- second, the Commission must make a recommendation to the Minister under section 52K;
- third, the Minister must consider the Commission's recommendation and decide whether or not to recommend to the Governor-General that regulation be imposed and, if so, which type or types of regulation;
- fourth, if the Minister decides to recommend regulation, an Order in Council may be made by the Governor-General under section 52N that makes the goods or services subject to regulation and identifies the type or types of regulation that apply; and
- finally, for each type of regulated goods or services, the Commission must make a section 52P determination specifying how the applicable type or types of regulation apply to a supplier of the regulated goods or services (as part of

this process, the Commission must determine the input methodologies that apply to the particular goods or services).

6.4 INFORMATION DISCLOSURE

361 The Act provides for information disclosure regulation as a relatively ‘light-handed’ form of regulation. Regulated suppliers are required to disclose certain specified information relevant to their performance (such as financial statements, prices and quality performance measures), including forward-looking information (such as forecasts and asset management plans). Disclosed information may then be used to assess performance and monitor trends.

362 This section discusses the general information disclosure provisions set out in subpart 4 of Part 4, including the instrument’s purpose, scope of its application and how determinations are to be made. These generic provisions should be considered together with those relevant to particular sectors. These sector specific considerations are discussed in chapters 7 to 10.

6.4.1 Purpose of Information Disclosure

363 The purpose of the Part is set out in section 52A (see paragraph 146). Section 53A provides that the purpose of information disclosure regulation is:

to ensure that sufficient information is readily available to interested persons to assess whether the purpose of this Part [as set out in section 52A above] is being met.

364 This implies that any information disclosure requirements determined by the Commission must request sufficient information from regulated businesses to enable any interested person to assess whether the regulated business is acting in a way that promotes the long-term benefit of consumers.

6.4.2 Scope of Application

365 Information disclosure, at least initially, is intended to be the most widely used regulatory instrument under the Act. The suppliers of the following services are subject to information disclosure regulation under Part 4:

- electricity lines services (transmission and distribution);
- gas pipeline services (transmission and distribution); and
- specified airport services (Auckland, Christchurch and Wellington International Airports).

366 Part 4 sets out savings provisions for the information disclosure regimes. The following, also discussed in chapters 7 to 11, continue to apply until the Commission makes section 52P determinations specifying how information disclosure regulation applies to each sector:

- information disclosure requirements applying to electricity lines businesses published under subpart 3 of Part 4A;
- Gas (Information Disclosure) Regulations 1997 made under section 55 of the Gas Act 1992; and
- Airport Authorities (Airport Companies Information Disclosure) Regulations 1999 made under section 9A of the Airport Authorities Act 1966.

6.4.3 Setting Information Disclosure Requirements

367 Section 53B(1) describes the effect of being subject to information disclosure regulation as follows:

- (1) *Every supplier of goods or services that are subject to information disclosure regulation must:*
 - (a) *publicly disclose information in accordance with the information disclosure requirements set out in the relevant section 52P determination; and*
 - (b) *supply to the Commission a copy of all information disclosed in accordance with the section 52P determination, within 5 working days after the information is first made publicly available; and*
 - (c) *supply to the Commission, in accordance with a written notice by the Commission, any further statements, reports, agreements, particulars, or other information required for the purpose of monitoring the supplier's compliance with the section 52P determination.*

368 The Commission must make section 52P determinations specifying how information disclosure regulation applies to suppliers, in accordance with sections 54I, 55E, and 56E. These determinations must set out the information disclosure requirements that apply to each regulated supplier; specify any time frames and input methodologies that may apply.

369 Section 52P(4) provides that it is not necessary for a single determination to address all matters relating to particular regulated goods and services and different parts of any determination may come into effect at different times. Section 52P(7) provides that, as soon as practicable after making a determination, the Commission must give a copy of the determination to each supplier to whom the determination relates and publish a summary in the *Gazette* and make the whole determination publicly available.

370 In addition to the general section 52P determination provisions, determinations relating to information disclosure must specify the goods or services and the suppliers to which it applies; the information and the manner in which it is to be disclosed; when, and for how long information must be disclosed; and the input methodologies and any other methodologies that apply. This is provided for by section 53C(1) which specifies the required content:

A section 52P determination relating to goods or services that are subject to information disclosure regulation must:

- (a) *specify the goods or services to which it applies;*
- (b) *specify the suppliers to which it applies;*
- (c) *specify the information to be disclosed;*
- (d) *specify the manner in which the information is to be disclosed;*
- (e) *specify the form of disclosure;*
- (f) *specify when, and for how long, information must be disclosed;*
- (g) *specify the input methodologies that apply; and*
- (h) *specify any other methodologies that are required in the preparation or compilation of the information.*

371 This suggests that there will normally be at least some input methodologies that apply to information disclosure regulation.

372 With respect to specifying the input methodologies that apply, under section 53F and as noted in the previous chapter, where information disclosure regulation is the only type of regulation that applies:

- a) suppliers do not have to apply pricing methodologies, or methodologies for evaluating or determining the cost of capital;
- b) however, the Commission may still use these methodologies to monitor and analyse information, and may require suppliers to disclose information about the pricing and cost of capital methodologies that they do in fact use.

373 Any or all of the following types of information may be required to be disclosed under section 53C(2):

- (a) *financial statements (including projected financial statements):*
- (b) *asset values and valuation reports:*
- (c) *prices, terms and conditions relating to prices, and pricing methodologies:*
- (d) *contracts:*
- (e) *transactions with related parties:*
- (f) *financial and non-financial performance measures:*
- (g) *plans and forecasts, including (without limitation) plans and forecasts about demand, investments, prices, revenues, quality and service levels, capacity and spare capacity, and efficiency improvements:*
- (h) *asset management plans:*
- (i) *quality performance measures and statistics:*
- (j) *assumptions, policies, and methodologies used or applied in these or other areas:*
- (k) *consolidated information that includes information about unregulated goods or services, in which case section 53D applies.*

374 Section 53C(3) allows for further specifications to be made in the determination, including verification of disclosed information, transitional provisions and possible exemptions from information disclosure requirements.

The section 52P determination may do all or any of the following:

- (a) *require disclosed information, or information from which disclosed information is derived (in whole or in part), to be verified by statutory declaration:*
- (b) *require independent audits of disclosed information:*
- (c) *require the retention of data on which disclosed information is based, and associated documentation:*
- (d) *exempt any person or class of persons, or provide for exemptions, from any requirements of the determination, and provide for the revocation of exemptions:*
- (e) *provide for transitional provisions:*
- (f) *impose any other requirements that the Commission considers necessary or desirable to promote the purpose of information disclosure regulation.*

6.4.4 Monitoring and Analysis

375 Section 53B(2) sets out the Commission's powers and obligations for monitoring and analysing disclosed information. The Commission may monitor and analyse any disclosed information. It must publish a summary and analysis of any information as soon as practicable after it is publicly disclosed:

- (2) *If a supplier of goods or services is subject to information disclosure regulation, the Commission:*
 - (a) *may monitor and analyse all information disclosed in accordance with the information disclosure requirements; and*
 - (b) *must, as soon as practicable after any information is publicly disclosed, publish a summary and analysis of that information for the purpose of promoting greater understanding of the performance of individual regulated suppliers, their relative performance, and the changes in performance over time.*

376 Section 53D provides the Commission with powers to request information from regulated suppliers on unregulated goods or services to the extent required to enable the purposes of monitoring compliance with information disclosure requirements.

377 Breaches of information disclosure requirements are dealt with under Part 6 of the Act. Sections 86 to 86B set out what constitutes a contravention and the relevant pecuniary penalties and criminal proceedings that may apply. The regime's penalty provisions are discussed in more detail in chapter 11.

378 With respect to setting information disclosure requirements and how compliance against these requirements might be assessed, the Commission may have to give close consideration to the effects of the new Part 6 penalties regime.

- (25). Do you consider the Commission should focus on particular types of information during the monitoring and analysis of disclosed information?
- (26). How prescriptive should information disclosure requirements be in order for suppliers to reasonably demonstrate compliance and for the Commission to assess whether compliance has been achieved?

6.4.5 Additional Considerations

Application of the Purpose of Information Disclosure

379 The existing information disclosure regimes that existed prior to the passage of the CAA may inform the new regimes required to be established under the Act. However, any new requirements set under the new Part 4 of the Act that might be based on existing information disclosure requirements will need to be consistent with the new purpose statement.

380 The information disclosure regime for electricity lines services is the only existing regime established under the Act. The current purpose of information disclosure regulation as applied to electricity lines services under Part 4A (which is not repealed until 1 April 2009), is set out in section 57T(1):

to promote the efficient operation of markets directly related to electricity distribution and transmission services by ensuring that large line owners and large electricity distributors make publicly available reliable and timely information about the operation and behaviour of those

businesses, so that a wide range of people are informed about such factors as profits, costs, asset values, price (including terms and conditions of supply), quality, security, and reliability of supply of those businesses.

- 381 In comparison, the existing information disclosure regimes for gas pipeline services and specified airport services which have been established under the Gas Act and the Airport Authorities Act 1966 do not appear to be subject to any specific regulatory purpose statements (instead, the statutory provisions under which they are established specify the form of regulation that may be imposed).
- 382 Briefly discussed below is how the previous section 57T(1) purpose statement for electricity lines services has previously been interpreted by the Commission, the broad areas of information required to meet the purpose, and the Commission's preliminary views as to how this relates to the new section 53A purpose statement and making information disclosure determinations.
- 383 The primary purpose of section 57T(1) has been interpreted as being to promote the efficient operation of markets. As explained above (paragraph 35), the Commission considers that there are three dimensions to the economically efficient operation of any market.
- 384 The table below sets out the broad areas of information required for disclosure to meet the overall 'market efficiency' objectives under the Part 4A regime.

Table 5 Information Disclosure – Efficiency Aspects ¹²²

Aspect of 'Market Efficiency' Objective	Area of Information Required to meet Objective
Allocative efficiency and assessment of returns	<ul style="list-style-type: none"> – Charges and pricing methodology – Profitability (and supporting financial information) – Quality information
Productive efficiency	<ul style="list-style-type: none"> – Cost information – Quality information – Input and output statistics
Dynamic efficiency	<ul style="list-style-type: none"> – Capital expenditure information – Asset value – Asset management plans – Input and output statistics – Quality information

- 385 The new purpose statement for information disclosure regulation in section 53A of the Act specifically refers back to the overall regulatory purpose in section 52A of the Act (which is set out in full above). That section provides that the long-term benefit of

¹²² Commerce Commission, *Regulation of Electricity Lines Businesses, Information Disclosure Regime, Companion Paper to the Revised Information Disclosure Requirements, 31 October 2008*, page 23.

consumers is to be promoted by promoting outcomes that are consistent with those produced in competitive markets. The means of promoting these outcomes is specified in detail and includes, amongst other things, promoting efficiency gains. Thus it is possible to consider that the new purpose statement essentially expands upon, but is not inconsistent with, the section 57T(1) purpose statement under Part 4A. On that basis, the measurement of efficiency, as applied in the interpretation of the Part 4A purpose, is a potential way to determine if a regulated business is acting in a way that promotes the long-term benefit of consumers by promoting outcomes that are consistent with outcomes produced in competitive markets.

- 386 The key concept underpinning the Commission's decisions on the information disclosure regime for electricity lines businesses under Part 4A was the concept of FCM, as discussed in paragraphs 190-194. Application of the FCM concept means that the financial capital employed by a firm to efficiently construct and install assets used to supply services is preserved in real terms.
- 387 With this in mind, it is likely that the broad areas of information required to be disclosed (identified in table 5) and the general FCM concept continue to be relevant for electricity lines services. The Commission may consider using these concepts when determining information disclosure requirements for gas pipeline services and specified airport services. However, when setting new information disclosure requirements under Part 4 of the Act, the Commission will need to consider whether any additional areas of information ought to be disclosed in order to meet the expanded regulatory objective.

- | | |
|-------|--|
| (27). | What areas of information should the Commission require to be disclosed to satisfy the section 53A purpose statement? |
| (28). | Do you agree with the view that the financial capital maintenance concept should apply to information disclosure regulation to meet the section 53A purpose statement? |

6.5 NEGOTIATE/ARBITRATE REGULATION

388 The Act provides for a new regulatory instrument referred to as negotiate/arbitrate regulation. This type of regulation requires suppliers and their customers to negotiate a settlement on matters such as prices and quality standards. If the parties fail to agree on specified matters within a set time frame, they are subject to arbitration process. Under section 53H(1)(c) the Commission is required to set the terms of any arbitration.

389 Enforcement of any settlements, whether they have been established as part of a negotiation or arbitration process, is to be undertaken by the parties.

6.5.1 Purpose

390 Section 53G provides that the purpose of negotiate/arbitrate regulation is:

to encourage a supplier and its customers to reach agreement, through negotiation, on the supplier's prices and quality standards during a specified regulatory period, and to provide for binding arbitration if negotiation is unsuccessful.

391 Section 53G does not contain any specific reference to promoting the purpose of Part 4, unlike section 53J which specifies that the arbitrator's role is to make an arbitral award that promotes the purpose of Part 4.

6.5.2 Scope of Application

392 No suppliers are currently subject to negotiate/arbitrate regulation. The Commission may recommend to the Minister that particular goods or services be subject to negotiate/arbitrate regulation as part of an inquiry under section 52I.

393 It is envisaged that a negotiate/arbitrate regime would most likely be considered for sectors where suppliers have a relatively limited number of customers.¹²³

6.5.3 Setting Terms of Negotiation and Arbitration

394 Section 53H(1) provides an overview of the regime and notes that, if a regulated supplier is subject to negotiate/arbitrate regulation:

- (a) *the supplier must enter into negotiations with parties identified by the Commission in order to reach agreement on the matters identified by the Commission (being the prices and quality standards associated with regulated goods or services) that will apply for the regulatory period specified by the Commission; and*
- (b) *if the negotiations fail to reach a settlement of all the matters within the time frames set by the Commission, the parties must enter into arbitration to resolve the outstanding matters; and*
- (c) *the terms of the arbitration are set by the Commission, and the arbitral award is binding on the parties unless or until they agree to vary it.*

¹²³ Explanatory note to the Commerce Amendment Bill (201-1), Government Bill, as introduced to the House of Representatives, Wellington, 13 February 2008, p. 6.

