



Level 2, 35 Spring St
Melbourne 3000, Australia
Telephone +61 3 9651 0222
 +61 3 1300 664 969
Facsimile +61 3 9651 3688

REVIEW OF GAS ACCESS ARRANGEMENTS 2008-2012

FURTHER FINAL DECISION AND APPROVAL OF
COMMISSION'S AMENDED REVISIONS TO
ACCESS ARRANGEMENT

MULTINET

19 MAY 2008

PREFACE

On 30 March 2007, Multinet submitted proposed revisions to its existing gas distribution Access Arrangement to the Essential Services Commission (the Commission) for approval.

Under the *National Third Party Access Code for Natural Gas Pipeline Systems* (the Code), the Commission is required to decide whether to approve or not approve the proposed revisions. The Commission may approve the proposed revisions only if it is satisfied that the Access Arrangement as revised would contain the elements and satisfy the principles set out in sections 3.1 to 3.20 of the Code, and after considering the various factors set out in section 2.24 of the Code.

On 7 March 2008, following an extensive consultation process the Commission released its final decision in relation to Multinet's proposed revisions in accordance with the provisions of the Code.¹ In summary, the Commission's final decision did not propose to approve Multinet's proposed revisions and set out the nature of amendments that would have to be made to the revisions in order for the Commission to approve them, together with the detailed reasoning underpinning the Commission's decision.

On 28 March 2008, Multinet submitted amended revisions in response to the Commission's final decision.

Under the Code, the Commission is required to issue a further final decision in which it either approves the amended revisions to the Access Arrangement, or not approve the amended revisions to the Access Arrangement. The Commission may approve the amended revisions to the Access Arrangement where it is satisfied that the amended revisions incorporate the amendments specified by the Commission in its final decision, or if the Commission is satisfied that the amended revisions either substantially incorporate the amendments specified by the Commission or otherwise address to the Commission's satisfaction the matters the Commission identified in its final decision as being the reasons for requiring the amendments specified in its final decision. Where the Commission does not approve the amended revisions to an Access Arrangement, it is required to draft and approve its own amended revisions to the Access Arrangement.

After reviewing Multinet's amended revisions, the Commission is not satisfied that they incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or

¹ See Essential Services Commission, *Gas Access Arrangement Review 2008 – 2012: Final Decision*, 7 March 2008 (Final Decision).

otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

Therefore, the Commission's further final decision, pursuant to section 2.41 of the Code, is to not approve Multinet's amended revisions. As required by section 2.42 of the Code, the Commission has drafted and approved its own amended revisions to Multinet's Access Arrangement. In summary, the Commission's amended revisions:

- apply a different X factor from Multinet's amended revisions
- do not accept a number of other amended revisions proposed by Multinet, including in relation to elements of Multinet's proposed Services Policy, terms and conditions and Reference Tariff Policy (including Ancillary Reference Service tariffs) and
- otherwise adopt Multinet's amended revisions.

The Commission's amended revisions to the Access Arrangement for Multinet's network are attached to this document. Other information regarding the review, including the Commission's final decision, is available on the Commission's website at www.esc.vic.gov.au.

GREG WILSON
Chairperson

CONTENTS

Preface	2
Contents.....	4
1 Introduction	5
2 Required amendments – P₀ and X factor	6
2.1 The outsource arrangements	6
2.2 Cost of capital and taxation	10
2.3 Operating expenditure	23
2.4 Capital expenditure	35
2.5 Demand	35
2.6 P ₀ adjustments and X factor	36
3 Required amendments – other matters	37
3.1 Services	37
3.2 Reference Tariff Policy and glossary	39
3.3 Extensions/Expansions Policy	44
3.4 Unaccounted for gas (UAFG)	44
4 Revised Access Arrangements	45
APPENDIX A - Amendments to tables	46

1 INTRODUCTION

On 30 March 2007, Multinet submitted proposed revisions to its existing gas distribution Access Arrangement to the Commission.²

These proposed revisions set out the policies, terms and conditions on which Multinet proposed to make access available to third parties to the services of its distribution pipelines for the five year period from 1 January 2008.

Under the *National Third Party Access Code for Natural Gas Pipeline Systems* (the Code) the Commission is required to decide whether to approve or not approve the proposed revisions.

Amongst the other requirements of the Code, the process of reviewing Multinet's proposed revisions has involved the following key steps:

- the release of two consultation papers in 2006
- advertising the receipt of the proposed revisions
- release of a summary paper (24 April 2007) for public comment
- release of a draft decision (28 August 2007) for public comment
- release of a final decision (7 March 2008) and
- a number of workshops.

The final decision required Multinet to give effect to a number of required amendments and to submit amended revisions to its Access Arrangements to the Commission for approval by 28 March 2008.

On 28 March 2008 Multinet submitted amended revisions in response to the Commission's final decision. Multinet has made the majority of the amendments required by the final decision to be made to the revisions in order for the Commission to approve them. However it has not made a number of amendments required by the final decision to be made to the revisions in order for the Commission to approve them, particularly in relation to tariffs for services.

After reviewing Multinet's amended revisions, the Commission is not satisfied that they incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

The Commission has therefore, pursuant to section 2.41 of the Code, not approved Multinet's amended revisions. As a result, the Commission has drafted and approved its own amended revisions to the Access Arrangement for Multinet's Victorian network pursuant to section 2.42 of the Code.

With the exception of the matters dealt with in this further final decision, the Commission's amended revisions to the Access Arrangement incorporate the amended revisions proposed by Multinet in response to the final decision. The reasons for incorporating these amended revisions are set out in the final decision.

² In Victoria, Multinet is licensed as Vic Gas Distribution Pty Ltd (formerly known as Stratus Networks).

2 REQUIRED AMENDMENTS – P₀ AND X FACTOR

In the final decision the Commission required Multinet to amend its proposed revisions to provide for certain changes in average prices for its Reference Services, denoted by the P₀ (real price change on 1 July 2008) and X factor (real price change on 1 January each year from 2009 to 2012). The final decision provided for a P₀ of 2.5% (i.e. an average price decrease of 2.5%) and an X factor of 0.0%.

The P₀ and X factor are an outcome of a number of different elements, including the Commission's final decision in relation to the treatment of outsource arrangements, operating expenditure, capital expenditure, the cost of capital and taxation, the efficiency carryover mechanism, and demand for services. Although not required amendments in themselves, these elements influence the P₀ and X factor directly as well as indirectly through factors such as the RAB roll forward and the efficiency carryover mechanism.

