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**Review of Commerce Commission's
Draft Gas Distribution Services
Decisions Paper**

A Report for Orion New Zealand Limited



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Executive Summary

A critical element of the Commerce Commission's (the Commission's) draft gas distribution services decisions is the establishment of appropriate opening values for the regulatory asset base (RAB) for Powerco Limited (Powerco) and Vector Limited (Vector). These values should be based on the cost that would be faced by a hypothetical new entrant (HNE) of average efficiency as at 25 August 2005. This is consistent with:

- § the fundamental economic principle that prices should reflect the opportunity cost of the resources displaced in providing services in the relevant market and so the promotion of competition for the long term benefit of consumers, consistent with section 1A of the Act;
- § safeguarding the interests of the acquirers of the controlled services from the excessive prices that might arise from an inappropriately *high* opening RAB, consistent with section 70A(b) of the Act;
- § promoting efficiency in the production and supply of the controlled services by ensuring that the opening RAB is not set inappropriately *low* and so avoiding a scenario in which prices are set at or below a level that would warrant the imposition of control, consistent with section 70A(c) of the Act; and
- § the general scheme of Part 5, which contemplates the RAB being set as at the date control commences without regard to valuations or methodologies that pre-date that time.

In its draft decision, the Commission has taken a quite different, and in our view, erroneous approach. Its treatment of 'amortised revaluation gains' essentially delivers an outcome that is consistent with it having established *1 July 2002* and *31 March 2003* as the starting point for control (or t_0) for Powerco and Vector, respectively. It does this by effectively adopting a roll-forward approach from these earlier dates, ie:

- § the Commission's actual approach is to set the opening RAB values based on the optimised deprival value (ODV) of system fixed assets as at 25 August 2005 (t_0), and retrospectively to adjust for 'amortised asset revaluation gains' since 1 July 2002 and 31 March 2003 for Powerco and Vector, respectively; but
- § equivalently, this can be represented as setting the opening RAB values according to the ODV of system fixed assets as at 1 July 2002 and 31 March 2003 (t_0) for Powerco and Vector, respectively and rolling forward those values to 30 June 2005 by accounting for interim new capital expenditure, depreciation and 'found assets'.

The Commission claims that its approach is consistent with the financial capital maintenance (FCM) concept. This is simply not the case. The FCM principle is *not relevant* to the initial valuation of the RAB. FCM is a *depreciation* concept that can be applied consistently to *any* initial opening RAB value. In itself, it has no bearing on *when* or *how* that initial RAB is set. In citing the FCM concept as supporting its approach the Commission is mistakenly conflating two separate tasks that it must undertake, namely:

- § *specifying an opening RAB*, which can and should be based on a HNE value as at 25 August 2005 – the FCM concept is irrelevant to this exercise; and

§ *establishing the framework by which forward-looking regulated prices will be determined, under which the opening RAB becomes the financial capital to be maintained, moving forward, assuming the FCM principle is adopted.*

Even if the most recent prior ODV valuations *were* the appropriate opening RAB values (a view we do not hold) the FCM concept does not necessarily require a backward-looking adjustment to be made to forward-looking prices at 25 August 2005 to reflect changes in asset values over the very short period since the most recent ODV valuations. Whether or not an after-the-fact adjustment is warranted depends upon the circumstances, including whether a commitment was made to undertake such a ‘wash-up’ when prices were last set (which it was not). Since this is effectively the first time prices have been determined following a comprehensive regulatory review, no such adjustment is necessary.

The Commission’s misinterpretation and misapplication of the FCM concept therefore involves it taking into account an *irrelevant consideration* in reaching its draft decision. It is also inconsistent with the general scheme of Part 5, which cannot be interpreted as allowing the retrospective adjustment the Commission proposes. Moreover, by setting inappropriately low RAB values that pre-date control the Commission’s decision is:

- § inconsistent with the outcomes of a workably competitive market outcome and so the promotion of competition for the long term benefits of consumers (section 1A);
- § not necessary to safeguard the interests of acquirers of gas distribution services (section 70A(b)); and
- § inconsistent with the promotion of long-term dynamic efficiency in the production and supply of those services (section 70A(c)).

We conclude that the Commission’s draft decision is in error. The opening RAB values should instead be based on the relevant ODV valuations as at 25 August 2005, without any adjustment for ‘amortised revaluation gains’ accruing prior to that date.

1. Introduction

This report has been prepared by NERA Economic Consulting (NERA) and Mark Berry, Barrister, on behalf of Orion New Zealand Limited (Orion). Its subject is the Commerce Commission's Draft Decision for the Authorisation for the Control of Natural Gas Distribution Services by Powerco Limited and Vector Limited (the draft decision). The draft decision is the product of two discrete inquiries, under Parts 4 and 5 of *the Commerce Act 1986* (the Act), respectively. The first has concluded and the second is ongoing:

- § the first inquiry under Part 4 was 'whether' to impose control on natural gas distribution services and was triggered by a Ministerial request.¹ It concluded with the 27 July 2005 decision of the Minister to impose control, pursuant to section 53 of the Act; and
- § the second inquiry under Part 5 requires the Commission to set the terms of Authorisation. This phase commenced on 25 August 2005 when the Commission was required to impose a Provisional Authorisation by virtue of section 55 of the Act. Prior to this date neither business was subject to formal price regulation.

Under the terms of that Provisional Authorisation, Powerco and Vector were required to reduce their average prices by 9 per cent and 9.5 per cent, respectively. The Commission must now decide the terms of the Authorisation proper, having regard to the criteria set out in sections 1A and 70A of the Act. The draft decision therefore represents the first occasion that the Commission has sought to define the terms of control under Part 5, with a view to establishing regulated prices to apply during the 2005-2016 term of the Control Order.

It should be noted that the context for the draft decision differs significantly from decisions made in respect of the Part 4A regime for electricity lines businesses, which involves the establishment of price and quality thresholds. These operate as screening mechanisms for subsequent decisions that are made by the Commission – rather than the Minister – as to whether or not to impose control where there has been the breach of a threshold.

The Commission's jurisdiction in the present inquiry is conferred under the authorisation provisions contained in Part 5 of the Act. The relevant provisions are those relating to the authorisation of controlled gas pipeline services provided by Vector and Powerco. Specifically, the Commission has power, under section 70(1), to set such price, quality and related terms 'using whatever approach it considers appropriate'. However, this power is not unfettered. The Commission must also have regard to the purpose statement provisions contained in section 1A, and the guiding considerations set out in section 70A. This means that the Commission must take into account the following considerations:²

- § the promotion of competition for the long term benefit of consumers in New Zealand (section 1A);
- § the extent to which competition is limited or likely to be lessened (section 70A(a));

¹ The Minister asked the Commission to report to him on whether control should be imposed, consistent with s56(3) and with reference to the grounds appearing in s52 of the Act.

² The Commission may also take into other relevant considerations, such as the costs of regulation, as indicated in paragraph 78 of its draft decision.

- § the necessity or desirability of safeguarding the interests of the acquirers of the controlled services (section 70A(b)); and
- § the promotion of efficiency in the production and supply of the controlled services in question (section 70A(c)).

The date from which Part 5 begins to apply in the present case is 25 August 2005, being the date that control was imposed pursuant to section 53 and the Commerce (Control of Natural Gas Services) Amendment Order 2005. Accordingly, the matter at hand is for the Commission to set final authorisation terms *with effect from 25 August 2005*.³ This effectively involves two sub-tasks:

- § to establish initial prices as at 25 August 2005, having regard to the various considerations under the statutory scheme - of which the valuation of the regulatory asset base (RAB) will be a critical element; and
- § to establish an arrangement that allows those initial prices to be updated over time as inflation and underlying costs change.