395 Section 53J provides that:

- (1) *If a settlement is not reached (whether by negotiation or voluntary arbitration) within the time frame set by the Commission, the parties must enter into arbitration under this section on the terms set out in the section 52P determination.*
- (2) *The Arbitration Act 1996 does not apply to arbitration under this section, but the Commission may, in setting out the terms of the arbitration in the section 52P determination, apply any provisions of that Act to the arbitration.*
- (3) *The arbitrator's role is to make an arbitral award that promotes the purpose of this Part.*
- (4) *If final consumers of regulated goods or services are not directly represented as parties in the arbitration, the arbitrator must have particular regard to the effect of the outcome of the arbitration on those final consumers.*
- (5) *The arbitral award is binding on the parties to the arbitration unless or until the parties agree to vary it.*

396 Section 53I(1) sets out the required content of a section 52P determination in relation to negotiate/arbitrate regulation, namely:

- (a) *the parties to the negotiation or arbitration;*
- (b) *the matters (including the prices and quality standards associated with the regulated goods or services) that the parties must agree to by negotiation, or are bound to by arbitral award;*
- (c) *the period or periods for which any negotiated settlement or arbitral award applies;*
- (d) *a reference to the input methodologies that apply;*
- (e) *the information that the parties must provide to the other parties and, if necessary, the arbitrator, and the time frames for that provision;*
- (f) *the processes for negotiations, including the form of involvement by the parties, and the form, scope, and coverage of any negotiated settlement;*
- (g) *the time frames for the negotiations (including stages in negotiations) and, in particular, the date by which, if negotiations are not complete, the parties must enter into arbitration to settle any remaining unresolved matters;*
- (h) *the terms of any compulsory arbitration that takes place under section 53J, including its form, procedures, the allocation of costs, and powers of the arbitrator;*
- (i) *the date by which the arbitral award must be made; and*
- (j) *the manner in which the parties must make publicly available any negotiated settlement, arbitral award, or both.*

397 Sections 53I(2) to (5) specify additional considerations in relation to negotiate/arbitrate regulation:

- (2) *The Commission may include in the determination any other matters it considers necessary or desirable to promote the purpose of negotiate/arbitrate regulation.*
- (3) *If the parties to a negotiation agree to arbitration, the arbitration may be on whatever terms they agree to, but must be completed within the time frames set for the negotiation.*
- (4) *The Commission may extend any time frames set out in a section 52P determination.*
- (5) *The terms of arbitration set by the Commission must—*
 - (a) *allow the parties a reasonable period within which to agree on an arbitrator but, if agreement is not reached within that period (or any extended period allowed under subsection (4)), the terms must provide that the Commission must appoint the arbitrator (and may not appoint itself as the arbitrator); and*

- (b) *include provisions enabling the parties to enforce the arbitral award; and*
- (c) *include a right of appeal to the High Court, exercisable by any party to the arbitration, on a point of law only.*

6.5.4 Additional Considerations

Application

- 398 As specified above, negotiate/arbitrate regulation currently does not apply to any regulated services and would not apply to any goods or services until imposed following a Part 4 inquiry.
- 399 The Commission may need to perform in-depth analysis on the negotiate/arbitrate regime in the context of a Part 4 inquiry, when considering whether this type of regulation might be imposed on particular goods or services. However, more generally, the Commission considers that signalling how such a regime might operate in practice could play an important role in the effectiveness of information disclosure regulation for those suppliers of regulated services (e.g., airport services) that could (at least potentially) be subject to this form of regulation in the future (paragraphs 579-582 below). Therefore, the Commission does intend providing further views on negotiate-arbitrate regulation and consulting on those views.

- (29). Should input methodologies seek to take account of how negotiate/arbitrate regulation might be applied in the future? If so, how might this be achieved?
- (30). What matters (other than the supplier's price and quality standards) do you consider the Commission could require parties to agree to by negotiation or be bound to by arbitral award?

6.6 DEFAULT/CUSTOMISED PRICE-QUALITY REGULATION

400 The Act provides for another new instrument in the form of default/customised price-quality regulation. It is one of the two price-quality control options under Part 4 (the other being individual price-quality regulation which is discussed in section 6.7). The main features of default/customised price-quality regulation, which replaces the Part 4A thresholds regime, are:

- default price-quality paths (“DPP”) that apply to regulated suppliers for a regulatory period and that are set by the Commission in a ‘relatively low cost way’ using readily available information;
- individual suppliers may make proposals to the Commission for a customised price-quality path (“CPP”), which propose alternative price and/or quality paths to better meet their particular circumstances;
- the Commission makes determinations for any CPP, which may be less favourable than the DPP in some respects (see section 53V(2)), and apply for a specified period instead of the relevant DPP; and
- breaches of price-quality paths are directly subject to penalty provisions.

6.6.1 Purpose

401 In addition to the purpose of Part 4 (section 52A), Section 53K provides that the purpose of default/customised price-quality regulation is:

to provide a relatively low-cost way of setting price-quality paths for suppliers of regulated goods or services, while allowing the opportunity for individual regulated suppliers to have alternative price-quality paths that better meet their particular circumstances.

6.6.2 Scope of Application

402 Suppliers of the following services are subject to default/customised price-quality regulation under Part 4:

- electricity lines services (distribution), except those that are exempt on the basis of consumer ownership (discussed in section 7.2.1); and
- gas pipeline services (transmission and distribution), with the gas pipeline services controlled by virtue of the Commerce (Control of Natural Gas Services) Order 2005 transitioning to this type of regulation after the Order’s expiry.

403 Under section 54M, the type of price-quality regulation that applies to Transpower following the expiry of its administrative settlement on 30 June 2011, of which default/customised price-quality regulation is an option, will be determined following a recommendation by the Commission to the Minister.

6.6.3 Form of Default/Customised Price-Quality Paths

Overview of Default/Customised Price-Quality Regulation

404 An overview of the default/customised price-quality regime is provided in section 53L. It notes in subsection (1) that:

- (a) *the Commission sets default price-quality paths that apply for a regulatory period, and all regulated suppliers must apply those default price-quality paths;*

but

- (b) *individual suppliers may make a proposal to the Commission for a customised price-quality path; and*
- (c) *the Commission may set a customised price-quality path for the supplier, and that then applies for a set period instead of a specified default price-quality path.*

Application of Default/Customised Price-Quality Paths

405 As noted above, the Commission must make section 52P determinations specifying how default/customised price-quality regulation applies to suppliers, in accordance with sections 54K and 55F. Section 53O sets out the required content of section 52P determinations in respect of default price-quality paths as follows:

If default price-quality regulation applies to regulated goods or services, the section 52P determination must set out a default price-quality path that includes:

- (a) *the starting prices that apply to the supply of the goods or services during the first regulatory period; and*
- (b) *the rate or rates of change in prices, relative to the consumer price index, allowed during the first regulatory period; and*
- (c) *the quality standards that apply during the first regulatory period; and*
- (d) *the date or dates on which the default price-quality path (or any part of it) takes effect; and*
- (e) *the annual date by which any proposal for a customised price-quality path must be received; and*
- (f) *the annual date by which compliance must be demonstrated in accordance with section 53N.*

406 The use of the word “includes” suggests that such determinations may also specify other matters.

407 The parameters for setting (and resetting) starting prices, rates of change and quality standards for a DPP are discussed later in this section.

408 Section 53P(2) requires that the Commission consult with interested parties when setting (or resetting) default price-quality paths.

409 The DPP applies to a supplier for the duration of the regulated period, unless the Commission makes a determination on a CPP proposal submitted by the supplier.

410 Section 53M specifies the required content and timing of default/customised price-quality paths as follows:

- (1) *Every price-quality path (whether a default price-quality path or a customised price-quality path under this subpart, or an individual price-quality path under subpart 7) must specify:*
 - (a) *in relation to prices, either or both of the following with respect to a specified regulatory period:*
 - (i) *the maximum price or prices that may be charged by a regulated supplier;*
 - (ii) *the maximum revenues that may be recovered by a regulated supplier; and*
 - (b) *the quality standards that must be met by the regulated supplier; and*
 - (c) *the regulatory period.*

- (2) *A price-quality path may include incentives for an individual supplier to maintain or improve its quality of supply, and those incentives may include (without limitation) any of the following:*
 - (a) *penalties by way of a reduction in the supplier's maximum prices or revenues based on whether, or by what amount, the supplier fails to meet the required quality standards;*
 - (b) *rewards by way of an increase in the supplier's maximum prices or revenue based on whether, or by what amount, the supplier meets or exceeds the required quality standards;*
 - (c) *consumer compensation schemes that set minimum standards of performance and require the supplier to pay prescribed amounts of compensation to consumers if it fails to meet those standards;*
 - (d) *reporting requirements, including special reporting requirements in asset management plans, if the supplier fails to meet the quality standards.*
- (3) *Quality standards may be prescribed in any way the Commission considers appropriate (such as targets, bands, or formulae) and may include (without limitation)—*
 - (a) *responsiveness to consumers; and*
 - (b) *in relation to electricity lines services, reliability of supply, reduction in energy losses, and voltage stability or other technical requirements.*
- (4) *A regulatory period must be 5 years.*
- (5) *However, the Commission may set a shorter period than 5 years if it considers that it would better meet the purposes of this Part, but in any event may not set a term less than 4 years.*
- (6) *Subsections (4) and (5) are subject to section 53W.*
- (7) *No default price-quality path applies to a supplier until the date specified in the relevant section 52P determination, which must be a date at least 4 months after a summary of the determination is published in the Gazette under section 52P(7)(b).*

411 Section 53M(4) to (6) specifies that the regulatory period for a DPP is 5 years, unless the Commission considers that a shorter period, of not less than 4 years, would better meet the purposes of Part 4. The regulatory period may be different for suppliers subject to a CPP, which is set in accordance with section 53W.

412 The default price-quality path automatically applies to those suppliers that are subject to price-quality regulation, unless they have applied for a customised price-quality path and this application has been approved by the Commission.

Customised Price-Quality Path Proposals

413 Section 53Q(1) states that:

At any time after a default price-quality path is set by the Commission, a supplier that is (or is likely to be) subject to the default price-quality path may make a proposal to the Commission for a customised price-quality path to apply to that supplier.

414 The exact timing for making proposals is, however, subject to an annual “cut-off” date. The annual date for when CPP proposals must be received must be specified in the DPP determination, as provided for in section 53O(e).

415 Section 53Q(2) to (4) establishes further limitations around CPP applications:

- (2) *Every proposal must:*
 - (a) *comply with the input methodologies referred to in section 52T(1)(d) relating to the process for, and content of, customised price-quality path proposals; and*

- (b) *be made within the period, or by the annual date, specified for the purpose in the section 52P determination; and*
 - (c) *include the standard application fee for customised price-quality path proposals; and*
 - (d) *apply or adopt all relevant input methodologies.*
- (3) *A supplier may make only 1 proposal during a regulatory period, and may not make a proposal within the 12 months before a default price-quality path is due to be reset.*
 - (4) *A supplier that makes a proposal must make it publicly available as soon as practicable after it has been made to the Commission.*

416 Under section 53R(a), a supplier can not withdraw a proposal once it has been submitted to the Commission.

Determinations on Customised Price-Quality Path Proposals

417 Under section 53V(1), the Commission may determine any CPP it considers appropriate. Section 53V(2) specifies that, in determining a customised price-quality path, the Commission may, without limitation, do any of the following:

- (a) *set a price-quality path that is lower, or otherwise less favourable to the regulated supplier, than the default price-quality path that would otherwise apply;*
- (b) *if it sets a lower or a higher price than applied under the default price-quality path, apply claw-back;*
- (c) *with the agreement of the supplier, vary an input methodology that would otherwise apply to the supplier.*

418 A supplier is bound by any CPP that the Commission sets for the duration of the regulatory period to which it applies, section 53R(b).

419 Section 53W provides that any CPP applies for 5 years, or a minimum of 3 if the Commission considers this would better meet the purpose of Part 4.

420 Section 52D specifies the following on “claw-back”:

- (1) *A reference to the Commission applying claw-back is a reference to the Commission doing either of the following:*
 - (a) *requiring a supplier to lower its prices on a temporary basis in order to compensate consumers for some or all of any over-recovery that occurred under the prices previously charged by the supplier;*
 - (b) *allowing a supplier to recover some or all of any shortfall in its revenues that occurred under the prices previously charged by the supplier.*
- (2) *If the Commission requires a supplier to lower its prices, it must also require that the lowering of prices must be spread over time in order to minimise undue financial hardship to the supplier.*
- (3) *If the Commission allows a supplier to recover any shortfall, it must require that any recovery must be spread over time in order to minimise price shocks to consumers.*

(31). Under what conditions might it be appropriate for the Commission to apply “claw-back” when determining a customised price-quality path?

Expiry of a Customised Price-Quality Path

421 Upon the expiry of a CPP, a supplier automatically moves to the DPP that applies unless they have proposed and received approval for a new customised path under new section 53Q (see section 53X(1) and 53X(4)).

422 However, section 53X(2) enables the Commission to vary starting prices for those moving from a CPP to the DPP:

The starting prices that apply at the beginning of the default price-quality path are those that applied at the end of the customised price-quality path unless, at least 4 months before the end of the customised price-quality path, the Commission advises the supplier that different start prices must apply.

423 If the Commission decides to vary a supplier's starting prices, this can be done by amending the determination that applies to that supplier. If the Commission decides not to vary a supplier's starting prices, then the supplier will simply move onto the DPP and it is likely that the Commission will not need to make any amendment to the relevant determination.

Resets of Default Price-Quality Paths

424 The Commission may reset the starting prices, rates of change, and quality standards that apply to the default price-quality path at any time before the end of the regulatory period. Section 53P(1) provides that:

Before the end of the first and every subsequent regulatory period, the Commission must amend the section 52P determination by setting out the starting prices (as referred to in section 53O(a)), rates of change (as referred to in section 53O(b)), and quality standards (as referred to in section 53O(c)) that apply for the following regulatory period.