Multinet has not amended the P₀ in the manner required by the Commission and instead has proposed a P₀ of -9.0%. Multinet has proposed alternative outcomes in relation to the treatment of outsource arrangements, operating expenditure, capital expenditure, the cost of capital and taxation. These are discussed below.

2.1 The outsource arrangements

Multinet has expressed concern with the approach adopted in the final decision by the Commission in respect of the Operating Services Agreement (OSA) fee paid between Multinet and Alinta Asset Management (AAM) (under which AAM operates the Multinet network), as well as the fee paid by Multinet to its parent Energy Partnership (Gas) Pty Limited (the EPG fee).

In respect to the OSA fee, in the final decision the Commission was not satisfied that Multinet's forecast cost benchmarks were the best estimates reasonably derived of the forward looking costs of providing the services, consistent with the requirements in section 8.37 of the Code.³ It therefore did not approve Multinet's proposed revisions on this basis. However, the Commission did accept that there are likely to be some efficiencies derived by AAM that would not be achievable by Multinet. The Commission considered that ultimately it was a matter of regulatory judgment as to what allowance is appropriate in the circumstances.

The Commission determined to use the PricewaterhouseCoopers statement of AAM's 2006 costs as the basis of the forward looking operating cost benchmarks, but to exclude from those costs duplicated cost items, such as CEO, CFO, finance control and treasury, investor relations, and corporate communications. In relation to business and risk, the Commission made an allowance based on half those costs. The Commission then made an allowance for the efficiency savings identified as attributable to AAM, which would not be available to Multinet.

In the final decision the Commission was also not satisfied that the EPG fee was consistent with the Code.⁴ However, the Commission did accept that relevant costs will be incurred by a

³ Final Decision, p. 126.

⁴ Final Decision, pp. 127-128.

parent entity in undertaking corporate functions that would be required of a distribution business, for example, costs of corporate governance, treasury functions, investor relations, human resources management and statutory reporting. It appeared likely to the Commission in the final decision that the fees paid to PIES⁵ were not likely to recover all such costs. In the circumstances, and having regard to the overall reduction in Reference Tariffs under the review, in the final decision the Commission determined to include an allowance for the corporate overheads identified under the EPG fee.

Ultimately, the final decision of the Commission was to use an amount of \$38.52 million as the 2006 base for establishing future operating cost benchmarks. The Commission approved the amounts that Multinet had sought to roll into its RAB.

In response to the Commission's final decision, Multinet has made additional submissions on both the OSA and EPG fees and rejected the Commission's final decision in relation to 2006 expenditure. The Commission has considered the additional material put forward by Multinet in response to the final decision and does not consider that any of the additional material provided by Multinet satisfactorily addresses the Commission's concerns. As such, the Commission has not altered its position from that in its final decision in respect of Multinet's forecast operating expenditure proposals. Set out below are the Commission's specific consideration of Multinet's additional submissions and the Commission's further final decision in respect of Multinet's 2006 expenditure.

2.1.1 The OSA fee

In response to the final decision Multinet has submitted that the Commission has not established that Multinet's approach to forecasting its OSA costs for 2008-2012 is not Code compliant. Multinet has made this submission on the basis that it is unclear why the Commission has concluded that Multinet's estimate (\$30.68 million) does not comply with the Code, and has chosen to replace Multinet's estimate with its own (\$30.55 million) when the difference is so small.⁶ Multinet submitted that further doubt is placed on the Commission's decision as a result of the following points:⁷

- (a) 'incentive to negotiate the lowest cost – the Commission's view that Multinet did not have or respond to its incentive to negotiate the lowest sustainable cost is clearly inconsistent with paragraphs 13 to 21 of Mr Lowe's affidavit'
- (b) 'transparency of cost information – while the OSA does not compel AAM to provide Multinet with its cost information, AAM provided this information to Multinet and the Commission voluntarily. In the light of this information, Multinet has maintained its view that its forecast OSA costs reflect it securing an efficient commercial outcome from its OSA renegotiation in 2008'
- (c) 'excluded ESF costs – the ESF functions that AAM conducts are not duplicated services to Multinet. They are Alinta's overheads of doing business and are part of AAM's legitimate cost base. NERA confirmed that a proportion of a contractor's common costs should be included in its costs base when seeking to establish an in-house counterfactual'
- (d) 'synergy calculation – the Commission did not take account that AAM's estimate of its synergies is a minimum estimate. Other synergies exist but they are too difficult to calculate. NERA also highlighted this challenge'.

⁵ PIES is Pacific Indian Energy Services Ltd. PIES provides services to United Energy Distribution Pty Limited and to AlintaGas Networks Pty Ltd.

⁶ Multinet 2008, *Gas Access Arrangement Review 2008 to 2012 Final Decision Response Summary*, 28 March, p. 24.

⁷ *Ibid.*, p. 24.

In relation to Multinet's point (a), the Commission clearly set out in its final decision that it considered that Mr Lowe's⁸ evidence provides no persuasive evidence to conclude that AMPCI⁹ undertook a careful analysis of the costs that Multinet would incur if it continued to operate the network compared to the outsourcing of its operation and management to AAM prior to negotiating the OSA.¹⁰ This was because, taking into account the information set out in Mr Lowe's affidavit, the Commission, as outlined in the final decision, was concerned that by fixing the operating fee on historical costs Multinet failed to give consideration to the ability to achieve lower costs over time, as opposed to its concern to guard against the risk of costs rising in the future. The Commission noted that Multinet, or more accurately AMPCI, appears to have failed to question how it would benefit from any efficiency gains in circumstances where it had no access to the actual cost information upon which it was anticipated those gains would be calculated.¹¹

Multinet's submission in relation to the transparency of cost information under point (b) involves no new submission to the Commission. Again, the Commission clearly set out in its final decision that Multinet's cost forecasts are based on the historical contract payments, adjusted for the anticipated outcome of its upcoming contract renegotiation with AAM.¹² The Commission stated that despite this, the renegotiations are scheduled to take place after the Commission has concluded its review of the Access Arrangement revisions, which in turn is a principal input into that review.¹³ The Commission still considers that despite the fact Multinet might maintain its view that its forecast OSA costs reflect it securing an efficient commercial outcome from its OSA renegotiation in 2008, there still remains an element of significant speculation as to what the outcome of that price renegotiation will be.