This report focuses primarily on the Commission's approach to the *first* of these discrete tasks. In particular, it examines the Commission's application of the FCM concept and the associated measurement and treatment of what it terms 'amortised revaluation gains' to the two questions of the establishment of the initial RAB and how changes in the RAB over time will be dealt with. The remainder of the report is structured as follows:

- § section two summarises the approach employed by the Commission to establishment of the opening RAB;
- § section three provides an overview of the FCM concept and its potential applicability to the Commission's dual tasks;
- § section four describes what we consider to be the appropriate approach to establishing the opening RAB for the control period in light of the statutory criteria;
- § section five highlights a number of deficiencies in the Commission's approach to establishing the opening RAB; and
- § section six concludes.

³ With the explicit legislative exception of section 70C of the Act which provides that if the final price is lower than the provisionally authorised price the Commission may impose remedies by way of refunds, compensation and the like.

2. Commission's Approach to Setting the Opening RAB

Capital related costs account for a very substantial portion of gas distribution companies' total costs and so the long term costs of providing gas transportation services are largely determined by the efficiency of investment. If the regulatory arrangements ensure that service providers have the opportunity to earn a reasonable rate of return on their deployed capital, they will have the confidence to continue making appropriate investments, fostering dynamic efficiency.

Conversely, if the regulatory arrangements deprive businesses of the opportunity to earn a reasonable return on assets - say, by setting regulatory asset values too low - businesses may decline to invest because they do *not* have sufficient confidence of earning an adequate return on their efficient investments. The specification of the opening asset values for the purposes of establishing initial prices and the determination of the way in which changes asset values over time will be treated by the control framework are therefore critical considerations.

On 15 February 2007 the Commission released its methodology for estimating the opening RAB for the pending Authorisation for the control of supply of gas distribution services by Powerco and Vector. It stated that the opening value of the RAB at the start of the initial control period – 25 August 2005 – would be based on an optimised deprival valuation (ODV) carried out as at 30 June 2005:⁴

‘The release of this Valuation Methodology will allow Powerco and Vector to complete the valuation of their opening RAB for control purposes ... Each of the valuations shall be as at 30 June 2005.’

Put another way, 25 August 2005 was established as the starting date or ‘ t_0 ’ for the regulatory period, and the opening RAB was to be based on an ODV valuation estimate as at 30 June 2005. Consistent with this, in its draft decision the Commission stated that:⁵

‘The opening RAB is the value of the assets used in the provision of controlled services at the start of a control period, for the initial control period this is at 25 August 2005, i.e., the date at which the Order took effect.’

The ODV valuation of Powerco and Vector's assets as at 30 June 2005 was **\$361,936,585** and **\$315,335,599**, respectively, and the draft opening RAB was set at this same amount. The corresponding valuations of *system fixed assets* were estimated to be **\$359,008,825** and **\$305,771,459**, also respectively.

However, in its draft decision the Commission notes that these opening values are ‘significantly higher’ than the *most recent prior* ODV valuations undertaken by the two businesses and ‘rolled forward’ to take account of interim capital expenditure, depreciation and ‘found assets’. The Commission therefore proposes to treat the difference between the opening values of the RAB as at 25 August 2005 and the amount derived by ‘rolling forward’

⁴ Commerce Commission, *Authorisation for the Supply of Natural Gas Distribution Services by Powerco and Vector: Valuation of the Opening Regulatory Asset Base, Valuation Methodology*, 15 February 2007, p2 (Hereafter: ‘Draft decision’).

⁵ Draft decision, p67.

the most recent prior ODV valuations as 'revaluation gains' and thus economic income. It considered this to be consistent with:⁶

- § the FCM concept;
- § past and current practice under the Gas (Information Disclosure) Regulations; and
- § the approach taken in the Gas Control Inquiry; and
- § the requirements of Part 5.

The most recent prior ODV valuations for Powerco and Vector were undertaken as at 1 July 2002 and 31 March 2003, respectively. Table 1 summarises the calculation of the 'amortised revaluation gains' associated with the opening RAB valuations as at 25 August 2005. It illustrates that in each year of the first regulatory period (and potentially also beyond the second regulatory period⁷) the annual revenue requirements will be reduced by **\$12,907,426** and **\$9,269,897** for Powerco and Vector, respectively.

Table 1: Calculation of 'Amortised Revaluation Gains'

	Powerco	Vector
ODV of system fixed assets as at 30 June 2005	\$359,008,825	\$305,771,459
'Rolled forward' most recent ODV valuation	\$221,723,806	\$207,111,195
Revaluation gain	\$137,285,019	\$98,660,264
Amortisation period ⁸	44 years	50 years
Annual amortised revaluation gain⁹	\$12,907,426	\$9,269,897

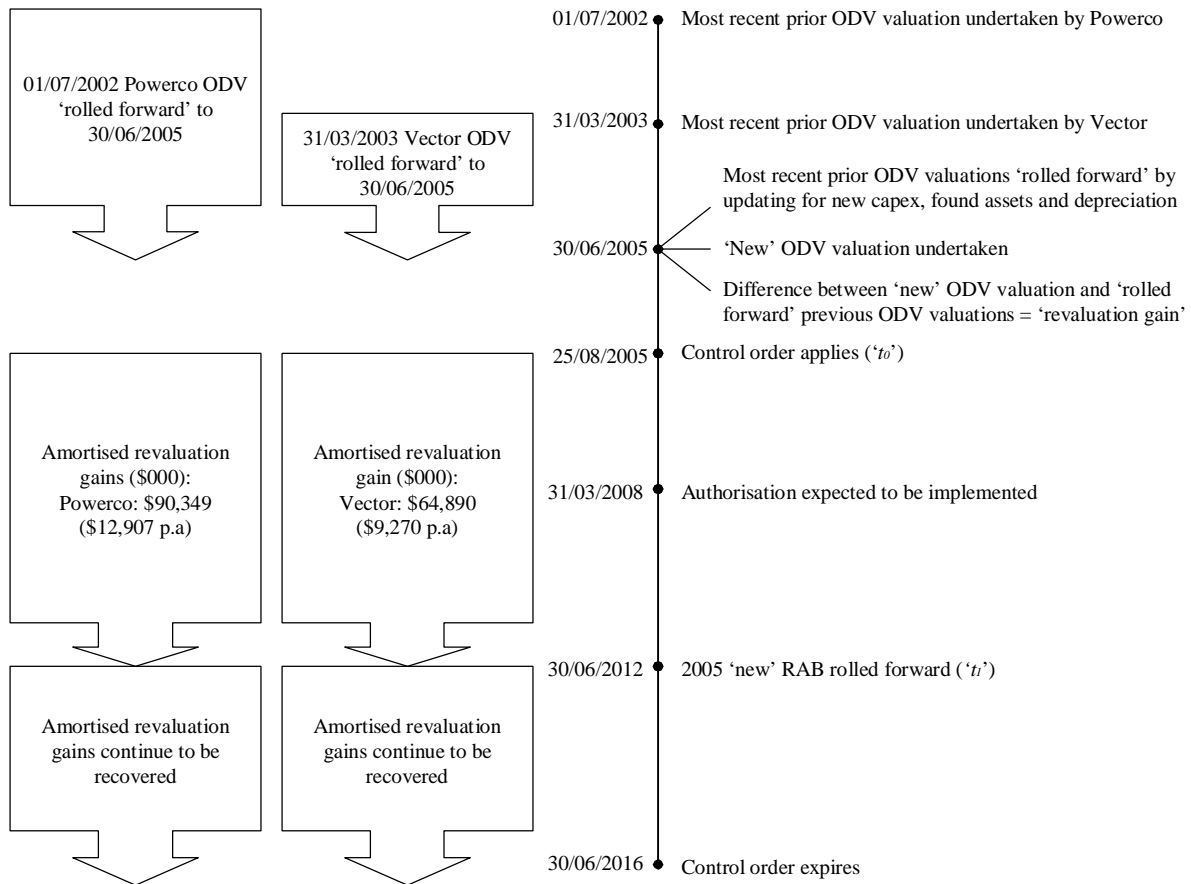
Figure 2.1 (not to scale) summarises the Commission's proposed measurement and treatment of revaluation gains and its subsequent impact upon regulated prices.