425 Under section 53M(7), no DPP applies until the date specified in the determination. A summary of the determination must be notified in the *Gazette* at least 4 months prior to this specified date (i.e., the end of the regulatory period). This places a clear limit on how late a reset can be finalised.

426 If the Commission does not reset a DPP within the regulatory period, suppliers will remain on that DPP until a reset occurs. Section 53P(11) provides that:

If starting prices, rates of change, and quality standards have not been set by way of an amendment to the relevant section 52P determination by the end of the regulatory period to which it applies, the starting prices, rates of change, and quality standards that apply at the end of the regulatory period continue to apply until the reset starting prices, rates of change, and quality standards are set.

Resetting of Price-Quality Paths following Appeals on Input Methodologies

427 Under section 53ZB, there is one circumstance in which the Commission must reset the default price-quality path within the regulatory period. This is where an applicable input methodology changes as a result of an appeal. Section 53ZB provides that:

- (1) *Default or customised price-quality paths may not be reopened within a regulatory period on the grounds of a change in an input methodology, except as provided in subsection (2).*
- (2) *Every default and customised price-quality path must be reset by the Commission in accordance with section 53P if:*
 - (a) *an input methodology changes as a result of an appeal under section 52Z; and*

- (b) *had the changed methodology applied at the time the price-quality path was set, it would have resulted in a materially different path being set.*
- (3) *When resetting a default or customised price-quality path under subsection (2), the Commission must apply claw-back.*

6.6.4 Requirements for Price-Quality Paths

428 Section 53M(1) sets out general specifications for the content of default and customised price-quality paths, including:

- (a) *in relation to prices, either or both of the following with respect to a specified regulatory period:*
 - (i) *the maximum price or prices that may be charged by a regulated supplier;*
 - (ii) *the maximum revenues that may be recovered by a regulated supplier; and*
- (b) *the quality standards that must be met by the regulated supplier; and*
- (c) *the regulatory period.*

429 Under section 53M(2), as part of any price-quality path the Commission may include incentives for an individual supplier to maintain or improve its quality of supply using any of the following mechanisms:

- (a) *penalties by way of a reduction in the supplier's maximum prices or revenues based on whether, or by what amount, the supplier fails to meet the required quality standards;*
- (b) *rewards by way of an increase in the supplier's maximum prices or revenue based on whether, or by what amount, the supplier meets or exceeds the required quality standards;*
- (c) *consumer compensation schemes that set minimum standards of performance and require the supplier to pay prescribed amounts of compensation to consumers if it fails to meet those standards;*
- (d) *reporting requirements, including special reporting requirements in asset management plans, if the supplier fails to meet the quality standards.*

Process for Setting (and Resetting) Default Price-Quality Paths

430 Sections 53O and 53P set out the parameters for setting (and resetting) the DPP. The parameters mainly relate to how the Commission sets starting prices, rates of change and quality standards.

431 A general limitation on the Commission is that it may not use comparative benchmarking on efficiency in order to set starting prices, rates of change, quality standards, or incentives to improve quality of supply, section 53P(10).

The Commission may not, for the purposes of this section, use comparative benchmarking on efficiency in order to set starting prices, rates of change, quality standards, or incentives to improve quality of supply.

432 Comparative benchmarking may involve evaluating or checking the difference or dissimilarity of data or information by it comparing to a point of reference. Such a point of reference might seek to reflect firms that are performing most efficiently. Evaluation of a firm's performance might be then based on a comparison with those of its peers at the point of reference.

(32). What do you understand "comparative benchmarking on efficiency" to mean?

Starting Prices

- 433 Section 53P(3) requires starting prices to be either: the prices that applied at the end of the preceding regulatory period; or prices, determined by the Commission, based on the current and projected profitability of each supplier.
- 434 Under section 53P(4), these starting prices must not seek to recover excessive profits made during any earlier period.

Rates of Change

- 435 Under section 53P(5), the Commission must usually set only one rate of change (X) per type of regulated goods or services (subject to section 53P(8)).
- 436 Section 53P(6) requires X to be based on the long-run average productivity improvement rate achieved by either or both of suppliers in New Zealand and/or other comparable countries, using appropriate productivity measures. Under section 53P(7), the Commission may take into account the effects of inflation on supplier inputs when setting X (paragraphs 75-78).
- 437 An alternative X may be set under section 53P(8) for a particular supplier, as an alternative (in whole or in part) to the starting prices if, in the Commission's opinion, this is “necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers”; or as an incentive to improve quality of supply. Section 53P(9) allows these alternative rates to include step changes.

(33). The provisions for setting and resetting default price-quality paths suggest that a CPI-X form of price path be implemented. Do you agree?

Quality Standards

- 438 Under 53M(3), quality standards may be prescribed in any way the Commission considers appropriate (such as targets, bands, or formulae).

6.6.5 Commission’s Assessment of Customised Price-Quality Path Proposals

- 439 Subpart 6 of Part 4 of the Act specifies the decision making process and statutory timeframes for assessing and making CPP determinations. Suppliers must submit CPP proposals by the annual date specified in the DPP determination.
- 440 The Commission has 40 working days to assess proposals and determine their compliance with relevant input methodologies. If there are any deficiencies with a proposal, the Commission may ask the supplier to remedy the deficiencies within 40 working days, or it may discontinue its consideration of the proposal. Where requested, if a supplier fails to remedy the deficiencies and provide additional information the Commission may discontinue its consideration of the proposal.
- 441 Section 53Z provides that the Commission is not required to consider any more than 4 proposals for a CPP relating to the same type of regulated goods or services in any one year. Excess proposals may be deferred to a subsequent consideration period. Where the Commission receives more than four proposals in any given year, it is entitled to prioritise proposals in accordance with specified criteria in section 53Z(3):

- (a) *quality and completeness of the initial proposal:*
- (b) *urgency of any proposed additional investment (compared to historic rates of investment) required to meet consumer requirements on quality:*
- (c) *materiality of the proposal relative to the size and revenues of the supplier.*

442 The Commission's initial view is that it should prioritise proposals as soon as initial proposals are received. Subject to this prioritisation process and any extensions granted under section 53U, section 53T requires the Commission to make a determination within 150 working days of receiving a complete proposal.

(34). Do you consider that the Commission should prioritise customised price-quality path proposals before or after it receives complete proposals? If after, should the prioritisation occur before or after its preliminary assessment of whether proposals comply with the relevant input methodologies?

6.6.6 Compliance Obligations for Price-Quality Paths

443 As stated above, section 53O(f) requires section 52P determinations for default/customised price-quality regulation to set out the annual date by which compliance must be demonstrated.

444 The compliance requirements may include any of the matters listed in section 53N. The powers to issue a notice requiring such information is only for the purpose of monitoring compliance with a price-quality path, and is in addition to the Commission's information gathering powers under section 98. The Commission may require, by written notice, from a regulated supplier any or all of the following:

- i) a written statement that states whether or not the supplier has complied with the price-quality path;
- ii) a report on the written compliance statement that is signed by an auditor;
- iii) sufficient information to enable the Commission to properly determine whether all applicable price-quality paths have been complied with; and
- iv) a certificate, in the form specified by the Commission and signed by at least one director of the supplier, confirming the truth and accuracy of any information provided.

445 Breaches of default/customised price-quality regulation are directly subject to pecuniary penalty and offence provisions under Part 6.

6.7 INDIVIDUAL PRICE-QUALITY REGULATION

446 The second price-quality control option available under Part 4 of the Act is individual price-quality regulation. The provisions for this type of regulation are less prescribed than for the others, giving the Commission the discretion to set price-quality paths as it sees appropriate.

6.7.1 Purpose

447 No specific purpose statement applies to subpart 7 of Part 4, which pertains to individual price-quality regulation. This means that the new Part 4 purpose statement in section 52A applies.

6.7.2 Scope of Application

- 448 No suppliers are currently subject to individual price-quality regulation. The Commission may recommend to the Minister that particular goods or services be subject to this form of regulation as part of an inquiry under section 52I.
- 449 The Commission may recommend that individual price-quality regulation is applied to Transpower following the expiry of its administrative settlement on 30 June 2011 (see section 54M(3)(b)).
- 450 Individual price-quality regulation may be appropriate where the goods or services are supplied by only one supplier, as is the case for electricity transmission services supplied by Transpower

6.7.3 Form of Individual Price-Quality Paths

- 451 Section 53ZC(1) provides the Commission with considerable flexibility when setting individual price-quality paths, such that:

the Commission may set the price-quality path for that supplier using any process, and in any way, it thinks fit, but must use the input methodologies that apply to the supply of those goods or services.

- 452 The provisions for individual price-quality regulation are the least prescriptive of all the regulatory instruments.

6.7.4 Requirements for Individual Price-Quality Paths

- 453 Listed in section 53ZC(2) are the relevant provisions, with necessary modifications, that apply to determinations on individual price-quality regulation. The provisions, which are common with default/customised price-quality regulation and discussed above, are:

- section 53M – the required content and timing of price-quality paths (see paragraphs 428, 429 and 438);
- section 53N – compliance obligations for price-quality paths (see paragraph 444); and
- section 53ZB – the implications for price-quality paths if input methodologies change (see paragraph 427).

(35). Given the Commission's discretion in setting individual price-quality paths, what initial views do you have as to the form this instrument should take?

(36). Do you consider that individual price-quality regulation should be the preferred form of price-quality regulation for single supplier sectors? Please explain.

CHAPTER 7: ELECTRICITY DISTRIBUTION SERVICES

454 This chapter discusses the application of relevant regulatory instruments to electricity lines services as supplied by electricity distribution businesses (EDBs). From 1 April 2009, the Act will regulate “suppliers of ‘electricity lines services’” (as defined in section 54C of the Act). However, we have used the term “EDB” in this chapter to distinguish between the regulatory instruments that apply to suppliers of electricity distribution services (which are discussed in this chapter) and those that apply to suppliers of electricity transmission services (which are discussed in the following chapter).

7.1 INTRODUCTION

455 The regulatory instruments that apply to EDBs are set out in subpart 9 of Part 4 of the Act. These are information disclosure regulation and default/customised price-quality regulation.

456 The provisions within the subpart sets out further detail on the instruments, as they are to be applied to the EDBs, including:

- the scope of regulated services;
- when the provisions take effect and any statutory timeframes for making section 52P determinations;
- arrangements for transition from previous regulatory regimes; and
- mandatory considerations for the Commission when exercising its powers.

457 These regulatory provisions are discussed below. Also included is a general discussion relating to the implementation of these provisions, including indicative processes.

7.2 REGULATORY PROVISIONS

458 Most of the provisions of subpart 9 of Part 4 do not come into force until 1 April 2009. However, section 54D(3) and section 54N took effect from 14 October 2008. Section 2 of the CAA states:

- (1) *The following come into force on 1 April 2009:*
 - (a) *sections 5 and 30 (which repeal Part 4A of the principal Act relating to electricity lines businesses); and*
 - (b) *subpart 9 of Part 4 of the principal Act (which relates to electricity lines businesses, as substituted by section 4 of this Act), except sections 54D(3) and 54N.*
- (2) *The rest of this Act comes into force on the 28th day after the date on which it receives the Royal assent [14 October 2008].*

7.2.1 Scope of Application

459 Under subpart 9 of Part 4, all EDBs are subject to information disclosure regulation. Since the sale of Vector's Wellington based electricity distribution assets¹²⁴, the Commission considers there are now 29 EDBs as listed in table 6.

Table 6 Electricity Distribution Businesses

Electricity Distribution Businesses (EDBs)		
Alpine Energy	MainPower	The Lines Company
Aurora Energy	Marlborough Lines	The Power Company
Buller Electricity	Nelson Electricity	Top Energy
Centralines	Network Tasman	Unison
Counties Power	Network Waitaki	Vector
Eastland Network	Northpower	Waipa Networks
Electra	Orion	WEL Networks
Electricity Ashburton	OtagoNet	Wellington Electricity
Electricity Invercargill	Powerco	Westpower
Horizon Energy	Scanpower	

460 EDBs are also subject to default/customised price-quality regulation. However, section 54G specifies that this instrument will not apply to those EDBs that are “consumer-owned”, as defined in section 54D(1).

A supplier is consumer-owned if it is a supplier that meets the following criteria:

- (a) *all the control rights and all the equity return rights (within the meaning of section 3 of the Electricity Industry Reform Act 1998) in the supplier are held by 1 or more customer trusts, community trusts, or customer co-operatives [these are separately defined in section 54D]; and*
- (b) *the trustees of each customer trust or community trust, or the directors of each customer co-operative, as the case may be, that is referred to in paragraph (a) are elected solely by the persons who are consumers of the supplier, and at least 90% of the persons who are consumers of the supplier at the time of the election are eligible to vote in those elections; and*
- (c) *at least 90% of the persons who are consumers of the supplier as at an income distribution resolution date benefit from that income distribution; and*
- (d) *the supplier has fewer than 150 000 ICPs.*

¹²⁴ Vector's Wellington electricity distribution network was sold to Wellington Electricity, an indirect wholly-owned subsidiary of Cheung Kong Infrastructure Limited (CKI). Completion of this sale took place on 24 July 2008.

461 Section 54D(1)(b) raises some uncertainty as to whether suppliers would lose their “consumer-owned” status during a regulatory period if they appointed trustees and directors in accordance with their trust or co-operative deed but did not hold an “election” as seems to be required by the section.

462 Section 54H sets out the process and conditions under which an EDB that is consumer-owned may cease to be exempt for the purposes of section 54G.