As to Multinet's points (c) and (d), the Commission notes that in its final decision it acknowledged that there are likely to be some efficiencies derived by AAM that would not be achievable by Multinet. The Commission also considered that the allocation of some element of Alinta ESF¹⁴ costs to the Multinet business are appropriate, for example, HR costs and Information System costs where these are directly related to the operation of the Multinet business.¹⁵ However, the Commission noted in the final decision the Commission's concern with the overall allocation of Alinta ESF costs and considered that there is a real and not remote possibility that these costs include both (1) costs for functions not properly referable to the provision of Reference Services, and (2) duplicated costs or costs that are only incurred as a result of the split of ownership and operation and management of the business.

As set out above, the Commission considered that ultimately it was a matter of regulatory judgment as to what allowance is appropriate in the circumstances. Multinet's submissions fail to take into account that as part of that regulatory judgement, and in light of the fact that it was not satisfied that Multinet's forecast cost benchmarks are consistent with the requirements in section 8.37 of the Code, the Commission did consider the overall evidence before it, including the ESF costs and NERA's synergy analysis (even though it may not have specifically noted that AAM stated that its estimate of synergies is a minimum estimate), and was mindful of the section 2.24 considerations by making an allowance to Multinet.

⁸ Mr Peter Lowe is currently a director of Multinet Group Holdings Pty Ltd, Multinet Gas (DB No. 1) Pty Ltd and Multinet Gas (DB No. 2) Pty Ltd and at the time the OSA was formed worked for AMPCI and was involved in negotiating the OSA on AMPCI's behalf over the period 2002 to 2003.

⁹ AMPCI is AMP Capital Investors (previously AMP Henderson)

¹⁰ Final Decision, p. 118.

¹¹ Final Decision, p. 118.

¹² Final Decision, p. 126.

¹³ Final Decision, p. 126.

¹⁴ ESF (Enterprise Support Functions) costs are said to relate to activities undertaken by Alinta to support the various business units.

¹⁵ Final Decision, p. 126.

Moreover, the Commission specifically included as part of this allowance efficiency savings identified as attributable to AAM, which would not be available to Multinet.¹⁶

Finally, the Commission has undertaken a reconciliation of Multinet's claims in respect of the OSA fee and the supporting information in relation to the cost base for that fee. Based on that reconciliation, the Commission has identified approximately [REDACTED] which does not reconcile as between the claimed OSA fee and the cost supported basis of the OSA fee. The Commission has made an appropriate adjustment to the Multinet operating expenditure benchmark.

2.1.2 The EPG fee

The final decision in respect of the EPG fee is rejected by Multinet on the basis that the amendment of the EPG fee from \$4.9 million to \$2.7 million per year specifically is based on the removal of:¹⁷

- \$1.5 million per year for fees paid by the DUET trust to its Responsible Entities where the underlying costs cannot be readily identified
- \$0.8 million per year for fees paid to Alinta for which there is no basis on which such an allocation could form part of the EPG fee.

Multinet submitted that the Commission appears to have only allowed the EPG fee to the extent it is supported by costs which meet the criteria of the Commission's regulatory accounting framework but notes that this framework differs to Accounting Standards by requiring underlying costs of all related parties to be accounted for. Multinet submitted that this framework is unworkable as neither Multinet nor its parent entities have control that enables them to either access or mandate that costs information be extracted and presented for regulatory purposes from Macquarie, AMP and Alinta.

The Commission does not consider that Multinet raises any further, new considerations or arguments to those set out in its evidence already received by the Commission and dealt with in the final decision.¹⁸ Multinet has not provided any additional material that has caused the Commission to change its view that Multinet's proposed treatment of its outsource arrangements is not consistent with the requirements of the Code. Further, Multinet has not provided any additional information in respect of the EPG fee that has caused the Commission to alter its opinion that the Commission's treatment of Multinet's outsource arrangements as set out in the Final Decision is other than consistent with the requirements of the Code.

Additional information received from Multinet in relation to its direct costs however has resulted in some adjustments to the EPG fee. The Commission's discussion of this is set out in section 2.3.2 of this further final decision.

2.1.3 Further final decision

For the reasons set out above, the Commission is not satisfied that the amended revisions to Multinet's Access Arrangement incorporate the amendments specified by the Commission in its final decision in respect of the OSA fee and the EPG fee. The Commission is also not satisfied that the amended revisions to Multinet's Access Arrangement either substantially incorporate the amendments specified by the Commission or otherwise address to the Commission's satisfaction the matters the Commission identified in its final decision.

¹⁶ Final Decision, p. 127.

¹⁷ Multinet 2008, *Gas Access Arrangement Review 2008 to 2012 Final Decision Response Summary*, 28 March, p. 25.

¹⁸ Final Decision, pp. 92–131.

Therefore, in accordance with section 2.41 of the Code, the Commission's further final decision is that it does not approve Multinet's amended revisions to its Access Arrangement in respect of its forecast cost benchmarks and the OSA fee and the EPG fee.

The Commission's recalculated P_0 and X factor incorporated in the Access Arrangement drafted and approved by the Commission pursuant to this further final decision therefore do not include the revised amendment sought by Multinet. Instead, for the reasons set out above and in the final decision, they reflect the Commission's decision on the OSA fee and EPG fee as set out in the final decision.

2.2 Cost of capital and taxation

Sections 8.30 and 8.31 of the Code are relevant to determining the Rate of Return to apply to an Access Arrangement.

Section 8.30 provides:

The Rate of Return used in determining a Reference Tariff should provide a return which is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Service (as reflected in the terms and conditions on which the Reference Service is offered and any other risk associated with delivering the Reference Service).

Section 8.31 provides:

By way of example, the Rate of Return may be set on the basis of a weighted average of the return applicable to each source of funds (equity, debt and any other relevant source of funds). Such returns may be determined on the basis of a well accepted financial model, such as the Capital Asset Pricing Model. In general, the weighted average of the return on funds should be calculated by reference to a financing structure that reflects standard industry structures for a going concern and best practice. However, other approaches may be adopted where the Relevant Regulator is satisfied that to do so would be consistent with the objectives contained in section 8.1.

In relation to the use of the CAPM, each of the distributors has the following Fixed Principle in their Access Arrangement that applies to the Rate of Return.

To the extent that the Rate of Return is relevant to the determination of Reference Tariffs, the Rate of Return on the Capital Base shall be calculated using the Capital Asset Pricing Model.