⁶ Draft decision, p153.

⁷ The Commission notes that, because it will have no jurisdiction once the Control Order expires in 2016, it cannot guarantee that Powerco and Vector will continue to amortise these revaluation gains in later years. Equally, assuming a new Control Order is issued and a new Authorisation comes into effect, the Commission gives no indication regarding how it would go about establishing the opening RAB as at 2016 were it required to do so, or how it would treat any revaluation gain vis-à-vis the closing RAB as at 2016.

⁸ Average residual lifetime of the assets represented by the valuation.

⁹ Based on the WACC for the Authorisation.

Figure 2.1: Commission's Treatment of Amortised Revaluation Gains

For the reasons outlined in section 5, the approach set out in the Commission's draft decisions does not distinguish between the various and different considerations applying to the questions of:

- § when and how an *initial asset value* should be established; and
- § how any *changes in asset valuations* over time should be dealt with under the regulatory pricing framework.

The Commission's erroneous conflation of these separate considerations largely arises through its misinterpretation of the applicability of the FCM concept to the establishment of initial asset values. We examine the FCM concept in the following section.

3. Financial Capital Maintenance

On a number of occasions throughout its draft decision the Commission appears not to recognise the important conceptual difference between establishing the opening RAB and the closely related but nonetheless distinct process of establishing a methodology for re-setting prices that take account of changes in a firm's regulatory asset base.

In large part this appears to stem from the Commission's misinterpretation and misapplication of the FCM concept. This section therefore provides an overview of the concept and application of FCM. In particular, whilst the FCM concept is potentially relevant for the determination of the *depreciation* to be charged to an asset, in and of itself it has no relevance to the question of the *initial valuation* of that asset.

3.1. A Current Cost Accounting Concept

Financial capital maintenance is a current cost accounting (CCA) concept that became prominent in the 1960s and 1970s, particularly in the United Kingdom (UK). The use of CCA became widespread in the 1980's, particularly in countries that suffered high and persistent inflation. Traditional historic cost approaches (HCA) were of limited utility in this environment because they effectively assumed that the purchasing power of money was stable and that the price of the goods and services did not change.

These deficiencies manifested themselves in the UK during the 1970s, when many companies found themselves reporting record 'profits' but short of cash to maintain their businesses after such 'profits' were distributed. Consequently, the use of CCA, in which assets were recorded at their current market values, was advocated in several countries, including the UK where the Byatt Report (1986) supported its use for that country's state-owned enterprises.¹⁰

Current cost accounting involves estimating and recording in financial accounts the cost *today* of purchasing an *existing* asset. The most widely employed concept for undertaking this estimation exercise focuses upon the current *replacement costs* of existing assets. Specifically, the current value of assets to a business is generally equated with their deprival value in a workably competitive market - essentially the present value of the expected or budgeted profit stream arising from use of the assets in such a market or, as the Byatt Report (1986) explained:¹¹

'...what it would cost to replace the assets now with their modern equivalent if they were being replaced in the ordinary course of business, not an unexpected crisis.'

Put another way, by valuing assets at current cost, asset values should represent the cost that would be faced by a hypothetical new entrant to the industry:¹²

¹⁰ Byatt, I.C.R. (1986), 'Accounting for economic costs and prices: A report to HM Treasury by an advisory group', London, 1986 (Hereafter: 'Byatt Report').

¹¹ Byatt Report, Volume II, p13.

¹² Byatt Report, Volume II, p56. See also: Whittington, G, 'Current Cost Accounting: Its role in regulated utilities', Fiscal Studies (1994) vol.15, no 4, p88.

‘If the relevant assets are worth replacing, the current replacement cost remains the appropriate economic valuation, *however long* it takes to recover those costs in the marketplace. The replacement cost still represents what a new competitor would have to pay to enter the market.’

Once that valuation exercise is completed, consideration must then be given to how that asset will be *depreciated* over its life. It is in relation to *this* decision that the FCM concept is of potential relevance, depending upon *what that asset valuation is taken to represent*.¹³ The basic choice as to which concept of depreciation should be applied turns on whether the ongoing valuation of assets is to represent shareholders’ *financial* investments in the firm, or the *physical* assets of the firm. These separate concepts each represent two potential purposes in maintaining current cost accounts, namely:

- § identifying the funds that can be safely withdrawn whilst maintaining the operating capability of the business - the ‘operating capability maintenance’ (OCM) approach; or
- § identifying the real rate of return being earned on the funds invested by the business’ shareholders – the ‘financial capital maintenance’ (FCM) approach.

These two purposes give rise to two different approaches to the derivation of depreciation to be charged against the revenue in estimating a firm’s annual economic profit:

- § the **OCM approach** identifies the function of the depreciation charge as setting aside funds to replace the operating capability of the asset in question at some point in the future, ie, the function of depreciation is to *maintain the operating capability of the business*;¹⁴ while
- § the **FCM approach** takes depreciation as representing the recovery of the original funds invested, in line with the benefit received in each period from the use of the assets¹⁵, ie, it involves striking profits after *protecting the purchasing power of funds invested by a business’ shareholders*.¹⁶

Under an FCM approach, the charging of depreciation is consistent with the concept of profit as the *return on funds invested after maintenance of the financial capital base* as represented by the real value of funds invested. Economic income is therefore defined as the surplus after a sufficient amount has been reserved to maintain the *financial value* of the asset.¹⁷ The FCM approach seeks to replicate the rate at which potential competitors could expect to recover their investment in a workably competitive market.¹⁸

¹³ See: IPART, *Rolling forward the regulatory asset bases of the electricity and gas industries: Discussion Paper*, January 1999, p9.

¹⁴ Byatt Report, Volume II, p29.

¹⁵ Ibid.

¹⁶ Byatt Report, Volume II, p31.

¹⁷ Allen Consulting Group, *Principles for determining regulatory depreciation allowances*, Note to the Independent Pricing and Regulatory Tribunal of NSW, September 2003, p14.