- (1) *Electricity lines services that are supplied by a supplier that is consumer-owned cease to be exempt for the purpose of section 54G (and therefore become subject to default/customised price-quality regulation under this Part) if the Governor-General, by Order in Council, declares that this section applies.*
- (2) *The Minister may make a recommendation only if the Minister is satisfied that either—*
 - “(a) *the Commission has advised the Minister that a supplier has ceased to be consumer-owned within the meaning of section 54D; or*
 - “(b) *the Commission has recommended to the Minister that the purpose of this Part would be better met if price-quality regulation were imposed on the supplier under this Part.*
- (3) *The Commission may make a recommendation under subsection (2)(b) only following consideration of a petition made by 1 or more of the following:*
 - (a) *15% of the persons who are residential consumers of the supplier as at the date of the petition who are eligible to vote in elections for trustees of the customer trust or community trust, or for directors of the customer co-operative;*
 - (b) *20% of the persons who are residential consumers of the supplier as at that date who are not eligible to vote in elections for trustees of the customer trust or community trust, or for directors of the customer co-operative;*
 - (c) *25% of the persons who are non-residential consumers (either by number or by consumption of that class of consumer) of the supplier as at that date.*
- (4) *If exact figures are not available as to the number of persons in a class referred to in subsection (3), the Commission may rely on any estimate that the Commission considers to be a reasonable estimate.*

463 Section 54D(3) provides that the Minister must publish an initial list (Minister’s List) of those EDBs that are consumer-owned, and hence are exempt from default/customised price-quality regulation.

As soon as practicable after this subsection comes into force [14 October 2008], the Minister must publish a notice in the Gazette stating the names of the suppliers that are consumer-owned at that date.

464 Section 54D(4) provides that:

The notice in subsection (3) is only for information purposes and has no legal effect.

465 This means that the notice itself does not determine whether a supplier is regulated or not. The relevant section 52P determination is the document that has legal effect in determining whether a supplier is regulated. The Minister’s List is likely to be published in advance of 1 April 2009 and there is potential for changes in EDB status following its publication. There is also potential for further changes in the ownership status of EDBs during the regulatory period.

466 The Commission intends publishing an indicative list, likely to be initially based on the Minister’s List, of EDBs subject to default-price-quality regulation. The Commission intends to briefly consult with EDBs prior to 1 April 2009, to confirm those that meet the “consumer-owned” criteria. Following the end of the assessment period on 31

March 2010, EDBs would be required to submit a compliance statement or demonstrate that they meet the "consumer-owned" criteria.

- (37). Do you have any views on the Commission's proposed approach to determining which electricity distribution businesses are subject to price-quality regulation? If so, please explain.

7.2.2 Information Disclosure

467 Information disclosure regulation applies to all EDBs irrespective of their ownership structure. Section 54I provides that the Commission must make a section 52P determination specifying how information disclosure regulation applies to each EDB "as soon as practicable" after 1 April 2009.

468 The Commission does not intend to determine new information disclosure requirements until applicable input methodologies have been developed.

469 Any information disclosure requirements that are determined by the Commission under Part 4A of the Act (prior to its repeal on 1 April 2009) continue to apply until such time as the Commission makes new requirements under the new legislative provisions.¹²⁵ Section 54W provides that:

Any information disclosure requirements published by the Commission under subpart 3 of Part 4A before 1 April 2009 continue to apply to each supplier of electricity lines services in respect of every financial year that precedes the first financial year to which a determination made by the Commission under section 54I(1) applies to that supplier.

470 The information disclosure requirements applicable to EDBs at the time of issuing this report consist of:

- Electricity Distribution (Information Disclosure) Requirements 2008;
- Electricity Information Disclosure Requirements 2004 (consolidating all amendments to 31 October 2008);
- Electricity Information Disclosure Handbook; and
- Handbook for Optimised Deprival Valuation of System Fixed Assets.

471 There is an ongoing consultation process relating to a specific provision of these requirements.¹²⁶

472 The Commission may continue to research new information disclosure requirements (which are likely to be informed by existing requirements) prior to determinations on input methodologies. It is anticipated that some of the new requirements may not rely on input methodologies, e.g., matters relating to service quality are not covered explicitly by input methodologies.

¹²⁵ Note that the Commission has recently set new *Electricity Information Disclosure Amendment Requirements (No. 3) 2008* and *Electricity Distribution (Information Disclosure) Requirements 2008* (available on the Commission's website: www.comcom.govt.nz).

¹²⁶ Commerce Commission, *Regulation of Electricity Lines Businesses Information Disclosure Requirements, Proposed Change to ODV Revaluation Provisions*, 31 October 2008.

- 473 Any new information disclosure requirements will need to request sufficient information to ensure that interested persons can assess whether the regime's wider regulatory objectives as reflected in the new purpose statement are being met.
- 474 It will be important for any new information disclosure requirements to request appropriate information particularly from consumer-owned EDBs, given that they will be subject only to information disclosure regulation (and not to price-quality regulation) from 1 April 2009. The exemption from price-quality regulation for "consumer-owned" EDBs will likely affect a number of EDBs. These businesses serve a significant number of consumers, including many rural areas with service quality that the Commission has had previous cause to investigate. Future information disclosure requirements may require a particular focus on quality performance to allow adequate monitoring and analysis.
- 475 The Commission will also need to ensure that information disclosure requirements for "consumer-owned" EDBs are consistent with section 53F(1), which provides that "consumer-owned" EDBs do not have to apply pricing methodologies and methodologies for evaluating or determining the cost of capital (as discussed in paragraph 212).

- (38). What factors should be considered when determining information disclosure requirements for EDBs under the new regulatory provisions? To what extent does the new purpose statement for information disclosure regulation (section 53A) require amendment to the current information disclosure requirements?
- (39). Given that consumer-owned EDBs are only subject to information disclosure regulation, do you think that different information disclosure requirements should apply to those EDBs?

7.2.3 *Transition of Thresholds*

- 476 The Part 4A thresholds will be replaced by default/customised price-quality regulation on 1 April 2009. In light of this, the threshold reset consultation process has been suspended.
- 477 For the period from 1 April 2009 to 31 March 2010 the thresholds are deemed to be section 52P determinations that apply to non consumer-owned EDBs as if they were default price-quality paths. Section 54J(2) provides that:

On and after 1 April 2009, the thresholds for large electricity lines businesses that expire on 31 March 2009 are deemed to be section 52P determinations that:

- (a) apply those thresholds to each supplier as if the thresholds were default price-quality paths; and*
- (b) state that the regulatory period for each supplier ends on 31 March 2010; and*
- (c) comply with sections 52P and 53O; and*
- (d) were notified in the Gazette under section 52P(7)(b) at least 4 months before 1 April 2009.*

- 478 The existing thresholds will remain the same during that period, i.e., the same X-factors and quality threshold will continue to apply to the non-consumer owned EDBs. Breaches of the DPP before 31 March 2010 are to be dealt with under section 54N (essentially as if they were breaches of a threshold), and not under Part 6 of the Act.

479 As discussed above, an additional EDB has recently been created through the sale of Vector's Wellington distribution business to Wellington Electricity. Wellington Electricity meets the definition of a "large electricity lines business" under section 57D of Part 4A. The Commission's view is that Wellington Electricity will not meet the consumer ownership criteria set out in section 54D. As such, the Commission must set thresholds for the declaration of control in relation to Wellington Electricity. The Commission considers that Wellington Electricity's thresholds will be set by way of an amendment to the Notice prior to 1 April 2009. These thresholds would then be deemed to be Wellington Electricity's initial DPP applying from 1 April 2009.

480 The Commission's view is that it should seek to achieve the equivalent effect of the thresholds which applied to Vector prior to the sale.¹²⁷ These thresholds should apply to Wellington Electricity and the remainder of Vector's distribution network. As such, the existing X-factor of 0% would apply to both Vector and Wellington Electricity under the price threshold. In applying the quality threshold, the Commission would apply the "no material deterioration"¹²⁸ requirement when assessing whether both businesses have complied.

481 The Commission will consider any possible impact of the sale on the application of the thresholds to Vector. This may also require an amendment to the Notice prior to 1 April 2009.

- (40). Do you have any views on the Commission's proposed approach to applying the thresholds to Wellington Electricity? Please explain.
- (41). What are the possible impacts of applying the current thresholds to Vector following the sale of its Wellington network?
- (42). Are there any additional issues that you believe the Commission should consider when transitioning the thresholds? If so, please explain.

7.2.4 Threshold Compliance

482 Section 54N, sets out the process for breaches of thresholds and the initial DPP that occur before 1 April 2010. It provides that:

- (1) *This section applies to—*
- (a) *any breach of a threshold that occurred before the close of 31 March 2007; and*
 - (b) *any breach of a threshold that occurs on or after 1 April 2007 and before the close of 31 March 2009; and*
 - (c) *any breach of a default price-quality path that occurs on or after 1 April 2009 and before the close of 31 March 2010.*
- (2) *The Commission may not publish a notice of intention to declare control under Part 4A,—*
- (a) *in respect of a breach referred to in subsection (1)(a), at any time after 1*

¹²⁷ Vector remains subject to its threshold set by the Commission under Part 4A under its administrative settlement (see paragraph 112).

¹²⁸ Supra n 48, paragraph 13.

October 2008; and

- (b) in respect of a breach referred to in subsection (1)(b) or (c), at any time after the expiry of 12 months after the end of the financial year in which the breach occurs.*
- (3) The Commission may, at any time before the expiry of 12 months after the date on which the Commission publishes a notice of intention to declare control under subsection (2) in respect of the breach,—*
 - (a) make a control declaration under Part 4A; or*
 - (b) enter into an administrative settlement in respect of the breach under Part 4A.*
- (4) The Commission may do anything under subsections (2) and (3) as if the Commerce Amendment Act 2008 had not been enacted, except that the purpose in section 52A must be taken to be the purpose of Part 4A.*
- (5) To avoid doubt, the Commission may, but need not, apply input methodologies in acting under subsection (3).*
- (6) Despite anything in Part 4A, any control imposed, or administrative settlement entered into, under Part 4A in accordance with subsection (3) is subject to the following:*
 - (a) the term of control, or of the settlement, must be not more than 5 years:*
 - (b) the expiry of the term must be treated as if it were the expiry of a customised price-quality path, and section 53X applies accordingly (unless the supplier concerned would not otherwise be subject to default/customised price-quality regulation after the expiry of the term).*

483 The term of any declaration of control, or administrative settlement, must not exceed 5 years. The expiry of the term must be treated as if it were the expiry of a CPP and section 53X applies accordingly (unless the EDBs concerned would not otherwise be subject to default/customised price quality regulation after the expiry of the term).

484 If a supplier breaches control imposed, or any administrative settlement entered into in accordance with section 54N(3), the breach may be dealt with under Part 6 as if it were a breach of a customised price-quality path, despite anything in the terms of the control or settlement. This applies whether or not the EDB is, after 1 April 2009, subject to default/customised price-quality regulation.

485 Breaches of a DPP that occur after 1 April 2010 are subject to pecuniary penalty and offence provisions in Part 6.

7.2.5 Default Price-Quality Paths

Initial Reset of DPP

486 The Part 4A thresholds for EDBs will be replaced by default/customised price-quality regulation, as discussed in paragraph 477. Under section 54K(1), the first DPP is required to be reset by 1 April 2010 using the process set out in section 53P (as discussed in section 6.6.4). The Commission is required to amend the section 52P determination by setting out the starting prices, rates of change and quality standards that apply for the following regulatory period. In resetting starting prices, rates of change, and quality standards, the Commission must consult with interested parties. Section 54K states:

- (1) Before 1 April 2010, the Commission must reset the default price-quality paths for each supplier that apply on and after that date, using the process set out in section 53P.*
- (2) The Commission may reset the default price-quality paths even if all or any of the*

relevant input methodologies have not been determined.

- (3) *If an input methodology is published after 1 April 2010 and if, had that methodology applied at the time the default price-quality paths were reset as required by subsection (1), it would have resulted in a materially different path being set, then the Commission may reset the default price-quality paths in accordance with section 53P and may apply claw-back, despite section 53ZB(1).*
- (4) *However, the Commission may not exercise its powers in subsection (3) later than 9 months after the date of publication of the input methodology.*
- (5) *Nothing in this section affects sections 54N and 54O.*

487 No DPP applies until the date specified in the relevant determination, which must be a date at least 4 months after a summary of the determination is published in the *Gazette*. This means that a summary of the reset DPP determination should be published by 1 December 2009.

Starting Prices

488 Section 53P(3) and (4) state:

- (2) *The starting prices must be either—*
 - (a) *the prices that applied at the end of the preceding regulatory period; or*
 - (b) *prices, determined by the Commission, that are based on the current and projected profitability of each supplier.*
- (4) *Starting prices set in accordance with subsection (3)(b) must not seek to recover any excessive profits made during any earlier period.*

(43). Are there any particular circumstances in which you consider that the Commission should adjust starting prices for electricity distribution businesses?

Rates of Change

489 Sections 53P(5) to (7), deal with the setting of rates of change:

- (5) *Subject to subsection (8), the Commission must set only one rate of change per type of regulated goods or services (for example, if the rate of change (x) is 1% in a CPI-X path, 1% must be the rate for all goods or services of that type).*
- (6) *The rate of change must be based on the long-run average productivity improvement rate achieved by either or both of suppliers in New Zealand, and suppliers in other comparable countries, of the relevant goods or services, using whatever measures of productivity the Commission considers appropriate.*
- (7) *When setting the rate of change, the Commission may take into account the effects of inflation on the inputs of suppliers of the relevant goods or services.*

490 The Commission has previously considered the use of alternative price indices under the price-path threshold and considers that a number of the issues previously addressed remain relevant.¹²⁹

(44). What are appropriate productivity measures for electricity distribution businesses?

¹²⁹ Commerce Commission, *supra* n 49, section 3.3; and *supra* n 48, para. 218.

- (45). Do you consider the reference to inflation allows for the use of alternative price indices? If so, what indices may be appropriate? Does this relate to the overall form of the price cap or does it allow the Commission to include an input price differential when specifying the X factor?
- (46). Under what conditions might it be appropriate to include productivity growth information from overseas in setting the X factor? What adjustments might be necessary if overseas data were used?

491 Sections 53P(8) and 53P(9), provide further detail on the setting of rates of change:

- (8) *The Commission may set alternative rates of change for a particular supplier—*
- (a) *as an alternative, in whole or in part, to the starting prices set under subsection (3)(b) if, in the Commission's opinion, this is necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers; or*
- (b) *as an incentive (under section 53M(2)) for the supplier to improve its quality of supply.*
- (9) *Any alternative rates of change set under subsection (8) may include step changes.*

492 The Commission considers that these provisions allow for alternative X-factors and that these may be used as a 'glide-path' approach to adjust starting prices. They also suggest that there is scope for linking quality performance with allowed price levels. Such an approach may be similar to the use of an 'S-factor' as previously considered by the Commission for EDBs.¹³⁰

493 Section 53P(1) provides that:

The Commission may not, for the purposes of this section, use comparative benchmarking on efficiency in order to set starting prices, rates of change, quality standards, or incentives to improve quality of supply.