This Fixed Principle will apply until the end of the Third Access Arrangement Period.

Under section 8.47 of the Code a Fixed Principle is an element of the Reference Tariff Policy that cannot be changed without the agreement of the Service Provider.

In the final decision the Commission concluded that the evidence in relation to the prevailing risk adjusted market rate of return was consistent with a Rate of Return for Multinet of 6.20 per cent.

A real after-tax Rate of Return does not include any allowance for the cost of taxation to the distributors. Accordingly, the price controls to be incorporated into a distributor's revised Access Arrangement must include an allowance for taxation obligations. The cost of taxation is taken into account in the determination of Total Revenue as an element of Non-Capital Costs under section 8.37 of the Code and with reference to the objectives contained in section 8.1. Consideration was also given to sections 8.30 and 8.31 as a means of incorporating 'prevailing conditions' in the market for funds. In the final decision the

Commission determined that in the calculation of the Rate of Return, the distributors must use a value for imputation credits (gamma) of 0.50.

In response to the final decision, Multinet submitted amended revisions to its Access Arrangement that incorporated a Rate of Return of 7.30 per cent, and a value for imputation credits of 0.35. In support of its proposed amended revisions to its Access Arrangement Multinet called on the Commission to review its final decision on the Rate of Return and taxation. In particular, Multinet's submission¹⁹ addressed the Commission's consideration of the values applied to:

- inflation
- debt premium
- equity beta
- imputation credits.

Each of these matters is discussed below.

2.2.1 Inflation

In the final decision the Commission adopted a forecast inflation rate of 2.7 per cent in calculating the Rate of Return.²⁰ In its submission in response to the final decision Multinet claimed that:

- in examining average inflation over the past ten years, the Commission should have corrected for the inflationary effect of the GST which would provide an adjusted Commission forecast inflation rate of 2.4 per cent, and
- the Commission should not have taken into account the February 2008 Statement on Monetary Policy issued by the Reserve Bank of Australia (RBA), as this was information which was released almost two months after the end of the November 2007 sampling period.²¹

Multinet noted that it did not consider that the estimate of inflation obtained by adjusting the Commission's methodology (which would give an inflation rate of 2.4 per cent) would be an efficient predictor of forward looking inflation. Rather, Multinet considered that an inflation rate of between 2.5 per cent and 2.6 per cent was appropriate. Multinet therefore adopted an inflation rate of 2.6 per cent in determining the Rate of Return applied in its amended revisions to its Access Arrangement.²²

In section 10.6.1 of the final decision the Commission considered the evidence provided by each of the distributors, the statements of the RBA and Treasury, the views of financial market forecasters and historic indicators, and the need for consideration of a ten year horizon consistent with the yield on ten year nominal CGS. Following its consideration of this material the Commission formed the view that the best estimate of inflation arrived at on a reasonable basis as required by section 8.2(e) of the Code was 2.70 per cent.²³

In arriving at this view, the Commission took into account, *inter alia*:

- an average inflation rate of 2.7 per cent over the past 10 years, indicative of a realised rate of inflation slightly above the mid point of the RBA's target range for inflation and

¹⁹ Multinet's submission was accompanied by a supporting report from NERA dated 27 March 2008 which addressed issues surrounding inflation, the debt margin and the equity beta.

²⁰ Final Decision, p. 489.

²¹ Multinet 2008, *Gas Access Review 2008 to 2012 Final Decision Response Summary*, 28 March, p. 15.

²² *Ibid.*, p. 15.

²³ Final Decision, p. 460.

- the RBA's February 2008 Statement on Monetary Policy, indicating medium term (mid 2010) forecasts of inflation at or above the upper bound of the 3.0 per cent upper bound of the Reserve Bank's target range.²⁴

The Commission has noted the arguments presented by Multinet that the forecast inflation rate should have been assessed at 30 November 2007 (the point at which the risk-free rate was measured²⁵) rather than at a later date. The Commission agrees that from the perspective of consistency, this is correct. The Commission also notes that from a practical perspective it is reasonable to base forecasts on a measurement period at a particular point in the review of proposed revisions to Access Arrangements, such as the November 2007 period. This measurement period then forms the basis upon which the final decision (and, where necessary, further final decision and the drafting and approving of the Commission's amended revisions to Access Arrangements) is made. Nevertheless, the Commission considers that, had it considered the forecast inflation rate at that time, it could have reasonably formed the view that forecast inflation was 2.7 per cent or 2.6 per cent.

Having considered Multinet's submission the Commission considers that there are persuasive and equally plausible arguments to support a forecast of inflation of either 2.6 per cent or 2.7 per cent. Given this, the Commission is satisfied that the amended revisions to Multinet's Access Arrangement in adopting an inflation rate of 2.6 per cent otherwise addresses to the Commission's satisfaction the matters identified in the final decision as being the reasons for requiring the amendments in its final decision.

Accordingly, the Commission's recalculated P_0 and X factors incorporated in the Access Arrangement drafted and approved by the Commission pursuant to this further final decision reflect an inflation forecast of 2.6 per cent.

2.2.2 Debt premium and debt raising transaction costs

In section 10.6.4 and 10.6.5 of the final decision the Commission considered analysis conducted by the Allen Consulting Group (ACG) in determining the debt premium on BBB+ rated bonds over the 20 trading days to 30 November 2007. The final decision applied a value of 214.5 basis points (bp), the component parts of which were the debt premium as observed of 202.0bp plus 12.5bp debt raising transaction costs.

In its amended revisions to its Access Arrangement submitted on 28 March 2008, Multinet applied a value for the debt premium of 247.1bp in determining the Rate of Return applied in its revised Access Arrangement.²⁶ This value comprised a debt premium derived from CBASpectrum (to 30 November 2007) of 209.6bp, an allowance for debt raising transaction costs of 12.5bp and an allowance of 25.0bp to correct for an alleged bias in CBASpectrum estimates of fair value yields.²⁷

In its response to the final decision Multinet identified concerns with the methodology applied by ACG in determining the debt premium, the data relied upon (as sourced from CBASpectrum), and the market movements post the November measurement period.²⁸

²⁴ Final Decision, pp. 458 – 459.

²⁵ The determination of a measurement period for the risk-free rate was sought by Multinet in a letter to the Commission dated 6 July 2007. Multinet originally proposed a measurement period of the first 20 days in August. See also the open letter published by the Commission dated 1 November 2007 by way of which the Commission gave notice to all interested parties that the measurement period of market parameters for incorporation in the Rate of Return would be the last 20 trading days in November.