¹⁸ If asset values are expected to *decline* as a result of technical progress, potential entrants will require this decline in value to be recoverable either as an extra depreciation charge or a higher profit rate before they will be willing to enter the business. Indeed, no investors would go into the business if they expected to be unable to recover part of their real

If events that govern the financing decisions of investors are correctly anticipated, an FCM-based depreciation charge will equal the full change in the value to the business of its assets, allowing for acquisitions and disposals. Application of the FCM depreciation concept should mean that, on an ex ante basis, the expected accounting return on investment is equal to the required ex post rate of return in the investment appraisal.¹⁹ This is *broadly* consistent with the Commission’s description of the concept in its draft decision, namely:²⁰

‘Application of the FCM concept means that a controlled business is compensated for its efficient expenditure and efficient investments such that, on an ex ante basis, *its financial capital is at least maintained* in present value terms. This means that the net present value (NPV) of the net pre-financing cash flows of the business, taken together with the opening and closing regulatory asset values (with appropriate signs) is intended to be zero. That is, the business is intended to earn at least its risk-adjusted cost of capital on its initial and ongoing investment and expenditure.’ [our emphasis]

Consistent with the Commission’s description above of the FCM concept as being concerned with *maintaining* a firm’s financial capital, it is critical to note that the concept has *no bearing on the initial asset valuation*. Put another way, the FCM concept says nothing about the point in time from which the depreciation principle implied by it is to be activated. This latter question concerns a conceptually separate matter. In other words, FCM amounts to one of two recognised principles that go to the question of how an asset should be *depreciated* over its life *once its initial valuation has been set*. It has absolutely no bearing on the question of how to estimate the initial ‘financial capital’ to be ‘maintained’ in the future.

At a number of points in its draft decision the Commission does not recognise this important distinction, and this leads it to applying the FCM concept inappropriately. For example, when examining ‘alternative approaches’ to the FCM concept the Commission states that:²¹

‘...the HNE [hypothetical new entrant] approach is potentially less consistent than the FCM approach with promoting dynamic efficiency and also with limiting the ability of businesses to extract excessive profits.’

The statement suggests that the ‘HNE approach’ and the ‘FCM concept’ are alternatives that are mutually exclusive and potentially inconsistent. They are not. This misinterpretation arises because in discussing apparent ‘alternatives’ the Commission is blurring the two tasks at hand, namely:

investment in assets. Similarly all forecast *gains* such as stock profits or real rises in the value of land would enter the investment appraisal and would be reflected in the value the business in an efficient capital market. See: Byatt Report, Volume II, p31.

¹⁹ Of course, while some projects or activities will only earn normal returns (ie, only cover their cost of capital) some will earn higher profits. This may occur for a number of reasons, including greater than expected efficiency gains. The accounting adjustments that may be required to account for such divergences is a fundamentally separate issue that we do not examine here, see: Byatt Report, Volume II, p43.

²⁰ Draft decision, p57.

²¹ Draft decision, p60.

- § the need to establish an opening RAB for the purposes of implementing control for the first time, which can and should be based on a HNE value – indeed, the Commission recognises the suitability of the HNE approach for this purpose; and
- § establishing regulated prices on a forward-looking basis, which requires that attention be given to how asset values will change over time, ie, assuming the FCM concept is to be adopted, the opening RAB becomes the financial capital to be maintained.

As section 5 below explains, the crucial misapplication of the FCM concept by the Commission arises from its proposed treatment of ‘amortised revaluation gains’ for the period 2002/3–2005 for the purposes of setting the initial RAB and subsequent controlled prices.

3.2. Backward Looking Adjustments

The above discussion of CCA principles focuses on estimating *forward-looking* economic costs based on current expectations concerning future events, and in particular the determination of depreciation profiles. Of course, *ex post* returns will vary from forward-looking expectations, because some projects or activities earn normal or less than normal returns (ie, only cover their cost of capital or perhaps even fall short of this) while others earn higher profits. Such variances between outcomes and expectations arise for a number of reasons, including inaccurate forecasts of demand and budgeted capital expenditure, or greater than expected efficiency gains, as the Commission recognises:²²

‘...a hypothetical ex post assessment of returns ... would likely find that the NPV of revenues over the period was actually positive. This could be because the businesses are able to make efficiency gains during the regulatory period over and above those assumed when the price path of the Authorisation was set.’

Under an FCM approach, returns in excess of an asset’s risk-adjusted cost of capital – brought about for whatever reason – represent economic rent. However, there is no uniform way of reflecting these divergences in current accounts, or in *forward-looking prices* in a regulatory pricing context.²³ In particular, the FCM concept does *not* necessarily require an adjustment to be made to asset values and depreciation charges (and thus regulatory prices) simply because current information differs from that forecast.²⁴ Rather, whether or not a backward-looking adjustment is warranted depends upon the circumstances.

In particular, whether the valuation of existing capital assets should properly involve a reconciliation or ‘wash-up’ with the asset values that were used to determine prices at the commencement of the previous price setting period depends on both the circumstances and objectives. Crucial considerations include the nature of the regulatory regime governing the price setting process, including decisions about the way risks should be shared between businesses and their customers, and the nature and extent of any commitments to make such adjustments.

²² Draft decision, p58.

²³ See for example: Byatt Report, Volume II, p43.

²⁴ See for example: Byatt Report, Volume II, p44.

Some regulatory processes operate on the basis of a backward-looking ‘wash-up’ of capital expenditure and asset values, and some do not.²⁵ Those regulatory regimes that *do* allow for a ‘wash-up’ process have clearly specified regulatory or contractual commitments in place to manage that process, for example:

- § mechanisms for dealing with windfall gains and losses in the context of Australian energy regulation are specified beforehand, in either the National Electricity Rules, the National Third Party Access Code for Natural Gas Pipeline Systems (the Gas Code), or in regulatory precedent; whereas
- § other pricing approaches such as the TSLRIC-based²⁶ pricing principle commonly employed in the regulation of Australian and New Zealand telecommunications markets deliberately omit such mechanisms and so do not explicitly provide for ‘time consistency’ of capital-related costs when determining prices.

Those regimes incorporating a wash-up generally allow a greater degree of sharing of business risk between service providers and customers.²⁷ Absent a wash-up mechanism, the upside and downside risk of asset revaluations is part and parcel of the risk a business undertakes when committing to a forward-looking price path. Outturn windfall gains and losses are observed frequently in competitive markets.²⁸ Indeed, only in markets when competition is limited is it possible to impose a retrospective adjustment.

In sum, the FCM concept does *not* necessarily call for prices that have been set under it on a forward-looking basis subsequently to be adjusted to account for variations in outturn asset values, capital expenditure or any other factors under-pinning the revenue requirement. Indeed, the Commission appears to acknowledge this (albeit implicitly) in its draft decision when it states that:²⁹

‘...the Commission will not strictly apply NPV=0 ex post at the end of the control period although it may be applied ex ante. By applying FCM in a conservative manner in favour of the controlled businesses that allows for NPV>0 over each regulatory period, the Commission provides incentives for the businesses to continue

²⁵ As a matter of principle, ‘wash-ups’ can extend beyond components such as asset revaluations and capital expenditure, for example, some regulatory regimes involving ongoing price control, including the regime for regulating Australian electricity transmission, operate on a revenue cap basis, so that prices automatically adjust upwards or downwards where demand is less than or greater than expected.

²⁶ Total service long-run incremental cost based pricing.

²⁷ It is worth emphasising whether or not a ‘wash-up’ of asset revaluations and capital expenditure is undertaken should *not* affect the NPV of either prices or profits over the medium-term, provided there is no systematic bias in the approach to indexation of asset values when a wash-up *is* undertaken, or in the estimation of the opening RAB and forecasts of forward looking capital expenditure, asset revaluation and depreciation applied when a wash-up is *not* provided for.