- (47). Under what circumstances should alternative X-factors be used?

Quality Standards

494 Section 53M(3) provides that:

quality standards may be prescribed in any way the Commission considers appropriate (such as targets, bands, or formulae) and may include (without limitation)

(a) *responsiveness to consumers, and*

(b) *in relation to electricity lines services, reliability of supply, reduction in energy losses, and voltage stability or other technical requirements.*

495 The Commission has previously discussed a number of these dimensions of quality as part of the thresholds regime.¹³¹ Voltage stability and similar technical requirements are, to a large extent, beyond the direct control of EDBs (being driven largely by

¹³⁰ Parsons Brinckerhoff Associates, *Resetting The 2009 Quality Thresholds: Investigation Report*, 19 December 2007, p.115.

¹³¹ *ibid*, p.11

generator performance). The Commission considers reliability of supply to be the characteristic of most relevance to EDB quality performance. Additional consideration may be given to consumer responsiveness and loss performance (as this might also promote behaviour that encourages energy efficiency).

(48). What factors do you consider are relevant when prescribing quality standards under a default price-quality path?

7.2.6 Customised Price-Quality Paths

496 If an EDB considers that the DPP is not appropriate, it may make a CPP proposal. Requirements that must be met by the supplier making a CPP proposal and the associated evaluation criteria for the Commission are determined under the input methodology process defined in subpart 3. Subpart 6 of Part 4 specifies the process and timing for making and assessing CPP determinations (these are discussed in section 6.6.5).

(49). Do you have any views on the content and evaluation of customised price-quality path proposals for electricity distribution businesses? Please explain.

7.2.7 Mandatory Considerations

Energy Efficiency

497 Under section 54Q, the Commission must:

Promote incentives, and must avoid imposing disincentives, for suppliers of electricity lines services to invest in energy efficiency and demand side management, and to reduce energy losses, when applying this Part in relation to electricity lines services.

498 The Commission recognises the importance of the matters included in section 54Q. The Commission intends working with other entities that also have a role in promoting energy efficiency incentives, such as the Electricity Commission.

499 With respect to promoting these incentives through the regulatory instruments, the Commission's initial view is that it may use:

- a) information disclosure regulation to require EDBs to disclose information on the energy efficiency measures that they have in place;
- b) default price-quality regulation to set quality standards that promote energy efficiency; and
- c) customised price-quality regulation to set specifications for CPP proposals that include energy efficiency requirements.

(50). What measures do you consider appropriate to promote energy efficiency under the regulatory instruments applicable to electricity distribution businesses, particularly given the Electricity Commission's role regarding pricing methodologies?

7.3 INDICATIVE PROCESSES

7.3.1 Threshold Transition Process

500 As discussed at paragraph 479, the Commission proposes setting a new threshold for Wellington Electricity and considering whether any consequential amendments to Vector's thresholds are required under Part 4A prior to 1 April 2009. The Commission intends consulting on a draft amendment notice in late February 2009 and publishing a finalised notice in the *Gazette* prior to 1 April 2009.

7.3.2 Proposed Process for Determining Default Price-Quality Paths

501 The Commission proposes to determine default price-quality paths in accordance with the following process.

Table 7 Default Price-Quality Path Determination

DPP Process	Indicative Timing
Publish and Consult on Discussion/Issues Paper	Q2 2009
Conference	Q3 2009
Publish and Consult on Decisions Paper	Q3 2009
Finalise and Issue Determination ¹³²	Q4 2009
<i>Gazette</i> summary of Determination	December 2009
DPP comes into effect	1 April 2009

(51). Do you have any views on the proposed process for determining default price-quality paths? If so, please explain.

¹³² This may be published for a brief technical consultation.

CHAPTER 8: ELECTRICITY TRANSMISSION SERVICES

502 This chapter discusses the application of relevant regulatory instruments to electricity lines services as supplied by Transpower.

8.1 INTRODUCTION

503 On 13 May 2008, the Commission accepted an administrative settlement from Transpower in respect of breaches of the thresholds under Part 4A.¹³³

504 Under subpart 9 of Part 4, Transpower continues to be subject to its administrative settlement (paragraph 112) until its expiry date of 30 June 2011. However, before the settlement expires in 2011, the Commission must make a recommendation to the Minister recommending which type of price-quality regulation should apply to Transpower. Transpower also continues to be subject to information disclosure regulation.

505 The provisions within the subpart sets out further detail on the instruments, as they are to be applied to the EDBs, including:

- the scope of regulated services;
- when the provisions take effect and any statutory timeframes for making section 52P determinations;
- transitional arrangements from previous regulatory regimes; and
- mandatory considerations for the Commission when exercising its powers.

506 The following gives an overview of the provisions in the Act, relevant to services supplied by Transpower.

8.2 REGULATORY PROVISIONS

8.2.1 *Commencement*

507 The provisions of subpart 9 of Part 4 that relate to Transpower take effect from 1 April 2009.

8.2.2 *Scope of Instruments*

508 Transpower is the sole supplier of electricity transmission services in New Zealand. As a supplier of electricity lines services, Transpower is subject to both information disclosure and price-quality regulation. The CAA does not specify what form of price-quality regulation applies to Transpower. It sets out a process for determining which price-quality instrument should apply following the expiry of its administrative settlement.

¹³³ Commerce Commission, *supra* n 52.

8.2.3 Information Disclosure Regulation

509 Transpower is subject to information disclosure regulation as discussed in section 6.4.2. The section 52P determination that specifies how information disclosure regulation applies to Transpower must be made as soon as practicable after 1 April 2009. The Commission intends to set new information disclosure requirements once applicable input methodologies have been developed.

510 Any information disclosure requirements that are set by the Commission under Part 4A of the Act (prior to its repeal on 1 April 2009) continue to apply until such time as the Commission makes new requirements under the new legislative provisions. Section 54W provides that:

Any information disclosure requirements published by the Commission under subpart 3 of Part 4A before 1 April 2009 continue to apply to each supplier of electricity lines services in respect of every financial year that precedes the first financial year to which a determination made by the Commission under section 54I(1) applies to that supplier.

511 The information disclosure requirements currently applicable to Transpower consist of:

- Electricity Information Disclosure Requirements 2004 (consolidating all amendments to 31 October 2008);
- Electricity Information Disclosure Handbook; and
- Handbook for Optimised Deprival Valuation of System Fixed Assets.

512 There is an ongoing consultation process relating to a specific provision in these requirements¹³⁴.

513 The current information disclosure requirements relating to Transpower were issued pursuant to Part 4A in March 2004. As an interim measure, these initial disclosure requirements largely replicated the provisions in the subsequently revoked *Electricity (Information Disclosure) Regulations 1999*. The Commission issued new information disclosure requirements for EDBs in October 2008. However, the disclosure requirements for Transpower remained largely unchanged (paragraph 115).

514 New information disclosure requirements for Transpower may be informed by its existing requirements and will need to request sufficient information to ensure that interested persons can assess whether the regime's wider regulatory objectives—reflected in the new purpose statement—are being met.

(52). What factors do you consider relevant in developing information disclosure requirements for Transpower under the new legislative regime?

¹³⁴ Commerce Commission, *Regulation of Electricity Lines Businesses Information Disclosure Requirements, Proposed Change to ODV Revaluation Provisions*, 31 October 2008.

8.2.4 Price-Quality Regulation

Administrative Settlements

- 515 Transpower's administrative settlement is preserved by the Act. Under section 54M(2), breaches of the administrative settlement may be treated as if they were a breach of a CPP, and remedies and penalties are available under Part 6.

Price-Quality Regulation

- 516 Section 54M(3) specifies that, before the administrative settlement expires (30 June 2011), the Commission must make a recommendation to the Minister that an Order in Council be made declaring what price-quality regulation Transpower should be subject to, i.e., either:
- a) default/customised price-quality regulation, or
 - b) individual price-quality path regulation.
- 517 The process for recommending the form of regulation must follow the process requirements in subpart 2 of Part 4 (except those provisions specifically relating to inquiries).
- 518 If the Order in Council declares that Transpower is subject to default/customised price-quality regulation under section 54M(5), the Commission must set a DPP in accordance with section 53P. This DPP would apply from when the Order in Council comes into force.
- 519 If the Order in Council declares that Transpower is subject to individual price-quality regulation, the provisions in section 53ZC apply.
- 520 The only requirements that may be set in respect to Transpower's quality standards are requirements that give effect to quality standards set by the Electricity Commission (section 54M(6)).

- (53). What are the pros and cons of default/customised price-quality regulation and individual price-quality regulation?
- (54). Do you have any views as to which should apply to Transpower from July 2011? If so, please explain.

8.2.5 Additional Considerations

Energy Efficiency

- 521 Under section 54Q, the Commission must:

Promote incentives, and must avoid imposing disincentives, for suppliers of electricity lines services to invest in energy efficiency and demand side management, and to reduce energy losses, when applying this Part in relation to electricity lines services.

- 522 The Commission recognises the importance of the matters included in section 54Q. The Commission intends working with other entities that also have a role in promoting energy efficiency incentives, such as the Electricity Commission. Given the Electricity Commission's role in setting quality standards for Transpower, there may be a limit to

how energy efficiency incentives can be achieved through a DPP. However, there may be more scope to do so under an individual price-path.

Interaction with Electricity Act 1992

523 Section 54V(2) sets out the provisions relating to the interface with the Electricity Act 1992. These include that before exercising any of its powers under Part 4, the Commission must take into account any electricity governance regulation or rule, or decision made under subpart 2 of Part 14 of the Electricity Act 1992 by the Electricity Commission that relates to or affects pricing methodologies of Transpower, or relevant guidelines which it is advised that are likely to be relevant.

- (2) *The Commerce Commission must take into account, before exercising or performing any of its powers, duties, or functions under this Part,—*
- (a) *any electricity governance regulation or rule, or decision made under them, that relates to or affects the quality standards or pricing methodologies applicable to Transpower:*
 - (b) *any electricity governance regulation or rule, or decision made under them, that relates to or affects the pricing methodologies applicable to any other line owner:*
 - (c) *any guidelines of which it receives advice under subsection (1) that are likely to be relevant to the exercise or performance of the powers, duties, or functions of the Commerce Commission under this Part:*
 - (d) *the levy payable by Transpower or any other line owner under section 172ZC of the Electricity Act 1992:*
 - (e) *the continuance of supply obligations imposed by section 62 of the Electricity Act 1992.*

(55). What measures to promote energy efficiency do you consider are appropriate under the potential mechanisms for Transpower?

Memorandum of Understanding with Electricity Commission

524 The Commission and the Electricity Commission, on 16 August 2007, signed a Memorandum of Understanding¹³⁵ (MOU) which was updated on 13 November 2008. It incorporates an operational protocol addressing matters set out in the revised Government Policy Statement on Electricity Governance¹³⁶, and a protocol on improving incentives for electricity distribution businesses. The MOU has been updated to reflect:

- amendments made to the Act by the CAA;
- Transpower's administrative settlement, accepted by the Commerce Commission on 13 May 2008; and

¹³⁵ *Memorandum of Understanding between Electricity Commission and Commerce Commission (with 2008 Amendments)*, 13 November 2008.

¹³⁶ Ministry of Economic Development, *Government Policy Statement on Electricity Governance*, May 2008.

- a new protocol on improving incentives for suppliers of electricity lines services in response to the Government Policy Statement on Electricity Governance issued in May 2008

8.3 INDICATIVE PROCESS

525 As set out above, the Commission must recommend to the Minister that an Order in Council be made before the expiry of the administrative settlement. This recommendation must allow sufficient time for the Minister to consider the recommendation, to make a recommendation to the Governor-General, for the Order in Council to be made, and for the Commission to make a section 52P determination applying the regulation to Transpower.

(56). Do you have any views on the timing of and content of the recommendation to the Minister?

CHAPTER 9: GAS PIPELINE SERVICES

526 This chapter discusses the application of regulation to gas pipeline services (both distribution and transmission) as supplied by Gas Pipelines Businesses (“GPBs”).

9.1 INTRODUCTION

527 The regulatory instruments that apply to gas pipeline services are set out in subpart 10 of Part 4 of the Act. These are information disclosure and default/customised price-quality regulation. The provisions within the subpart give further detail as to how these regulatory instruments apply to suppliers of gas pipeline services, including:

- the scope of regulated services;
- when the provisions take effect and any statutory timeframes for making section 52P determinations;
- transitional arrangements from previous regulatory regimes; and
- mandatory considerations for the Commission when exercising its powers.

528 The provisions are discussed in the following section.

9.2 REGULATORY PROVISIONS

9.2.1 *Commencement*

529 Subpart 10 of Part 4 came into force on 14 October 2008.

9.2.2 *Scope of Application*

530 Section 55(1)(a) provides that certain gas pipeline services are subject to information disclosure regulation and default/customised price-quality regulation. The meaning of “gas pipeline services” is defined in section 55A, as:

(1) *In this subpart, unless the context otherwise requires, gas pipeline services means the conveyance of natural gas by pipeline, including the assumption of responsibility for losses of natural gas.*

“(2) *However, none of the following are gas pipeline services:*

“(a) *conveying natural gas to a gas processing facility:*

“(b) *conveying natural gas if the total amount of gas conveyed to consumers by the supplier is less than 75 000 gigajoules per annum:*

“(c) *conveying natural gas by a pipeline that is listed in the second column of Schedule 6.*

531 Schedule 6 of the Act lists specified pipelines that are exempt from Part 4. This is set out in the table below.

Table 8 Schedule 6 – Exemptions from Part 4 in respect of specific pipelines

Owner	Pipeline
Todd Taranaki Limited	McKee Production Station—Tikorangi gas pipelines
Swift Energy New Zealand Limited	Waihapa—New Plymouth gas pipeline
Methanex New Zealand Limited	Bertrand Road—Waitara Valley Plant gas pipeline (via Faull Road Mixing station) Tikorangi—Faull Road Mixing Station gas pipeline Faull Road Mixing Station—Motunui Plant main process gas pipeline Faull Road Mixing Station—Waitara Valley Plant minor gas pipeline
Energy Infrastructure Limited and Petroleum Infrastructure Limited	The 032 pipeline running from the T-junction on the Maui Pipeline at Ngatimaru Road to the Pohokura Production Station and the Methanex Motunui Methanol Plant
Vector Limited	Kapuni—Faull Road Mixing Station low temperature separator gas pipeline
Nova Gas Limited	All gas pipelines

- 532 In light of schedule 6, set out below is an indicative list of the GPBs (both transmission and distribution) that the Commission considers are subject to information disclosure and default/customised price-quality regulation under subpart 10 of Part 4.