²⁶ Multinet 2008, *Gas Access Review 2008 to 2012 Final Decision Response Summary*, 28 March, p. 18.

²⁷ *Ibid.*, pp. 18 – 19.

²⁸ *Ibid.*, p. 18.

The Commission sought comment from ACG on the difference between the debt premium derived from CBASpectrum to 30 November 2007 and applied by the Commission in its final decision (202.0bp) and submitted by Multinet (209.6bp). The difference in the debt premium arises from different methods applied by ACG and CBASpectrum in determining the value of the yield on Commonwealth Government Securities (CGS), which is deducted from estimates of the fair value yields on BBB+ rated bonds to derive the debt premium.

The value of the debt premium applied by the Commission in its final decision was based on an interpolated yield on CGS of 607.4bp, whereas the value applied by Multinet would appear to be based on an interpolated yield on CGS of 599.8bp.²⁹ The Commission notes advice from ACG that the different value appears to be a result of one or more of a difference in the method of interpolation, a different method of fair value adjustment, and/or a difference in the actual bonds used. As CBASpectrum has not published its methods, it is not possible to determine the exact reason for the difference.

In determining the Rate of Return as a weighted average cost of capital, the cost of debt is determined as a total cost of debt rather than the debt margin, although the Commission expresses these as separate parameters. As such, the Commission notes advice from ACG that differences in the values of the CGS yield and debt margin are of no consequence in determining the cost of debt as long as consistent values of the CGS yield (i.e. risk-free rate) are used in the determination of the debt margin and cost of debt.

Thus, the Commission agrees with ACG that if the debt margin were to be determined as per Multinet's submission this would make no difference to the cost of debt (as the higher debt margin would be exactly offset by the lower risk-free rate). However, the cost of equity would be lower and hence Multinet's overall Rate of Return would be lower.

On the matter of a correction for bias in CBASpectrum fair value yields, Multinet disagreed with the Commission's conclusion that there is no evidence of a prevailing bias at the current time. The Commission noted in the final decision that there is no evidence of bias in the CBASpectrum data used.³⁰ Multinet has not provided evidence of a bias in the current data in response to the final decision. The Commission notes that while a previous CBASpectrum estimation method had been demonstrated to provide downward biased predictions on fair value yields for low-rated, long-dated corporate bonds, no analysis or evidence has been submitted that the method now applied by CBASpectrum method (from September 2006) has a downward bias in predictions of the fair value yields.³¹ Therefore there is no basis to correct for a 'bias' for which there is no evidence.

In relation to the measurement period, the selection of a specified and pre-notified period over which debt premiums are measured, while not prescribed under the Code, does provide an important measure of business certainty for the distributors, consistent with their legitimate business interests. By selecting and pre-notifying the distributors of the period over which the estimate is to be made, distributors are then able (should they choose) to undertake financing arrangements (such as hedging) which enables them to secure their debt funding for the succeeding Access Arrangement period at levels commensurate with those in the benchmark Rate of Return used in determining Reference Tariffs.

Importantly, were the Commission to depart from the selected period in making its final decision, this would open up the distribution business to risk that the debt funding rate at which it has, or had the opportunity, to hedge, is different to the debt funding rate used in determining Reference Tariffs. If for example, the Commission reopened the measurement period and debt costs had reduced then the distributors actual debt funding position (had they

²⁹ Memorandum from the Allen Consulting Group, 15 April 2008, p. 1.

³⁰ Final Decision, p. 485. See also, Memorandum from the Allen Consulting Group, 25 January 2008, p. 8.

³¹ See also: Memorandum from the Allen Consulting Group, 9 July 2007, p. 5.

hedged in the notified period) would be higher than that reflected in the Rate of Return used in determining Reference Tariffs for the next regulatory period. This would not appear consistent with the Code objective of providing the distributor with the opportunity to earn a stream of revenue that recovers its efficient costs.³² Of course, if funding costs increased then they would stand to make a windfall gain which may not be consistent with the interests of Users and Prospective Users.³³ Importantly, the mere risk that the Commission would reopen the debt funding period represents a risk and a cost in that sense to the distributors, whatever the outcome (that is, whether they gain or lose).

Noting these risks, the Commission considers that, for any given financing structure, providing the distributors with the opportunity to hedge their debt funding costs at levels which are then reflected in setting the Reference Tariffs for the next Access Arrangement period reflects best financing practice.³⁴

Further, these considerations are consistent with Multinet's strong request that the Commission adopt a specific measurement period for the risk free rate. Multinet wrote to the Commission in July 2007³⁵ proposing that the measurement period for determining the risk free rate should be the first 20 days of August. In the letter Multinet noted that:

Multinet believes this is a relatively non controversial item and the measurement period is consistent with past practices. Although the Commission has not yet made a formal decision on the matter Multinet believes that confirmation from the Commission prior to any formal decision would be good regulatory practice and will reduce the company's exposure to regulatory risk.

The Commission discussed Multinet's proposal with Multinet and ultimately the measurement period was set as the last 20 trading days in November 2007.³⁶

SP AusNet, on behalf of the three distributors, provided on 22 April 2008 to the Commission current information on the yields on nominal 10 year Commonwealth Government Securities and raw CBASpectrum debt margins (10 year BBB+) for the period from January to March 2008.³⁷ SP AusNet submitted that this information, when adjusted for bias and debt raising costs, reflects the prevailing conditions in the market for funds during the period. Spreadsheets attached to the letter provide further information in relation to debt margins sourced from CBASpectrum data but not adjusted for any alleged bias in the CBASpectrum data. The information shows the respective debt margins for the last 20 trading days in January 2008, February 2008 and March 2008 set out respectively as 238.07bp, 292.95bp and 363.78bp.

³² Section 8.1(a) of the Code.

³³ See section 2.24(f) of the Code.

³⁴ It is noted that this approach appears to be now mandated as regulatory practice in the electricity industry, as reflected in the November 2006 amendments to the National Electricity Rules relating to the economic regulation of transmission services. Clause 6A.6.2 provides that the nominal risk free rate for a regulatory control period is determined by reference to a period of time which is either a period proposed by the relevant service provider and agreed by the regulator, with such agreement not to be unreasonably withheld, or a period specified by the regulator and notified to the provider prior to the commencement of that period if the period proposed by the provider is not agreed by the regulator. As the risk free rate and the debt risk premium are interrelated, agreeing the period for the measurement of the nominal risk free rate by default should also set the measurement period for the debt risk premium.