²⁸ Consider a residential leasehold agreement under which a tenant agrees to pay a fixed \$100/week price for a property throughout a year based on current and projected rental market conditions. During the year the rental market booms, increasing the equivalent market rental to near \$200/week. Whilst the tenant clearly benefits at the expense of the landlord in these circumstances, there is no suggestion that this has stemmed from the exercise of any market power. Moreover, when the lease is renegotiated, the landlord is unlikely to be in a position to ‘claw back’ the losses he has made during the lease term by loading the short-fall into the new rental price (eg, attempting to charge \$300/week), since the tenant will relocate. Likewise, if fortunes were reversed and the market rental were to fall, the tenant could not expect the landlord to reduce his price to ‘make good’ his past over-payments when the property can be leased at a market rental rate that does not involve compensating a tenant for such losses.

²⁹ Draft decision, p59.

to make efficiency improvements while ensuring that they can recover the efficient costs of their investments.’

We agree with the position that has been indicated by the Commission above: it is demonstrably desirable to provide businesses with a profit-based incentive to pursue efficiency gains. However, for the reasons outlined above, the implied suggestion that it is ordinarily a *requirement* of the FCM concept that the NPV of *ex post* returns should be equal to zero is incorrect.

3.3. Summary

The FCM concept is a CCA principle that gained prominence in the 1970s during times of high inflation. It is linked to the concept of profit as the return on funds invested after maintenance of the financial capital base as represented by the real value of funds invested.³⁰ Application of the FCM depreciation concept should mean that, on an *ex ante* basis, the expected accounting return on investment is equal to the required *ex post* rate of return in the investment appraisal. However, the FCM concept *has no bearing on the initial asset valuation* to be applied at the time price controls are put in place. Put simply, FCM is not relevant to the question of how to establish the amount of ‘financial capital’ that is to be ‘maintained’ in the future.

Under an FCM approach, returns in excess of an asset’s risk-adjusted cost of capital – brought about for whatever reason – represent economic rent. However, the concept does not extend to a uniform means of reflecting such divergences in current accounts, or in *forward-looking prices* in a regulatory pricing context. In particular, the FCM concept does not involve any requirement to adjust asset values and/or depreciation charges simply because out-turn information – such as that concerning movement in price indices – differs from that forecast. Whether or not an after-the-fact adjustment is warranted depends upon the circumstances, including whether a commitment was made to undertake a ‘wash-up’ when prices were last set.

³⁰ This sets the concept apart from, say, the OCM approach, which links the depreciation charge to the maintenance of the operating capability of the business.

4. Establishing an Appropriate Opening RAB

The Commission's task in its draft decision is to set the draft authorisation terms for Powerco and Vector *with effect from 25 August 2005*.³¹ Specifically, consistent with section 70(a) of the Act it must set such price, quality and related terms 'using whatever approach it considers appropriate', subject to the purpose statement provisions contained in section 1A, and the guiding considerations set out in section 70A.³² This effectively involves two sub-tasks:

- § establishing initial prices, as at 25 August 2005 having regard to the various considerations under the statutory scheme - of which the valuation of the RAB will be a critical element; and
- § establishing arrangements that allow those initial prices to be updated over time as inflation and underlying costs change.

This section focuses upon the *first* of the two sub-tasks outlined above – the establishment of initial prices as at 25 August 2005 and, more specifically, the valuation of the opening RAB. There is little doubt about *when* the opening RAB should be set. It should be established as at 25 August 2005 because that is the date from which the Control Order applies. It represents a clear delineation between the previous Part 4 inquiry and the present Part 5 inquiry. It represents the clear '*t₀*' date for the purpose of setting initial regulatory prices. The Commission acknowledges this in its draft decision:³³

'The opening RAB is the value of the assets used in the provision of controlled services at the start of a control period, for the initial control period this is at 25 August 2005, i.e., the date at which the Order took effect ... the Commission required Powerco and Vector under s70E of the Act to revalue their controlled assets using an Optimised Deprival Value (ODV) methodology to determine the opening RAB value'

The Commission has also been clear about *how* the initial RAB should be set. The statement above demonstrates its intention to establish the initial RAB as at 25 August 2005 based on the *ODV value of the relevant assets* at that date. This is consistent with its expressed intention in its earlier valuation methodology paper of 17 February 2007 in which it stated:³⁴

'The release of this Valuation Methodology will allow Powerco and Vector to complete the valuation of their opening RAB for control purposes ... Each of the valuations shall be as at 30 June 2005.'

As the following sections explain, the relevant economic and legal principles contained in the mandatory statutory considerations and the scheme of Part 5 itself supports the Commission's

³¹ With the explicit legislative exception of section 70C of the Act which provides that if the final price is lower than the provisionally authorised price the Commission may impose remedies by way of refunds, compensation and the like.

³² The Commission may also take into other relevant considerations, such as the costs of regulation, as indicated in paragraph 78 of its draft decision.

³³ Draft decision, p67.

³⁴ Commerce Commission, *Authorisation for the Supply of Natural Gas Distribution Services by Powerco and Vector: Valuation of the Opening Regulatory Asset Base, Valuation Methodology*, 15 February 2007, p2.

intended approach.³⁵ Namely, it highlights the need to establish the initial RAB as at 25 August 2005, and to base that valuation on the ODV of the relevant system assets for Powerco and Vector at that date.

4.1. The Economics of ODV

If employed appropriately, an ODV asset valuation methodology is consistent with the efficiency objectives enshrined in sections 1A and 70A of the Act. In particular, it is consistent with the fundamental economic principle that prices should reflect the opportunity cost of the resources displaced in providing services in the relevant market. The ODV valuations of the relevant gas distribution assets as at 25 August 2005 represent the deprival values of the assets in question in a workably competitive market as at the date from which control is to be imposed. This represents the present value of the expected or budgeted profit stream arising from use of the assets, or as the Byatt Report (1986) explained:³⁶

‘...what it would cost to replace the assets now with their modern equivalent if they were being replaced in the ordinary course of business, not an unexpected crisis.’

In other words, the ODV values as at 25 August 2005 represent the cost that would be faced by a *hypothetical new entrant* to the industry of average efficiency:³⁷

‘If the relevant assets are worth replacing, the current replacement cost remains the appropriate economic valuation, *however long* it takes to recover those costs in the marketplace. The replacement cost still represents what a new competitor would have to pay to enter the market.’

This means that initial regulated prices are determined by reference to the opening asset value one would expect to observe in a workably competitive market. This is the correct approach because, as the Commission itself notes, it serves to remove the scope for the extraction of excess profits by breaking any circularity between asset valuations and pricing decisions,³⁸ whilst ensuring that prices are not set not set inappropriately *low*, ie, below a level that would warrant the imposition of control. The Commission also recognises the virtue of the ODV/HNE approach to establishing initial asset values in its draft decision:

‘The Commission notes that a HNE approach can be a useful framework for determining efficient price levels at a point in time and can therefore be consistent with promoting allocative efficiency.’

Consistent with its role as the reference point for the costs faced by a hypothetical new entrant (HNE), the use of ODV-based asset values applying from the outset of control would promote economic efficiency by ensuring that the final price of gas competes appropriately

³⁵ As section 5 below explains, the Commission’s *actual* approach to setting the initial RAB and regulatory prices is quite different to that *indicated*.

³⁶ Byatt Report, Volume II, p13.

³⁷ Byatt Report, Volume II, p56. See also: Whittington, G, ‘Current Cost Accounting: Its role in regulated utilities’, *Fiscal Studies* (1994) vol.15, no 4, p88.

³⁸ Although we note that this phenomenon does not exist in this instance since the most recent prior ODV valuations are *lower* than the estimates as at 30 June 2005.

with alternative forms of energy. Similarly, ODV-based asset values derive prices that signal to customers the real worth of demand side investments they might make to manage their gas consumption, further promoting the long-term interests of consumers and the efficient supply of gas distribution services.