Table 9 Commission’s indicative list of regulated gas pipeline businesses

Transmission	Distribution
Vector Limited	Powerco Limited ¹³⁷
Maui Development Limited	Vector Limited ¹³⁸ Wanganui Gas Limited

- 533 Vector and Powerco are subject to the Commerce (Control of Natural Gas Services) Order 2005. Default/customised price-quality regulation does not apply to these GPBs until the Order in Council under which they are controlled expires on or before 1 July 2012.

(57). Do you have any comments on the indicative list of gas pipeline businesses subject to regulation under Part 4? Do you have any views as to how this list can be maintained? If so, please explain.

¹³⁷ Powerco is subject to the *Authorisation for Powerco Limited, Commission Decision No. 656*.

¹³⁸ The Vector (Auckland) network is subject to the *Authorisation for Vector Limited, Commission Decision No. 657*.

9.2.3 Information Disclosure

534 GPBs are subject to information disclosure regulation as discussed in section 6.4. Under section 55E, the Commission must make a determination setting out how information disclosure regulation applies to each supplier of gas pipeline services as soon as practicable after 14 October 2008, as set out in section 55E(1).

535 Given that section 53C(g) requires such determinations to “specify the input methodologies that apply,” the Commission does not intend to issue such a determination until after determining relevant input methodologies.

536 The existing information disclosure requirements made under the Gas Act 1992 continue to apply until such time as the Commission determines new requirements under the Act. Section 55J provides that:

- (1) *The Gas (Information Disclosure) Regulations 1997 continue to apply to each supplier of gas pipeline services in respect of every financial year that precedes the first financial year to which a determination made by the Commission referred to in section 55E(1) applies to that supplier.*
- (2) *After that, no regulations made under section 55 of the Gas Act 1992 apply to the supplier of gas pipeline services.*

(58). Do you have any views on the suitability of the information disclosure requirements established under the Gas (Information Disclosure) Regulations 1997 for the purposes of information disclosure regulation under the Act?

9.2.4 Default Price-Quality Paths

Overview

537 Gas pipeline services are subject to default/customised price-quality regulation on and after 1 July 2010. As discussed in section 6.6, this type of regulation consists of default price-quality paths (“DPP”) applicable to regulated GPBs, with the option for customisation under an individually defined customised price-quality path (“CPP”).

Initial DPP Determination

538 Section 55D provides that:

gas pipeline services are subject to default/customised price-quality regulation under this Part on and after 1 July 2010.

539 Accordingly, the Commission will set the first default price-quality paths for suppliers of gas pipeline services by 1 July 2010.

540 The Commission notes that section 55E(2) below appears to conflict with section 55D. It provides that the determination must be set as soon as practicable after 1 July 2010:

the section 52P determinations that specify how default/customised price-quality regulation applies to each supplier of gas pipeline services must be made as soon as practicable after 1 July 2010, in the manner set out in section 55F.

541 However, section 55F(1) reinforces that a determination must be made by 1 July 2010 by referring back to the regulatory period mentioned in section 53P:

the Commission must use the processes set out in section 53P in making the first section 52P

determinations that set out how default price-quality regulation applies to suppliers of gas pipeline services as if 30 June 2010 were the end of the previous regulatory period.

- 542 Section 53P(1) also supports the view that the Commission may be required to set the initial DPP before 30 June 2010:

before the end of the first and every subsequent regulatory period, the Commission must amend the section 52P determination...

- 543 This suggests that the Commission may be required to set the first default price-quality paths before 30 June 2010.

- 544 Section 53M(7) provides that:

no default price-quality path applies to a supplier until the date specified in the relevant section 52P determination, which must be a date at least 4 months after a summary of the determination is published in the Gazette under section 52P(7)(b).

- 545 The Commission will publish a summary of the relevant section 52P determination in the *Gazette* by 1 March 2010.

(59). Do you have any comments on the above discussion?

Setting Initial DPP

- 546 Section 55F(1) stipulates that the Commission must use the process in section 53P for making a section 52P determination setting out the first DPP for GPBs. Section 53P, provides that in resetting starting prices, rates of change and quality standards, the Commission must consult with interested parties.

- 547 However, section 55F(2) allows the Commission to apply “claw-back” (as discussed in section 6.6.3), requiring suppliers to lower prices to compensate consumers for over-recovery of revenue:

if a supplier has increased its weighted average prices by more than the movement, or forecast movement, in the all groups index number of the New Zealand Consumer Price Index in the period beginning 1 January 2008 and ending with the date that the determination is made, the Commission may apply clawback to the extent of requiring the supplier to lower its prices in order to compensate consumers for some or all of any over-recovery of revenues that occurred during that period.

- 548 As discussed in section 6.6.4, the Commission may not use comparative benchmarking on efficiency in order to set starting prices, rates of change, quality standards, or incentives to improve quality of supply.

Starting Prices

- 549 Starting prices must be either the prices at the end of the preceding regulatory period or prices, determined by the Commission, based on the current and projected profitability of each supplier. They must not seek to recover excessive profits during any earlier period.

(60). Under what circumstances should starting prices be adjusted for gas pipeline businesses?
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Rates of Change

550 Subject to the exception described in paragraph 552, the Commission must set only one rate of change (X) in respect of the same type of services. Sections 53P(5) to (7), deal with the setting of rates of change:

- (5) *Subject to subsection (8), the Commission must set only one rate of change per type of regulated goods or services (for example, if the rate of change (x) is 1% in a CPI-X path, 1% must be the rate for all goods or services of that type).*
- (6) *The rate of change must be based on the long-run average productivity improvement rate achieved by either or both of suppliers in New Zealand, and suppliers in other comparable countries, of the relevant goods or services, using whatever measures of productivity the Commission considers appropriate.*
- (7) *When setting the rate of change, the Commission may take into account the effects of inflation on the inputs of suppliers of the relevant goods or services.*

(61). What do you consider to be appropriate productivity measures for gas pipeline businesses?

551 The Commission has previously considered the use of alternative price indices in the price-path thresholds set under the old Part 4A.¹³⁹

(62). Do you consider the reference to inflation allows for the use of alternative price indices, and if so, what indices may be appropriate for gas pipeline businesses? Does this relate to the overall form of the price cap or does it allow the Commission to include an input price differential when specifying the X factor?

(63). Under what conditions might it be appropriate to include productivity growth information from overseas in setting the X factor? What adjustments might it be necessary to make to overseas data if it were to be included?

552 An alternative X-factor may be set for particular GPBs, as an alternative, in whole or in part, to the starting prices if, in the Commission's opinion, this is “necessary or desirable to minimise any undue financial hardship to the supplier or to minimise price shock to consumers”; or as an incentive to improve quality of supply. These alternative rates may include step changes. They may also include incentives (rewards/penalties) to maintain or improve quality of supply, consumer compensation schemes and special quality reporting requirements.

553 The Commission considers that these provisions allow for alternative X-factors and that these may be used as a ‘glide-path’ approach to adjust starting prices. The provision allowing for quality related incentives suggest the possible use of an ‘S-factor’ approach¹⁴⁰ as previously considered by the Commission for electricity lines businesses.

(64). To what extent might an S-factor approach for gas pipeline businesses be consistent with the statutory provisions?

¹³⁹ See footnote 129.

¹⁴⁰ See footnote 130.

Quality Standards

- 554 Section 53M(3) provides that quality standards may be prescribed in any way the Commission considers appropriate (such as targets, bands, or formulae) and may include responsiveness to consumers.

(65). What dimensions of service quality are directly relevant to gas pipeline businesses?

Default Price-Path Determination

- 555 As provided for in section 55F(3), the Commission may set a DPP for suppliers of gas pipeline services even if all of the relevant input methodologies have not been determined. However, sections 55F(3) and (4) sets out provisions for how input methodologies may be applied following their publication:

- (4) *If an input methodology is published after a section 52P determination referred to in subsection (1) is made, and if, had that methodology applied at the time the default price-quality paths were set as required by subsection (1), it would have resulted in a materially different path being set, then the Commission may reset the default price-quality paths and may apply clawback, despite section 53ZB(1).*
- (5) *However, the Commission may not exercise its powers in subsection (4) later than 9 months after the date of publication of the input methodology.*

9.2.5 Customised Price-Quality Paths

CPP Proposals

- 556 If the DPP is not considered appropriate by a GPB, it may make a customised price-path proposal. Requirements that must be met by the supplier making a CPP proposal and the associated evaluation criteria for the Commission are determined under the input methodology process defined in subpart 3. Subpart 6 of Part 4 specifies the process and timing for making and assessing CPP determinations (these are discussed in section 6.6.3).

9.2.6 Transitional Arrangements for Vector and Powerco

- 557 Sections 55G and 55H sets out transitional arrangements that apply to gas pipeline services controlled by virtue of the Commerce (Control of Natural Gas Services) Order 2005. The authorisation applying to the gas pipeline services supplied by Vector and Powerco was made in relation to this Order in Council.

- 558 Section 55G provides for the continuation of the Order in Council and the ability to use provisions under old Part 5, and also sets out how breaches of the Order in Council may be dealt with.

- (1) *This section provides how price-quality regulation under this Part applies to services that are controlled by virtue of the Commerce (Control of Natural Gas Services) Order 2005 (the Order).*
- (2) *The Order continues in force, despite the repeal of Part 4 (as it was before its repeal by the Commerce Amendment Act 2008), until the date on which the Order expires or is revoked (the expiry date).*
- (3) *The enactment of the Commerce Amendment Act 2008 does not limit or affect, before the expiry date, any of the following in respect of the gas pipeline services that are controlled by virtue of the Order:*

- (a) *any authorisation made (including the ability to amend or revoke an authorisation), or any undertaking obtained or accepted, under Part 5 before 1 April 2009; or*
 - (b) *the power of the Commission to obtain or accept any further undertakings under Part 5; or*
 - (c) *any action that may be commenced or continued in respect of a breach of any authorisation or undertaking.*
- (4) *To avoid doubt, subsection (3) applies as if the provisions of Parts 4 to 6 had not been amended or repealed by the Commerce Amendment Act 2008.*
 - (5) *However, any breach of the Order after 1 April 2009 may be dealt with under Part 6 as if it were a breach of a customised price-quality path.*

559 Section 55H sets out the transitional provisions for a gas pipeline service after it ceases to be controlled by virtue of the Commerce (Control of Natural Gas Services) Order 2005.

- (1) *This section provides how price-quality regulation under this Part applies to a gas pipeline service after it ceases to be controlled by virtue of the Commerce (Control of Natural Gas Services) Order 2005 (the Order).*
- (2) *The expiry of the Order must be treated as if it were the expiry of a customised price-quality path, and section 53X applies accordingly.*
- (3) *In this section, the date on which the Order expires is—*
 - (a) *the expiry date referred to in section 55G; or*
 - (b) *if an undertaking is obtained or accepted from a supplier in respect of a service that expires on an earlier date, that earlier date, provided that the Order ceases to apply to that service on or before that date (by revocation of the Order or otherwise).*

(66). Do you consider that the Commission should revoke the Authorisations for Vector and Powerco prior to 30 June 2012 so that they are subject to default price-quality paths from the same date as other regulated gas pipeline businesses?

9.2.7 Mandatory Considerations

Interaction with Gas Act 1992

560 Section 55I sets out the provisions relating to the interface with the Gas Act 1992. These include that before exercising any of its powers under Part 4, the Commission must take into account any gas governance regulation or rule under Part 4A of the Gas Act 1992 that relates to quality standards or pricing methodologies, or relevant guidelines which it is advised that are likely to be relevant.

CHAPTER 10: AIRPORT SERVICES

561 This chapter discusses the statutory provisions that apply to regulation of suppliers of specified airport services.

10.1 INTRODUCTION

562 Specified airport services are subject to information disclosure regulation under subpart 11 of Part 4 of the Act. That subpart came into force on 14 October 2008 and prescribes:

- the scope of regulated services;
- arrangements for transition from the previous regulatory regime;
- when the provisions take effect and the statutory timeframes for making section 52P determinations; and
- monitoring responsibilities for the Commission, including a requirement to provide a one-off report to the Ministers of Commerce and Transport.

563 These are discussed in the following section.

10.2 REGULATORY PROVISIONS

10.2.1 Commencement

564 Subpart 11 of Part 4 of the Act came into force from 14 October 2008.

10.2.2 Scope of Instruments

565 Specified airport services that are supplied by the companies operating Auckland, Wellington and Christchurch International Airports (“airport companies”) are regulated under the Act.

566 Section 56A defines “specified airport services” as including the following activities (whether for international or domestic flights):

- (a) *aircraft and freight activities;*
- (b) *airfield activities;*
- (c) *specified passenger terminal activities; and*
- (d) *any other services that are determined by the Governor-General, by Order in Council made on the recommendation of the Minister, to be specified airport services.*

567 Each of the above activities is defined in detail in the Airport Authorities Act 1966 (AAA). These definitions are quite broad and include non-exhaustive lists of the types of activity that are considered to fall within each of these categories.