³⁵ Letter from Multinet to the Commission dated 6 July 2007.

³⁶ See Essential Services Commission, Open Letter, 1 November 2007.

³⁷ SP AusNet letter to Essential Services Commission, 22 April 2008.

The letter from SP AusNet also noted that in relation to the calculation of the Rate of Return, each of the distributors relies on the submissions made by each other to the Commission. In this regard, the Commission notes that the submissions made by the distributors in relation to the calculation of the Rate of Return are not necessarily consistent. For example, and specifically in relation to the measurement period for market parameters for incorporation in the Rate of Return:

- Envestra has taken an inconsistent position on the measurement period of the debt margin in initially requesting that the measurement period be set as the last 20 trading days in November 2007 and that there be no change to this measurement period, but in its response to the Commission's final decision noting that the change in credit conditions since November 2007 should be a factor that the Commission needs to take into account in determining the relevant debt margin³⁸
- SP AusNet submitted that with regard to the parameters used within the calculation of the Rate of Return either all should be updated (except the sampling of the government securities, which the businesses hedge at significant cost) or none³⁹
- Multinet submitted (in the context of forecast inflation) that the November 2007 sampling period should be used as this was the period agreed between the distributors and the Commission.⁴⁰

That said, the Commission has considered the available evidence in relation to the debt premium.

In the draft decision the debt premium had been determined, on the basis of analysis undertaken at an effective date of 20 June 2007, to be in the range of 115bp to 125bp (unadjusted for debt raising costs).⁴¹

By the time of the final decision, global debt markets had been affected by the liquidity crisis arising from exposure of financial sector counter parties to non-performing US sub-prime mortgages. Debt margins first moved upwards in June 2007 and accelerated in August 2007. After a short period of levelling out, margins rose markedly from the end of October 2007. By the November 2007 sampling period relevant debt margins were in the range of 195bp to 202bp (unadjusted for debt raising costs)⁴² which represents an increase of some 80bp from the draft decision sampling period.

Margins continued to rise after November 2007. For the last 20 trading days in January 2008, February 2008 and March 2008, the debt margins in the evidence submitted by SP AusNet were respectively 238.07bp, 292.95bp and 363.78bp.⁴³ Debt margins are shown in figure 1:

³⁸ Envestra 2008, *Amended Access Arrangement Information for Envestra's Victorian Distribution System*, 28 March, p. 39.

³⁹ SP AusNet 2008, *Gas Access Arrangement Revision: Response to Final Decision 2008 – 2012*, 28 March, p. 16.

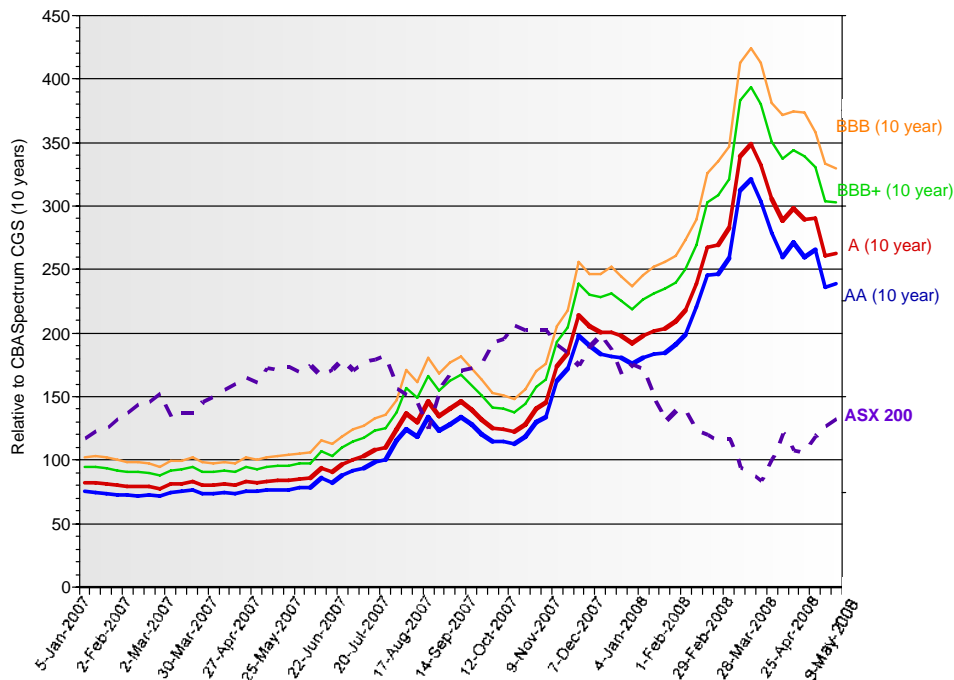
⁴⁰ Multinet 2008, *Gas Access Review 2008 to 2012 Final Decision Response Summary*, 28 March, p. 15.

⁴¹ Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, 28 August 2007, p. 412.

⁴² Final Decision, p. 488.

⁴³ SP AusNet letter to Essential Services Commission, 22 April 2008.

Figure 1 CBASpectrum debt margins to 10 year CGS by credit rating



The information on the debt margin over this period clearly indicates that there has been considerable volatility in debt markets. It is well recognised that global debt markets have been affected by a lack of liquidity as lenders have withdrawn from the market.