4.2. Legal Principle and the Scheme of Part 5

The essential legal framework has already been outlined in Section 1 above. The Commission’s jurisdiction in this matter is conferred under Part 5 of the Act. The set of regulatory terms under section 70(1), for the first time in the case of Vector and Powerco, must be undertaken in accordance with the guiding principles contained in sections 1A and 70A. An assessment of the Commission’s draft decision on this basis alone reveals errors, as described below.

An additional and allied principle also serves to reveal errors in the approach undertaken by the Commission, because its proposed approach offends basic presumptions against the retrospective application of legislation. While the Commission’s approach is not retrospective in the sense that it is not proposing to impose authorised terms prior to 25 August 2005, it is nonetheless retrospective in the sense that it seeks to adjust the future on the basis of developments that predate the decision to impose control. It also affects legitimate expectations that have been formed in the past (as outlined in Section 5.2 below).³⁹

The combined effect of sections 7 and 4 of the *Acts Interpretation Act* is that legislation is not to have retrospective effect unless this is *expressly or impliedly stipulated in the legislation*.⁴⁰ Section 70C(1)(a) of the Act is illustrative. It states that if a Provisional Authorisation has enabled higher prices than those ultimately allowed under the final Authorisation, the overcharging in the interim may be recovered through future tariffs.⁴¹ Absent an explicit provision, various principles have been developed to ascertain whether legislation is intended to have a retrospective effect. In particular:⁴²

- § the general presumption against retrospective adjustments *in any case*;⁴³ and
- § the nature and degree of the injustice that would result from the retrospective operation of the legislation in question.⁴⁴

³⁹ For an outline of principles which expose such circumstances to the application of the presumption against retrospectivity, see Burrows, “Statute Law in New Zealand” (3d ed), p402.

⁴⁰ While section 7 of the Interpretation Act provides that “[A]n enactment does not have retrospective effect”, section 4(1) supports the proposition that legislation can be given retrospective effect if that is the clear intention of Parliament. Section 4(1) provides that the Interpretation Act (including s 7) applies unless (a) the enactment in question “provides otherwise” or (b) the context of the enactment requires a different interpretation.

⁴¹ Another example is clause 8.10 of the Australian Gas Code, which explicitly sets out a number of factors that should be considered when setting the RAB for a pipeline that existed *before* the commencement of the Code. Those factors include ‘the basis on which tariffs have been (or appear to have been) set in the past, the economic depreciation of the pipeline and the historical returns to the service provider’.

⁴² It is also appropriate to note that the rule against the retrospective construction of statutes has typically applied substantively in cases where vested rights would be prejudicially affected or where new disabilities may attach in respect of past transactions.

⁴³ *Prouse v CIR* (1994) 16 NZTLC 11249, 11252.

With this in mind it is apparent that, apart from the limited exception explicitly provided for by section 70(C)(1), the scheme of Part 5 does not expressly or impliedly anticipate the valuation of the initial RAB being influenced by factors pre-dating control. More generally, it does not expressly or impliedly anticipate the extinction of past expectations that have been legitimately formed prior to the introduction of control. Rather, Part 5 contemplates the establishment of a *forward-looking* regulatory regime from the date control first applies and hence, a current value of the asset base as at 25 August 2005 (' t_0 ') without reference to backward-looking valuations and methodologies.

Issues of justice and fairness further reinforce the necessity for such an approach to be taken. In this instance, the businesses were arguably entitled to believe that prices would be set afresh from 25 August 2005 on a forward-looking basis. Until the Commission released its draft decision market participants were not cognisant of the regulatory arrangements it intended to put in place as at 25 August 2005. Moreover, market participants were likely under the impression post 17 February 2007 that prices would be based upon an ODV valuation as at 30 June 2005, consistent with the Commission's valuation methodology paper, as outlined in section 5.2 below.

4.3. Summary

The relevant economic and legal principles enshrined in the mandatory considerations contained in the Act and the scheme of Part 5 itself recommend an opening RAB based on the ODV of the relevant assets as at 25 August 2005. Specifically, establishing the opening RAB values based on the cost that would be faced by a hypothetical averagely efficient new entrant to the industry on this date is consistent with:

- § the promotion of competition for the long term benefit of consumers in New Zealand, consistent with section 1A of the Act;
- § safeguarding the interests of the acquirers of the controlled services from the excessive prices that might arise from an inappropriately *high* opening RAB, consistent with section 70A(b) of the Act;
- § promoting efficiency in the production and supply of the controlled services by ensuring that the opening RAB is not set inappropriately *low* and so avoiding a scenario in which prices are set at or below a level that would warrant the imposition of control, consistent with section 70A(c) of the Act; and
- § the general scheme of Part 5, which contemplates the RAB being set as at the date control commences without regard to valuations or methodologies that pre-date that time.

The approach is also consistent with what the Commission *indicated* it would do in its valuation methodology paper of 17 February 2007 and the approach it *claims* to have taken in its draft decision. However, as the following section explains, the Commission's treatment of 'amortised revaluation gains' means that, in substance, it *has not* adopted this approach.

⁴⁴ See, for example, *Doro v Victorian Railway Commissioners* [1960] VR 84, 86. Further relevant matters in this context include fairness and public policy considerations. See also: *Re Matawhero B Block* (1884) NZLR 2 SC 357, 359; *Board of Management of the BNZ Officers' Provident Association v McDonald* (unreported, Court of Appeal, CA 244/01, 23 April 2002) para 30.

5. Assessment of the Commission's Approach

The Commission stated in both its valuation methodology paper and its draft decision that the opening value of the RAB would be set as at 25 August 2005 and be based on the ODV of the relevant assets at that date. As discussed in section 4, this approach is demonstrably consistent with the relevant statutory criteria. However, in substance the Commission's *actual* approach is quite different from establishing an initial RAB based on the 30 June 2005 ODV values. By way of brief recap, in its draft decision the Commission:

- § observed that the *ostensible* opening RAB values, based on ODV estimates as at 30 June 2005 were 'significantly higher' than the *most recent prior* ODV valuations undertaken by the two businesses, 'rolled forward' to take account of interim capital expenditure, depreciation and 'found assets'; and
- § proposed to treat the difference between the opening RAB values and the 'rolled forward' most recent prior ODV valuations as 'revaluation gains' for the purposes of setting initial regulated tariffs.

The Commission's treatment of 'amortised revaluation gains' means that, in substance, it has *not* adopted the approach that it indicated it would in its valuation methodology paper, or that it claims to have adopted in its draft decision. For the reasons outlined in the following sections, in our view the Commission's approach is inappropriate and as a result its draft decision is in error.

5.1. Incorrect Starting Point

The reduction in the businesses' annual revenues by the amortised difference between the ODV values as at 30 June 2005 and the 'rolled forward' most recent prior ODV values means that the Commission's *ostensible* opening ODV values as at 25 August 2005 have little or no bearing on the controlled prices it seeks to determine. Rather, the Commission's approach essentially delivers an outcome that is consistent with it having established *1 July 2002* and *31 March 2003* as the starting point for control for Powerco and Vector, respectively. It does this by effectively adopting a roll-forward approach from these earlier dates, ie:

- § the Commission actual approach is to set the opening RAB values based on the ODV of system fixed assets as at 25 August 2005 (t_0), and retrospectively to adjust for 'amortised asset revaluation gains' since 1 July 2002 and 31 March 2003 for Powerco and Vector, respectively; but
- § equivalently, this can be represented as setting the opening RAB values according to the ODV of system fixed assets as at 1 July 2002 and 31 March 2003 (t_0) for Powerco and Vector, respectively and rolling forward those values to 30 June 2005 by accounting for interim new capital expenditure, depreciation and 'found assets'.