568 The AAA defines “aircraft and freight activities” as activities undertaken (including the facilities and services provided) to enable the servicing and maintenance of aircraft and the handling of freight, including:

- (a) *the provision within a security area of any one or more of the following:*
 - (i) *hangars;*
 - (ii) *facilities and services for the refuelling of aircraft, flight catering, and waste*

disposal;

- (iii) facilities and services for the storing of freight;*
- (iv) security, customs, and quarantine services for freight; and*

- (b) the holding of any facilities and assets (including land) acquired or held to provide aircraft and freight activities in the future (whether or not used for any other purpose in the meantime).*

569 The AAA defines “airfield activities” as activities undertaken (including the facilities and services provided) to enable the landing and take-off of aircraft, including:

- (a) the provision of any one or more of the following:*
 - (i) airfields, runways, taxiways, and parking aprons for aircraft*
 - (ii) facilities and services for air traffic and parking apron control;*
 - (iii) airfield and associated lighting;*
 - (iv) services to maintain and repair airfields, runways, taxiways, and parking aprons for aircraft;*
 - (v) rescue, fire, safety, and environmental hazard control services*
 - (vi) airfield supervisory and security services; and*
- (b) the holding of any facilities and assets (including land) acquired or held to provide aircraft and freight activities in the future (whether or not used for any other purpose in the meantime).*

570 The AAA defines “specified passenger terminal activities” as activities undertaken (including the facilities and services provided) in relation to aircraft passengers while those passengers are in a security area, including:

- (a) the provision of any one or more of the following:*
 - (i) passenger seating areas, thoroughfares, and airbridges;*
 - (ii) flight information and public address systems;*
 - (iii) facilities and services for the operation of customs, immigration, and quarantine checks and control;*
 - (iv) facilities for the collection of duty-free items;*
 - (v) facilities and services for the operation of security and Police services;*
 - (vi) any activities undertaken (including the facilities and services provided) in a passenger terminal to enable the check-in of aircraft passengers, including services for baggage handling; and*
- (b) the holding of any facilities and assets (including land) acquired or held to provide aircraft and freight activities in the future (whether or not used for any other purpose in the meantime);*
- (c) but does not include the provision of any space for retail activities.*

571 In addition, under section 56A(1)(d), the Governor-General, by an Order in Council made on the recommendation of the Minister, may determine any other services to be specified airport services. Section 56A(4) specifies a number of prerequisites for such recommendations.

10.2.3 Transitional Arrangements

- 572 Section 56F sets out the arrangements for transition from the information disclosure regime established under the Airport Authorities (Airport Companies Information Disclosure) Regulations 1999 (Airport Regulations) to the new regulatory provisions under the Act.
- 573 It provides that the information disclosure requirements set under the Airport Regulations continue to apply to each regulated airport company until the requirements are superseded by a section 52P determination made under section 56E of the Act. That is, airport companies must continue to disclose audited financial statements to the Secretary of Transport not later than 5 months following the end of financial year, in accordance with Part 6 of the Airport Regulations.
- 574 Under section 56F, regulated airport companies must now also supply the Commission with copies of disclosures made under the Airport Regulations, as soon as practicable after so disclosing. The first set of disclosures that will be provided to the Commission relate to the financial year ending 30 June 2008. Section 56F(4) provides that the Commission may monitor and analyse any disclosure information that it is disclosed to it under the Airport Regulations.
- 575 After the determination made under the Act takes effect, no regulations made under section 9A of the AAA apply to the regulated airport companies.

10.2.4 Information Disclosure

- 576 Section 56E provides that the Commission must make a determination setting out how information disclosure regulation applies to regulated airport companies no later than 1 July 2010 (or, if the deadline for determining input methodologies is extended under section 52U(2), no later than the day after the date to which that deadline is extended). The Commission does not intend to issue such a determination until applicable input methodologies are developed.
- 577 The Commission will consult with interested parties prior to issuing a determination. Given that the statutory deadline for such a determination (1 July 2010) is one day after the statutory deadline for the determination of input methodologies (30 June 2010), consultation on the information disclosure determination for regulated airport companies will need to take place in parallel with consultation on applicable input methodologies.
- 578 In issuing new information disclosure requirements for regulated airport companies under the Act, the Commission will need to consider what requirements are needed to meet the purpose of information disclosure regulation in section 53A of the Act.

- (67). What areas of information do you consider are relevant when developing information disclosure requirements for regulated airport companies?
- (68). What are your initial views on the suitability of the current information disclosure requirements under the Airport Regulations?

10.2.5 Report to Ministers

579 Section 56G states that the Commission must review the information disclosure requirements that are in place under the Act from 2010 as soon as practicable after suppliers set any new price for a specified airport service in 2012 (this review must be carried out regardless of whether or not any new price for a specified airport service is actually set before 2012). The Commission must:

- (a) *review the information that has been disclosed by suppliers of specified airport services under subpart 4; and*
- (b) *consult (without necessarily holding an inquiry) with interested parties; and*
- (c) *report to the Ministers of Commerce and Transport as to how effectively information disclosure regulation is promoting the purpose in section 52A in respect of the specified airport services.*

580 A proposed process for completing the report to Ministers (Airports Report) on the effectiveness of information disclosure regulation at meeting the objectives of Part 4 will be consulted on in the future.

10.2.6 Additional Considerations

581 Section 53F provides that suppliers that are subject only to information disclosure regulation (such as the regulated airport companies) need not apply any input methodologies that relate to pricing methodologies, or methodologies for evaluating or determining the cost of capital.

582 As discussed above, the effectiveness of information disclosure regulation, as it applies to airport services, is the subject of the Airports Report. In developing the Airports Report the Commission may consider whether negotiate/arbitrate regulation and/or price-quality regulation, (which have both previously considered as potential options for regulating airport services),¹⁴¹ may better achieve the regulatory purpose of the Act (section 52A). The Commission intends setting out its expectations as to how these types of regulation would operate in the context of airport services regulation prior to the development of the Airports Report.

¹⁴¹ Supra n 123, p. 37.

CHAPTER 11: PENALTIES AND APPEALS

583 This chapter sets out the penalty provisions for breaches of regulatory provisions and the appeal provisions that are available.

11.1 PENALTIES

584 Part 6 of the Act allows the Court to make various types of order upon breach of the regulatory provisions, namely orders:

- a) requiring compliance;
- b) imposing a pecuniary penalty for a breach;
- c) requiring payment of compensation for a breach; or
- d) convicting a person for a breach and requiring them to pay a fine.

585 Section 79B describes the relationship between pecuniary penalties and criminal liability as follows:

- (1) *Once criminal proceedings against a person for an offence under section 86B or 87B are determined, the High Court may not order the person to pay a pecuniary penalty in respect of the conduct, events, transactions, or other matters that were the subject of the criminal proceedings.*
- (2) *Once civil proceedings against a person for a pecuniary penalty under this Part are determined, the person may not be convicted of an offence under section 86B or 87B in respect of the conduct, events, transactions, or other matters that were the subject of the civil proceedings.*

11.1.1 Orders Requiring Compliance

586 Section 86A allows the Commission to apply for an order requiring compliance with an information disclosure requirement:

- (1) *The Court may, on application by the Commission, order a supplier of regulated goods or services to comply with an information disclosure requirement that applies to the supplier.*
- (2) *An order under this section must specify the date by which, or period within which, the supplier must comply with the requirement.*

587 Section 87C allows a person to apply for an order requiring compliance with a price-quality requirement:

- (1) *If the Court is satisfied that goods or services that are subject to price-quality regulation are being supplied, or are likely to be supplied, in contravention of any price-quality requirement applying with respect to those goods or services, the Court may do either or both of the following:*
 - (a) *grant an injunction restraining any supplier of those goods or services from supplying them in contravention of the price-quality requirement;*
 - (b) *requiring the supplier to supply the goods or services in accordance with the price-quality requirement applying to them.*
- (2) *An application for an order under this section may be made by any person.*

588 The bolded phrase at section 87C(1) implies that pre-emptive action is possible if necessary. The Commission might argue that it is necessary in particular circumstances

based on the information it obtains in monitoring compliance with price-quality requirements.

11.1.2 Orders Imposing Pecuniary Penalties

589 Sections 86 and 87 set out the pecuniary penalties for contravening information disclosure and price-quality requirements. In both cases:

- (a) *the amount of pecuniary penalty must not, in respect of each act or omission, exceed \$500,000 in the case of an individual, or \$5,000,000 in the case of a body corporate; and*
- (b) *proceedings may be commenced at any time within 3 years after the contravention occurred.*

11.1.3 Orders Requiring Payment Of Compensation

590 Section 87A provides that, where a person is required to pay a pecuniary penalty for breach of a price-quality requirement, it may also be required to pay compensation for such a breach:

- (1) *If the Court orders a person to pay a pecuniary penalty under section 87 in respect of the contravention of a price-quality requirement, the Court may, in addition, order the person to pay compensation to any person who has suffered, or is likely to suffer, loss or damage as a result of the contravention (an aggrieved person).*
- (2) *An application for orders under this section may be made by the Commission or any aggrieved person.*
- (3) *The application must be made within 1 year of the date of the pecuniary penalty order.*
- (4) *The Court may make an order under this section whether or not any aggrieved person is party to the proceedings.*
- (5) *In proceedings under this section, the Court may make such orders as to cost as it thinks fit.*

11.1.4 Orders Imposing Criminal Convictions

591 Sections 86B and 87B make it a criminal offence to knowingly/intentionally contravene an information disclosure or a price-quality requirement. In both cases:

- (a) *a person who commits an offence under subsection (1) is liable on summary conviction to a fine not exceeding \$200,000 in the case of an individual, or \$1,000,000 in the case of a body corporate; and*
- (b) *proceedings may be commenced at any time within 3 years after the contravention occurred.*

11.2 APPEALS

592 The Act provides for a right of appeal on input methodology determinations and determinations made by the Commission under section 52P in relation to customised and individual price-quality paths.

11.2.1 Input Methodologies

593 The Act provides for a right of appeal to the High Court on the merits of the Commission's determinations on input methodologies (and not just on questions of law that arise in respect of such determinations). Section 52Z provides that:

- (1) *Any person who gave views on an input methodology determination to the Commission as*

part of the process under section 52V, and who, in the opinion of the Court, has a significant interest in the matter, may appeal to the High Court against the determination.

- (2) *In this section and section 52ZA, input methodology determination means any of the following:*
 - (a) *the initial determination of an input methodology;*
 - (b) *any determination by the Commission that amends the input methodology;*
 - (c) *any determination by the Commission of an input methodology following a review of the input methodology.*
- (3) *In determining an appeal against an input methodology determination, the Court may do any of the following:*
 - (a) *decline the appeal and confirm the input methodology set out in the determination;*
 - (b) *allow the appeal by:*
 - (i) *amending the input methodology; or*
 - (ii) *revoking the input methodology and substituting a new one; or*
 - (iii) *referring the input methodology determination back to the Commission with directions as to the particular matters that require amendment.*
- (4) *The Court may only exercise its powers under subsection (3)(b) if it is satisfied that the amended or substituted input methodology is (or will be, in the case of subsection (3)(b)(iii)) materially better in meeting the purpose of this Part, the purpose in section 52R, or both.*
- (5) *If the Court allows an appeal, the Commission may seek clarification from the Court on any matter for the purpose of implementing the Court's decision.*
- (6) *There is a right of appeal under section 97 to the Court of Appeal from any decision or order of the High Court under this section on a point of law only.*

594 Section 52Z(4) can be clarified as follows. The role of the Commission is to set input methodologies that it considers (having taken expert advice and undertaken its own analysis, etc.) best meet the purpose of the Part. It is the role of the Court to decide whether there is any “materially better” option, and the meaning of that phrase.

595 Section 52ZA provides that:

- (1) *Any appeal under section 52Z must be brought within 20 working days after the date on which the input methodology determination is published.*
- (2) *The appeal must be by way of rehearing and must be conducted solely on the basis of the documentary information and views that were before the Commission when it made its determination, and no party may introduce any new material during the appeal.*
- (3) *The High Court must sit with 2 lay members (unless the Court considers that only 1 is required).*
- (4) *Each of the lay members must have relevant experience and be appointed from the pool of people appointed under section 77 to be members of the Court for the purpose of hearing the appeal.*
- (5) *Section 77 applies, and section 77(14) is not limited by subsection (3) of this section.*

596 Section 53 provides that input methodologies remain in effect until an appeal is determined:

- (1) *The High Court may not stay the application of section 52S with respect to any input methodology published under section 52W until any appeal against it is finally determined.*

- (2) *Section 52S continues to apply with respect to every input methodology published under section 52W until any appeal against the input methodology is finally determined.*

11.2.2 Other Determinations

597 There is also a right of appeal to the High Court on:

- a) the merits of the Commission's determinations on customised and individual price-quality paths; and
- b) questions of law that arise in respect of determinations that relate to other regulatory instruments.

598 These rights of appeal have intentionally been kept separate from the right of appeal in relation to input methodologies, as demonstrated by section 91(1)(A) below. Any appeals relating to input methodologies should be made under section 52Z.

599 Section 91 provides that:

- (1) *There is a right of appeal to the High Court under this subsection against any determination of the Commission under this Act, other than the following:*
 - (a) *a determination, or any part of a determination, made under section 52P (a section 52P determination) that sets out:*
 - (i) *how information disclosure regulation or negotiate/arbitrate regulation applies to regulated suppliers; or*
 - (ii) *the default price-quality path that applies to regulated suppliers;*
 - (b) *an input methodology determination (as defined in section 52Z, and for which a separate appeal right is given under that section).*
- (1A) *An appeal against a section 52P determination may not include an appeal against all or part of an input methodology, whether on a point of law or any other ground.*
- (1B) *There is a right of appeal to the High Court on a question of law against any determination of the Commission under this Act (including a determination referred to in subsection (1)).*
- (2) *Every such appeal shall be made by giving notice of appeal within 20 working days after the date of the determination appealed against or within such further time as the Court may allow.*

CHAPTER 12: NEXT STEPS

600 The table below summarises the main papers the Commission intends to release to implement the regulatory provisions of Part 4 of the Act. Dates reflecting statutory deadlines are **bolded**, while other milestone dates are indicative and may vary.