However, debt margins appear to have peaked in mid-March 2008 and since this time they have fallen by around 75bp. This reduction in debt margins is consistent with general market sentiment that the recent period of volatility, both in debt and equity markets, is past its peak. The Governor of the RBA, Mr Glenn Stevens, recently made the following remarks about financial developments in Australia over the past months:

The local financial community has certainly been affected by the global turmoil but, on the whole, as the Reserve Bank's Financial Stability Review being released later this morning sets out, is weathering the storm well. Profitability remains very strong and capital sound. There is very little direct exposure to the US sub-prime problems, but the main reason for the resilience is many years of robust economic growth, sound regulatory foundations and prudent risk management. The Reserve Bank has been carefully monitoring access to funding, including offshore funding. We judge it to have been more than adequate, even if more expensive, though of course, we will continue to watch the situation closely.⁴⁴

More recently the RBA published its May Statement on Monetary Policy, which described global financial sentiment as having reached its 'low point' in mid March, noting that since that time the situation had been 'improving somewhat'. The RBA noted positive indicators in a

⁴⁴ Glenn Stevens 2008, *Recent Financial Developments* (address to Smart capital 2008: The Euromoney Australian Financial Markets Innovation Congress, Sydney), 27 March.

decline in the credit default swap premia, and strengthening in global share markets, although sentiment was still considered 'fragile'.⁴⁵ It concluded:

*Overall, Australian businesses are in a strong position, with high levels of profits and continued access to debt and equity funding, despite the turmoil in financial markets.*⁴⁶

Other market commentators also appear to have accepted that the most severe period of reduced access and higher cost of funds has now passed.⁴⁷

The Commission notes that the Code does not mandate a particular period or particular time on which to base the estimate of prevailing debt margins. In fact a number of approaches are adopted by regulators.⁴⁸ The Commission does not consider March, for example, to be a unique and correct estimate of the prevailing conditions for debt. There is no reason to conclude that March, for example, represents the cost of debt that will be incurred by the distributors in providing the Reference Services over the period from 1 January 2008 to 31 December 2012.

There is the very real prospect that March is an outlier month, and one which is inconsistent with the generally prevailing cost of debt. The debt margin that was generally prevailing in debt markets prior to June 2007 was less than 100bp. This margin had increased markedly by November and had further blown out over January to March, and now appears to be on the decline. Given these factors, the Commission considers that the November based estimate, while higher than the debt margin that has been generally prevailing over the longer term and lower than the margins in January through to March (and also April), is a reasonably based estimate of prevailing debt costs.

Accordingly, in the Access Arrangement drafted and approved by the Commission, and for the reasons set out above and in the final decision, the Commission has adopted a value for the debt premium of 202.0bp (plus 12.5bp debt raising transaction costs) in determining the Rate of Return.

2.2.3 Equity beta

The CAPM requires the determination of the relative volatility or riskiness of the relevant asset class, compared to the overall market and this is captured in the equity beta term in the CAPM. In the final decision the Commission concluded that the available market evidence was consistent with an equity beta of 0.5 and 0.8.⁴⁹ The Commission's final decision was that the best estimate of the equity beta arrived at on a reasonable basis was an equity beta of 0.7.⁵⁰

In doing so, the Commission noted that an equity beta of 0.7 was less than the value of 1.0 that applied in respect of the current Access Arrangements. In the final decision the

⁴⁵ RBA 2008, *Statement of Monetary Policy*, 9 May, pp. 1-2.

⁴⁶ *Ibid.*, p. 52.

⁴⁷ For example, in its 6 May *Australia at a Glance* statement, nabCapital concluded that 'We continue to expect that the RBA is now on hold for some time and we expect that further out, once evidence of a much slower growth in domestic demand becomes evident, the next move in the base rate will be a cut, most likely in 2009'.

⁴⁸ For example, the AER/ACCC has recently used a 10 day moving average in its January 2008 final decision in respect of SP AusNet's 2008-2014 electricity transmission revenue cap but a 40 day moving average in respect of its April 2008 decision on GasNet's 2008-2012 gas Access Arrangement. ESCOSA has been required to take a five year average of bond spreads for ETSA Utilities.

⁴⁹ Final Decision, p. 476.

⁵⁰ Final Decision, p. 489.

Commission decided that rather than applying an equity beta of 0.7 (notwithstanding that it considered this to be the best estimate of this measure arrived at on a reasonable basis) it would allow a transitional adjustment by establishing the Total Revenue amount based on an equity beta value of 0.8.⁵¹

The equity beta was the subject of much consideration prior to the final decision. In response to the draft decision the distributors engaged Competition Economics Consulting Group (CECG) to review the Commission's method for establishing the compensation for relative risk in the estimated cost of equity for the distributors. CECG was asked to provide advice on the following matters:

- Whether the resulting return on equity used in the CAPM as has been historically practiced in regulatory decisions (single factor/single period CAPM), reflects best estimates on a reasonable basis of the prevailing cost of equity for such businesses, and if not, why.
- If the use of the single period/single factor CAPM, as historically practiced, applying an equity beta of 0.7, does not adequately measure the cost of equity, advice as to what alternative approaches to using the CAPM could be employed that would give a better estimate and provide that estimate. CECG provided reports to the distributors that were submitted to the Commission subsequent to the draft decision and final decision.⁵²

CECG identified a range of issues regarding what it referred to as the Sharpe form of CAPM that has, since the inception of the Code in 1997, been used by the Commission and other regulators in determination of the weighted average cost of capital for regulated utility businesses. The CECG report concluded that deviation from an equity beta of 1.0 (a value which the Commission has previously adopted) increased the volatility of estimates. The CECG report also stated that using the Sharpe CAPM with an equity beta of 0.7 will tend to result in a downwardly biased estimate of the cost of equity – even if the equity beta of 0.7 has been accurately estimated.⁵³

The Commission expressed the view in the final decision that an underlying premise of the CECG report was that the Commission had the latitude to depart from the use of the (Sharpe) CAPM in establishing the Rate of Return. The Commission does not believe that it has this latitude: as noted above section 8.47 of the Code provides that Fixed Principles cannot be changed without the agreement of the Service Provider. The Commission noted that no distributor had sought a change to the Fixed Principle relating to the CAPM.

In the final decision, the Commission concluded that it was reasonable under the Code to derive an appropriate estimate of the cost of capital for regulated industries by using this form of CAPM. The Commission concluded this on the basis that the Sharpe CAPM:

- is commonly understood to be the standard approach applied by Australian regulators and the wider financial community
- was the well accepted model at the time the Code was drafted
- is set out in the Fixed Principles in the distributors' existing Access Arrangements and
- it is understood by stakeholders.⁵⁴

Following the final decision, CECG was commissioned by the distributors to provide further comment on the Commission's final decision.⁵⁵ In its memorandum to the distributors, CECG

⁵¹ Final Decision, pp. 205 – 207.

⁵² CECG, 2007, *Estimating Relative Risk in the Market for Funds*, 26 October.
CECG, 2008, Memorandum to Greg Meredith titled *Review of Vic Gas Final Decision*, 27 March.

⁵³ CECG 2007, *Estimating Relative Risk in the Market for Funds*, 26 October, p. 11. As noted in the Commission's final decision, the CECG report is not simply a critique of the equity beta, but a critique of the Sharpe CAPM.