Both approaches deliver comparable outcomes; namely, regulated prices that are determined by reference to the *earlier* initial ODV valuations. In other words, despite its stated intention, the Commission has effectively *not* used the ODV valuations as at 25 August 2005 to set the opening RAB values for Powerco and Vector. Rather, its opening RAB values are, in substance, the ODV valuations undertaken on 1 July 2002 and 31 March 2003, respectively. The Commission implicitly acknowledges this:

‘...to allow this *increase* to the opening RAB valuations for the initial control period of the Authorisation, without treating these revaluation gains as income, would result in windfall profits to Powerco and Vector, to the detriment of acquirers of the controlled services.’ [our emphasis]

By definition, it is not possible for an initial RAB to have *increased* relative to an earlier RAB because *there is no earlier RAB*. Such an increase is only possible when comparing regulatory periods over time, ie, the RAB at t_1 compared with the RAB at t_0 . The Commission’s statement only makes sense if it is using the *most recent prior* ODV valuations as its effective t_0 RAB values and, by implication, assuming that control has applied from those earlier dates. In other words, what the Commission is doing is using the ‘amortised revaluation gains’ as a means erroneously to establish earlier, lower opening RAB values.

5.2. Inappropriate Application of FCM

The Commission claims that its proposed treatment of amortised revaluation gains is consistent with the FCM concept. This is simply not the case. As section 3.1 explained, the FCM principle is *not relevant* to the initial valuation of the RAB. It is a *depreciation* concept that can be applied consistently to *any* initial opening RAB value. In itself, it has no bearing on *when* or *how* that initial RAB is set. In citing the FCM concept as supporting its approach the Commission is mistakenly conflating two separate tasks that it must undertake in the draft decision, namely:

- § *specifying an opening RAB*, which can and should be based on an ODV/HNE value as at 25 August 2005 for the reasons outlined in section 4 - indeed, the Commission recognises the suitability of the HNE approach for this purpose; and
- § *setting the framework by which forward-looking regulated prices will be established* – under which the opening RAB becomes the financial capital to be maintained, moving forward, assuming the FCM concept is adopted.

Even if the most recent prior ODV valuations *were* the appropriate opening RAB values (a view we do not hold for the reasons outlined in section 4), as section 3.2 outlined, the FCM concept does not require a backward-looking adjustment to be made to forward-looking prices at 25 August 2005 to reflect changes in asset values over that very short period. Indeed, some regulatory frameworks seek not to take account of retrospective factors in this fashion, as the Commission itself has recognised in a recent submission to the Ministry of Economic Development:⁴⁵

‘In the Commission’s view, a consequential benefit to consumers of bringing prices back toward competitive levels – through either competitive forces or economic regulation – is to limit the ability of suppliers to extract that wealth away from consumers in the first place. Like competition, regulation serves to limit the future transfer of surplus from consumers to suppliers that arises from the exercise of otherwise unconstrained monopoly power. Hence, *regulation would not generally seek to redistribute past monopoly rents previously extracted by producers back to consumers.*’ [our emphasis]

⁴⁵ Commerce Commission, *Review of Regulatory Provisions under the Commerce Act 1986: Submission on MED’s Discussion Document*, 6 July 2007, p19.

Whether or not a backward-looking adjustment is warranted depends upon the nature of the regulatory regime governing the price setting process and the nature and extent of any commitments to make such adjustments (rather than the FCM concept *per se*). No evidence has been put forward to the effect that a clear commitment existed at 1 July 2002 and 31 March 2003 to undertake an after-the-fact adjustment to forward-looking regulated prices to account for out-turn revaluation gains. There are a number of reasons for this:

- § until the Commission released its draft decision market participants did not know what regulatory arrangements it intended to put in place and market participants may have been under the impression and formed a legitimate expectation – particularly post 17 February 2007 – that prices would be based solely upon an ODV valuation as at 30 June 2005 without retrospective adjustments; and
- § although the Commission has in the past examined asset revaluations in a variety of ways, including in its draft ODV valuation handbook⁴⁶ and the Gas Control Inquiry,⁴⁷ these past statements fall significantly short of amounting to a ‘regulatory contract’ that contemplated such an adjustment once control began.

It should also be noted that the Commission’s assessment of amortised revaluation gains has carried out over very short and arbitrary periods of time - three years for Powerco and approximately two years for Vector. This is problematic because in workably competitive markets there is *always* the potential for the NPV of returns to be greater or less than zero over such short periods of time. Examining what is essentially an arbitrary snapshot of the relevant assets’ lives reveals very little about the overall return profile, which extends well before that brief historic period. There may have been numerous fluctuations in outturn returns over that longer time period.⁴⁸

5.3. Consequences of the Commission’s Approach

There are myriad adverse consequences that arise from the Commission’s inappropriate treatment of ‘amortised revaluation gains’ in formulating the initial RAB and initial regulatory prices. The immediate effect is a significant and unwarranted reduction in the businesses’ annual revenue requirements. As Table 1 illustrated, in each year of the two

⁴⁶ A final version of the Gas ODV Handbook was never released and, as the Commission itself observed, all gas pipeline businesses had some departures from the methodology outlined in the June 2000 version of the draft Handbook. Thus, it seems there was *not* a consistent approach employed by firms to asset revaluations under the disclosure regime. More fundamentally, following 25 August 2005 an entirely new regulatory regime has been in effect, rendering what occurred under the previous arrangements of little consequence.

⁴⁷ The purpose of the gas control inquiry was to determine *whether* control should be imposed. The Commission did not address how it would go about *setting forward-looking prices*. Moreover, it did not outline whether or how asset revaluations would be accounted for in prices if control was implemented. Indeed, the Commission emphasised that its analysis should *not* be construed to mean that a particular form of control would necessarily be used (see: Commerce Commission, *Gas Control Inquiry: Final Report Public Version*, 29 November, 2005, p2.15). Consequently, conclusions could not readily be drawn from the Commission’s inquiry report as to how it subsequently would set regulated prices under Part 5 or, specifically, how it would treat asset revaluations

⁴⁸ Indeed, the recent period of growth in asset values identified by the Commission may be more than offset by an earlier period of low returns pre-dating the most recent prior ODV valuations. There is no way of knowing this for certain without information on the efficient cost of the assets *at the time they were first installed*. As the Commission itself recognises, this information is unavailable because historical cost estimates of the relevant assets are unreliable, see: draft decision, p67.

regulatory periods (and potentially also beyond the second regulatory period) annual regulated revenues will be reduced by approximately **\$13m** and **\$9m** for Powerco and Vector, respectively. These reductions have two flow-on effects:

- § the ‘amortised revaluation gains’ reduce the building blocks allowable revenue calculation and so artificially inflate the ‘excess returns’ estimated to have been earned by the businesses during the term of the Provisional Authorisation. Specifically, the quantum of ‘excess returns’ that the Commission seeks to recoup through the application of s70C(1)(a) of the Act is overstated by the amount of the estimated ‘amortised revaluation gains’; and
- § the so called ODV-based opening RAB values have little bearing on regulated prices. Rather, prices are determined primarily by the *most recent prior* ODV values. Nonetheless, *indexed* revaluation adjustments are based on the more recent, *higher* ODV valuations. The businesses are therefore assumed to obtain a revaluation gain consistent with the higher opening ODV values, without actually setting their prices by reference to those valuations.