Table 10 Indicative Milestones Dates

Milestone	Electricity Distribution	Electricity Transmission	Gas	Airports
Transition of EDB thresholds	1 Apr 2009	N/A	N/A	N/A
DPP discussion paper	Q2 2009	N/A	Q2 2009	N/A
Guidelines discussion paper	May 2009			
Information disclosure discussion paper	TBC	TBC	TBC	Q2 2009
DPP conference	June 2009	N/A	Q3 2009	N/A
Regulatory Guidelines conference	Q3 2009			
DPP decision paper	Q3 2009	N/A	Q3 2009	N/A
Input methodologies draft determinations	Q4 2009 / Q1 2010			
DPP determinations	1 Dec 2009	N/A	1 Mar 2010	N/A
DPP take effect	1 Apr 2010	N/A	1 Jul 2010	N/A
Information disclosure decision paper	TBC	TBC	TBC	Q2 2010
Recommendation to Minister on Transpower	N/A	Q2 2010	N/A	N/A
Input methodologies determinations	30 Jun 2010*			
Information disclosure determinations	TBC	TBC	TBC	1 Jul 2010*
Transpower price-quality path determination	N/A	1 Mar 2011	N/A	N/A
Transpower price-quality path takes effect	N/A	1 Jul 2011	N/A	N/A
Powerco and Vector authorisations due to expire	N/A	30 Jun 2012	N/A	N/A
Report to Ministers on Airports information disclosure	N/A	N/A	N/A	Post 2012

* Subject to possible extension of up to six months

(69). Do you have any views on the indicative timelines and milestones outlined above?

Appendix A Questions

QUESTIONS	
1	Do you have any views on the new purpose statement in section 52A of the Act and how this might impact on the Commission's role?
2	In what ways do you consider the new purpose statement in section 52A to be materially different from that in section 57E?
3	Do you agree with the regulatory framework principles proposed above? If not, please explain.
4	Are there other economic or regulatory framework principles that the Commission might apply in performing its functions under Part 4 of the Act? If so, please discuss.
5	Do you agree with the implementation principles proposed above? If not, please explain.
6	Are there other implementation principles that the Commission might apply in performing its functions under Part 4 of the Act? If so, please discuss.
7	Do you have any views on the potential form and the extent of the role of input methodologies as applied to the regulatory instruments under Part 4?
8	What matters should be covered by the "processes and rules" referred to in section 52T(1)(c)?
9	Do you have any views on the proposed process to determine input methodologies? If so, please explain.
10	How should the financial capital maintenance approach apply to input methodologies?
11	What do you consider to be the main interdependencies between the key components of the Regulatory Guidelines?
12	How might cost allocation methodologies prevent inefficient cross-subsidisation from occurring, while not unduly deterring investment by a supplier of regulated services in the provision of other services?
13	Do you consider that the classification and description of the different types of regulated assets is appropriate? Please explain.
14	Are there any other asset valuation methodology options the Commission should consider for valuing these or other asset types? Please discuss.
15	An asset valuation methodology may be employed for different sectors and under different regulatory instruments. It will also need to be cognisant of any relevant regulatory purpose statements. In this context, what are your preferred options and what are their relative pros and cons?
16	What issues do you consider relevant in terms of potential mechanisms for promoting efficiency and accountability of investments?
17	What are the pros and cons of the various ex post or ex ante optimisation techniques, prudency reviews, or capital expenditure reviews, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?
18	What are the pros and cons of potential approaches to depreciation, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?

19	How might the Commission assess the likelihood of, and then deal with the prospect of, asset stranding?
20	What are the pros and cons of potential approaches to indexing the regulatory asset base, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?
21	What industry-specific or instrument-specific issues do you consider to be relevant when determining guidelines for the cost of capital for services subject to regulation under Part 4?
22	What are the pros and cons of the potential approaches to tax, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments?
23	What are the pros and cons of potential approaches to cost allocation, in light of the section 52A and 52R purpose statements, when applied to different sectors, and under different regulatory instruments? Consider the potential approaches at both the business unit level and when establishing pricing methodologies.
24	What implications do the statutory constraints on setting (and resetting) default price-quality paths have for selecting the appropriate asset valuation methodology?
25	Do you consider the Commission should focus on particular types of information during the monitoring and analysis of disclosed information?
26	How prescriptive should information disclosure requirements be in order for suppliers to reasonably demonstrate compliance and for the Commission to assess whether compliance has been achieved?
27	What areas of information should the Commission require to be disclosed to satisfy the section 53A purpose statement?
28	Do you agree with the view that the financial capital maintenance concept should apply to information disclosure regulation to meet the section 53A purpose statement?
29	Should input methodologies seek to take account of how negotiate/arbitrate regulation might be applied in the future? If so, how might this be achieved?
30	What matters (other than the supplier's price and quality standards) do you consider the Commission could require parties to agree to by negotiation or be bound to by arbitral award?
31	Under what conditions might it be appropriate for the Commission to apply 'claw-back' when determining a customised price-quality path?
32	What do you understand "comparative benchmarking on efficiency" to mean?
33	The provisions for setting and resetting default price-quality paths suggest that a CPI-X form of price path be implemented, do you agree?
34	Do you consider that the Commission should prioritise customised price-quality path proposals before or after it receives complete proposals? If after, should the prioritisation occur before or after its preliminary assessment of whether proposals comply with the relevant input methodologies?
35	Given the Commission's discretion in setting individual price-quality paths, what initial views do you have as to the form this instrument should take?
36	Do you consider that individual price-quality regulation should be the preferred form of price-quality regulation for single supplier sectors? Please explain.

37	Do you have any views on the Commission's proposed approach to determining which electricity distribution businesses are subject to price-quality regulation? If so, please explain.
38	What factors should be considered when determining information disclosure requirements for EDBs under the new regulatory provisions? To what extent does the new purpose statement for information disclosure regulation (section 53A) require amendment to the current information disclosure requirements?
39	Given that consumer-owned EDBs are only subject to information disclosure regulation, do you think that different information disclosure requirements should apply to those EDBs?
40	Do you have any views on the Commission's proposed approach to applying the thresholds to Wellington Electricity? Please explain.
41	What are the possible impacts of applying the current thresholds to Vector following the sale of its Wellington network?
42	Are there any additional issues that you believe the Commission should consider when transitioning the thresholds? If so, please explain.
43	Are there any particular circumstances in which you consider that the Commission should adjust starting prices for electricity distribution businesses?
44	What are appropriate productivity measures for electricity distribution businesses?
45	Do you consider the reference to inflation allows for the use of alternative price indices? If so, what indices may be appropriate? Does this relate to the overall form of the price cap or does it allow the Commission to include an input price differential when specifying the X factor?
46	Under what conditions might it be appropriate to include productivity growth information from overseas in setting the X factor? What adjustments might be necessary if overseas data were used?
47	Under what circumstances should alternative X-factors be used?
48	What factors do you consider are relevant when prescribing quality standards under a default price-quality path?
49	Do you have any views on the content and evaluation of customised price-quality path proposals for electricity distribution businesses? Please explain.
50	What measures do you consider appropriate to promote energy efficiency under the regulatory instruments applicable to electricity distribution businesses, particularly given the Electricity Commission's role regarding pricing methodologies?
51	Do you have any views on the proposed process for determining default price-quality paths? If so, please explain.
52	What factors do you consider relevant in developing information disclosure requirements for Transpower under the new legislative regime?
53	What are the pros and cons of default/customised price-quality regulation and individual price-quality regulation?
54	Do you have any views as to which should apply to Transpower from July 2011? If so, please explain.
55	What measures to promote energy efficiency do you consider are appropriate under the potential mechanisms for Transpower?

56	Do you have any views on the timing of and content of the recommendation to the Minister?
57	Do you have any comments on the indicative list of gas pipeline businesses subject to regulation under Part 4? Do you have any views as to how this list can be maintained? If so, please explain.
58	Do you have any views on the suitability of the information disclosure requirements established under the Gas (Information Disclosure) Regulations 1997 for the purposes of information disclosure regulation under the Act?
59	Do you have any comments on the above discussion?
60	Under what circumstances should starting prices be adjusted for gas pipeline businesses?
61	What do you consider to be appropriate productivity measures for gas pipeline businesses?
62	Do you consider the reference to inflation allows for the use of alternative price indices, and if so, what indices may be appropriate for gas pipeline businesses? Does this relate to the overall form of the price cap or does it allow the Commission to include an input price differential when specifying the X factor?
63	Under what conditions might it be appropriate to include productivity growth information from overseas in setting the X factor? What adjustments might it be necessary to make to overseas data if it were to be included?
64	To what extent might an S-factor approach for gas pipeline businesses be consistent with the statutory provisions?
65	What dimensions of service quality are directly relevant to gas pipeline businesses?
66	Do you consider that the Commission should revoke the Authorisations for Vector and Powerco prior to 30 June 2012 so that they are subject to default price-quality paths from the same date as other regulated gas pipeline businesses?
67	What areas of information do you consider are relevant when developing information disclosure requirements for regulated airport companies?
68	What are your initial views on the suitability of the current information disclosure requirements under the Airport Regulations?
69	Do you have any views on the indicative timelines and milestones outlined above?

Appendix B Glossary

LIST OF TERMS, ABBREVIATIONS AND ACRONYMS	
AAA	Airport Authorities Act 1966
ACAM	Avoidable Cost Allocation Methodology
ACCC	Australian Competition and Consumer Commission
Act, The	Commerce Act 1986
AMP	Asset management plan. The principal document that drives asset investment planning of EDBs.
Assessment Guidelines	Guidelines published by the Commerce Commission to inform interested parties of the Commission's broad process and analytical framework for assessing threshold compliance and for undertaking post-breach inquiries under the targeted control regime.
August 2006 GPS	Government Policy Statement relating to infrastructure investment incentives faced by regulated businesses.
CAA	Commerce Amendment Act 2008
Capex	Capital expenditure. Expenditure on investment in long-lived network assets, such as overhead lines.
CAPM	Capital asset pricing model
Commission, The	Commerce Commission
CPI	Consumer Price Index
CPP	Customised price-quality path
DHC	Depreciated historic cost
DPP	Default price-quality path
EDB	Electricity distribution business, a lines business providing distribution services rather than transmission services (i.e., a lines business other than Transpower).
EIRA	Electricity Industry Reform Act
ELB	Electricity lines business, a business defined to be a 'large electricity lines business' in section 57D of Part 4A, including Transpower.
FAC	Fully allocated cost

FDC	Fully distributed cost
FCM	Financial capital maintenance
GAAP	Generally accepted accounting practice
GPS	Government Policy Statements. Statements of economic policy transmitted in writing to the Commission by the Minister of Commerce under s26 of the Commerce Act.
IHC	Indexed historic cost
Initial Threshold	Thresholds set for the EDBs from 6 June 2003 under Part 4A of the Act.
km	Kilometres
kVA	Kilovolt-amperes (a measure of electrical capacity and apparent power).
kW	Kilowatt (a measure of real power).
LRIC	Long run incremental cost
MEA	Modern equivalent assets. Method of asset valuation that values the network at replacement cost where the replacement cost is determined as the cost of replacing assets with modern equivalent assets.
MED	Ministry of Economic Development
Meyrick	Meyrick and Associates, trading name for Meyrick Consulting Group Pty Ltd.
Minister, The	The Minister of Commerce
MOU	Memorandum of understanding
MTFP	Multilateral total factor productivity. Method of analysis to compare relative distribution business productivity. Allows for the comparison of absolute productivity levels, as well as growth rates.
MVA	Megavolt-amperes (a thousand kilovolt-amperes).
NGC	Natural Gas Corporation
NPV	Net present value
October 2006 GPS	Government Policy Statement relating to electricity governance.

ODRC	Optimised depreciated replacement cost
ODV	Optimised Deprival Value. Method of asset valuation based on valuing assets at the level at which they can be commercially sustained in the long term, and no more. The resulting value should be equal to the loss to the owner if they were deprived of the assets and then took action to minimise their loss.
ODV Handbook	Handbook describing the optimised deprival valuation methodology.
OECD	Organisation for Economic Co-operation and Development
OIC	Order in Council
Opex	Operating expenditure. The costs of the day to day operation of the network such as staff costs, repairs, maintenance expenditures, and overhead.
Part 4A	Part 4A (Provisions Applicable to Electricity Industry) of the Commerce Act 1986, which commenced on 8 August 2001.
Post-breach inquiry	Process Commission works through in order to decide whether or not to declare control on an EDB.
Principles	To assess the threshold options, the Commission has developed a set of Principles based on the evaluation criteria used to develop the current thresholds. The Principles reflect the Purpose Statement set out in s57E of the Act, regulatory best practice, and have had regard to relevant statements of economic policy transmitted to the Commission under s26 of the Act.
Process Paper	Paper published by the Commission on 30 July 2007 outlining a process for resetting the revised EDB thresholds.
Purpose Statement	The purpose of the targeted control regime as set out in s57E of the Commerce Act.
QCMA	The Australian Trade Practices Tribunal's discussion in <i>Re Queensland Co-operative Milling Association Ltd: Re Defiance Holdings Ltd</i> .
RAB	Regulatory asset base
Revised Thresholds	Thresholds for EDBs that were set on 1 April 2004. Also referred to as 'current thresholds'.

ROI	Return on investment. Measure of profitability as disclosed by the EDBs under the Information Disclosure.
RPI	Relative Profitability Indicator. Measure of profitability providing a normalised assessment of profitability based on a common depreciation rate being applied to each EDB.
SAC	Standalone cost
SAIDI	System average interruption duration index. A measure of the average time for which supply is off.
SAIFI	System average interruption frequency index. A measure of how often consumers are affected by interruptions.
s98 Notice	Notice issued by the Commission on 5 July 2007 under s98 of the Commerce Act requiring EDB's to submit information on their networks.
TFP	Total factor productivity. Change in productivity overtime, measured by the change in the ratio of outputs to inputs.
Transpower	Transpower New Zealand Limited. The state-owned enterprise that operates New Zealand's high-voltage transmission network.
X-factor	Efficiency factor. Under a CPI-X control a regulated business may increase average annual prices by no more than the change in the price of goods and services measured by CPI, less an annual percentage X.
WACC	Weighted average cost of capital. The weighted average of the expected cost of equity and the expected cost of debt.