In addition to these immediate adverse consequences, there may also be *longer-term* consequences that could prove even more harmful. In particular, if a regulatory regime exhibits opaque regulatory principles, or those principles are administered inconsistently or unpredictably, businesses may *not* have confidence that they will gain an adequate return on efficient investments and may decline to invest to the detriment of dynamic efficiency. The Commission’s treatment of ‘amortised revaluation gains’, and its associated misapplication of the FCM concept exhibits some of these traits.

5.4. Summary

Although the Commission claims to have established its opening RAB valuations based on the 25 August 2005 ODV values, in reality it has not. Rather, its treatment of ‘amortised revaluation gains’ means that, in substance, the *most recent prior ODV values* form the opening RAB valuations and influence regulatory prices. This approach is incorrect, and is unlikely to be consistent with the relevant statutory considerations because:

- § it involves a misinterpretation and consequent misapplication of the FCM concept, which has no bearing on the determination of the RAB and initial regulatory prices – it involves the Commission erroneously taking into account an *irrelevant consideration* in reaching its draft decision;
- § it is not consistent with the general scheme of Part 5, which cannot be interpreted as allowing the retrospective adjustment the Commission is proposing (for the reasons outlined in section 4), and is a fundamentally different context to past practice; and
- § it is not consistent with sections 1A and 70A of the Act because it is inconsistent with the promotion of competition for the long term benefits of consumers, it is not necessary to

safeguard the interests of acquirers of gas distribution services⁴⁹ and it risks harming long-term dynamic efficiency in the production and supply of those services.

The Commission's draft decision is therefore in error. For the reasons outlined in section 4, the Commission should instead establish its opening RAB valuations for Powerco and Vector based on the ODV of the relevant assets as at 25 August 2005 *without* adjusting for 'amortised revaluation gains'.

⁴⁹ Even though in the short-term *certain* consumers may benefit from what is largely a retrospective transfer, in the form of reduced prices for gas distribution services, consumers overall are likely to be harmed in the long-run. This is because the 'amortised revaluation gain' itself largely represents a short-term transfer of wealth that does not generate economic efficiency benefits, since one party gains at the expense of the other (all producers are ultimately owned by consumers. See NERA (2007), *Response to MED Discussion Document: Review of the Regulatory Control Provisions under the Commerce Act 1986: A Report for Orion New Zealand Limited*, p28.

6. Conclusion

The purpose of the draft decision is for the Commission to determine the first set of authorised terms for gas pipeline services provided by Vector and Powerco, with effect from 25 August 2005. This involves two discrete steps:

- § the establishment of initial prices, as at 25 August 2005 (t_0) having regard to the various considerations under the statutory scheme - of which the valuation of the regulatory asset base (RAB) will be a critical element; and
- § the establishment of arrangements that allow those initial prices to be updated over time as inflation and underlying costs change.

This report focuses upon the *first* of the two sub-tasks outlined above – the establishment of initial prices as at 25 August 2005 and, more specifically, the determination of the opening RAB. There is little doubt about *when* the opening RAB should be set, ie, 25 August 2005, the date from which the Control Order applies. The more challenging issue is *how* the opening RAB values should be estimated. In our view, those values should be based on the cost that would be faced by a hypothetical new entrant of average efficiency as at 25 August 2005. This is consistent with:

- § the fundamental economic principle that prices should reflect the opportunity cost of the resources displaced in providing services in the relevant market and so the promotion of competition for the long term benefit of consumers, consistent with section 1A of the Act;
- § safeguarding the interests of the acquirers of the controlled services from the excessive prices that might arise from an inappropriately *high* opening RAB, consistent with section 70A(b) of the Act;
- § promoting efficiency in the production and supply of the controlled services by ensuring that the opening RAB is not set inappropriately *low* and so avoiding a scenario in which prices are set at or below a level that would warrant the imposition of control, consistent with section 70A(c) of the Act; and
- § the general scheme of Part 5, which contemplates the RAB being set as at the date control commences without regard to valuations or methodologies that pre-date that time.

This is also consistent with the approach the Commission *indicated* it would take in its valuation methodology paper, and indeed the approach it *claims* to have taken in its draft decision. However, in reality it has taken a quite different, and in our view, erroneous approach. Its treatment of ‘amortised revaluation gains’ essentially delivers an outcome that is consistent with it having established *1 July 2002* and *31 March 2003* as the starting point for control for Powerco and Vector, respectively. It does this by effectively adopting a roll-forward approach from these earlier dates, ie:

- § the Commission actual approach is to set the opening RAB ODV values as at 25 August 2005 (t_0), and retrospectively to adjust for ‘amortised asset revaluation gains’ since 1 July 2002 and 31 March 2003 for Powerco and Vector, respectively; but
- § equivalently, this can be represented as setting the opening RAB ODV values as at 1 July 2002 and 31 March 2003 (t_0) for Powerco and Vector, respectively and rolling forward

those values to 30 June 2005 by accounting for interim new capital expenditure, depreciation and ‘found assets’.

The Commission claims that its approach is consistent with the financial capital maintenance (FCM) concept. This is simply not the case. The FCM principle is *not relevant* to the initial valuation of the RAB. Rather, it is a *depreciation* concept that can be applied consistently to *any* initial opening RAB value. In and of itself, FCM has no bearing on *when* or *how* that initial RAB is set. In citing the FCM concept as supporting its approach the Commission is mistakenly conflating two separate tasks that it must undertake, namely:

- § *specifying an opening RAB*, which can and should be based on a HNE value as at 25 August 2005 – the FCM concept is irrelevant to this exercise; and
- § *establishing the framework by which forward-looking regulated prices will be determined*, under which the opening RAB becomes the ‘financial capital’ to be ‘maintained’, moving forward, assuming the FCM concept is adopted.

Even if the most recent prior ODV valuations *were* the appropriate opening RAB values (a view we do not hold) the FCM concept does not require a backward-looking adjustment to be made to forward-looking prices at 25 August 2005 to reflect changes in asset values over the very short period since the most recent ODV valuations. Whether or not an after-the-fact adjustment is warranted depends upon the circumstances, including whether a commitment was made to undertake a ‘wash-up’ when prices were last set. No evidence has been put forward to the effect that any such commitment existed.

The Commission’s approach to establishing the opening RAB and initial regulatory prices is therefore in error. Specifically, it is unlikely to be consistent with the relevant statutory considerations and the general scheme of Part 5 because:

- § it involves a misinterpretation and consequent inappropriate application of the FCM concept, and so involves it erroneously taking into account an *irrelevant consideration* in reaching its draft decision;
- § it sets inappropriately low RAB values that pre-date control and so is:
 - inconsistent with a workably competitive market outcome and so the promotion of competition for the long term benefits of consumers (section 1A);
 - not necessary for safeguarding the interests of acquirers of gas distribution services (section 70A(b)); and
 - inconsistent with the promotion of long-term dynamic efficiency in the production and supply of those services (section 70A(c)); and
- § it is not consistent with the general scheme of Part 5, which cannot be interpreted as allowing the retrospective adjustment the Commission is proposing (for the reasons outlined in section 4), and is a fundamentally different context to past practice.

Consequently, the opening RAB values should instead be based on the ODV valuations as at 25 August 2005, *without* any adjustment for ‘amortised revaluation gains’.

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