⁵⁴ Final Decision, pp. 473 – 475.

⁵⁵ CECG 2008, Memorandum to Greg Meredith titled *Review of Vic Gas Final Decision*, 27 March.

stated that the Commission had misinterpreted the intent of its original report, noting that it had been developed to point out issues of bias associated with the Sharpe CAPM rather than propose to replace the Sharpe CAPM with an alternative form.

The Commission understands that the intent of the original CECG report was to present the view that:

- there is theoretical and empirical evidence to demonstrate that use of the Sharpe CAPM with an equity beta value significantly different to one will result in an estimation bias of the cost of equity for the relevant business or stock.⁵⁶ CECG contended that 'the only circumstance in which the Sharpe CAPM will not result in a biased estimate is when the equity beta is equal to 1.0 (as was the Commission's past practice)'
- the distributors' cost of equity should be determined from the empirically observed returns on equity for businesses with different equity beta values (i.e. the empirically established or observed security market line) rather than from the Sharpe CAPM on the basis of a particular empirical derivation of the security market line.⁵⁷ CECG indicated that the cost of equity should be determined to be 5.52 per cent above the government bond rate at an equity beta value of 0.7 (rather than 4.20 per cent above the government bond rate as determined by the Commission). Alternatively, CECG indicated that the same estimate of the cost of equity would be determined using the Sharpe CAPM by applying an equity beta value of 0.92.

In order to establish a further independent view on the theoretical and empirical matters presented, the Commission engaged ACG to undertake a review of CECG's submissions and provide an opinion on whether the matters raised and arguments presented in the submissions might warrant consideration of either:

- a change in the approach used to determine and/or assess rates of return (or more particularly the cost of equity) for the distributors or
- adjustments to be made to input parameters to the Sharpe CAPM (particularly the equity beta) to account for, or offset, suspected bias in the estimates of the cost of equity derived using the Sharpe CAPM.

In brief, the ACG report concluded the following.⁵⁸

It is our view that there are potential deficiencies in the matters raised and arguments presented in the CECG submissions. While we accept as a generality that the Sharpe CAPM has been found in many instances to under-estimate the cost of equity, we do not consider that the arguments and evidence presented in CECG's submissions conclusively establish that use of the Sharpe CAPM results in significant underestimation of the cost of equity for regulated utility businesses such as the gas distribution businesses.

In summary, our reasons for this view are as follows.

- *Empirical studies that test the predictive power of the Sharpe CAPM have mixed results and may not support the view that the Sharpe CAPM would necessarily under-estimate the cost of equity for businesses with the particular characteristics of the gas distribution businesses. We are not satisfied that CECG has undertaken a full and balanced review of relevant empirical studies, and we suggest that studies not addressed by CECG would support contrary findings (i.e., that the Sharpe CAPM does not systematically under-estimate the cost of equity for businesses with low equity betas).*

⁵⁶ CECG 2007 *Estimating Relative Risk in the Market for Funds*, 26 October, p. 6.

⁵⁷ Black, F., M.C. Jensen and M. Scholes (1972), 'The Capital Asset Pricing Model: Some Empirical Tests', in M. Jensen (ed.), *Studies in the Theory of Capital Markets*, Praeger.

⁵⁸ ACG 2008, *Response to CECG paper entitled 'Estimating relative risk in the market for funds' and associated submissions*, 2 May, p. 2.

Furthermore, we consider that a more detailed study of businesses with characteristics of the gas distribution businesses would be necessary to reach a definitive view on whether the Sharpe CAPM would systematically under-estimate costs of equity for businesses of this type.

- The theoretical basis for considering that the Sharpe CAPM would under-estimate the cost of equity for businesses such as the distribution businesses has not been conclusively established. It is our view that CECG has not established that the theoretical basis for the underestimation of the cost of equity (a high level of 'theta risk' or covariance of returns of a business with reductions in investment opportunities) is necessarily of significance for businesses with characteristics of the gas distribution businesses. There are reasons for considering that this may not be the case. Again, further analysis would be necessary to reach a definitive view on this issue.*

- CECG's estimate of a minimum equity beta value of 0.92 for the gas distribution businesses, based on an adjustment to the Commission's equity beta estimate of 0.70, is unreliable as this beta estimate was produced using methods that lack theoretical or empirical foundation.*

Having considered the evidence before it, the Commission acknowledges that it is possible that for low beta stocks the (Sharpe) CAPM may not be the best predictor of returns for firms with a beta other than 1.0.

However, the Commission is not satisfied that it is positively the case that the (Sharpe) CAPM is not a good predictor of returns for firms with a beta less than 1.0. Further, the Commission is not satisfied as to the extent to which the (Sharpe) CAPM may not accurately predict return for firms with a beta less than 1.0, such that it could make an adjustment for this issue. Even if the Commission was satisfied that some adjustment should be made as a result of estimation bias in the application of the Sharpe CAPM, there was not sufficient material before the Commission that would permit it to assess the magnitude of any such adjustment.

During the consultation process the distributors (and particularly Envestra) made numerous submissions in relation to the evidence relied upon in making the decision to change the equity beta, and the impact that a transition from an equity beta of 1.0 to an equity beta of 0.7 would have on their business. The Commission had regard to these submissions in considering whether it would be consistent with the requirements of the Code to make a transitional allowance in the equity beta. While sections 8.30 and 8.31 of the Code do not provide for consideration of these transitional factors, that is not to say they are not relevant considerations under other provisions of the Code. On this basis the Commission noted the objectives of sections 2.24, 8.1(a), and 8.1(d) of the Code. The Commission concluded that the transitional impact of the change from 1.0 to 0.7 was a relevant consideration in determining the amount it would approve for Total Revenue.

Consequently, in the final decision, the Commission provided as a transitional measure (under section 8.6 of the Code) a specific allowance in the Total Revenue of Multinet to reflect the difference in revenue from using an equity beta of 0.8 compared to an equity beta of 0.7 in order to reduce the financial impact of the reduction in the equity beta on Multinet.⁵⁹

The Commission considers that this demonstrates that the Commission has not mechanically or inappropriately applied the CAPM (as suggested by Envestra).⁶⁰ Rather, the Commission has carefully considered the material put before it through the review of the Access Arrangements in relation to the use of an equity beta less than 1.0 and has not been satisfied that the CAPM does underestimate the returns on low-beta stocks.

⁵⁹ Final Decision, pp. 205 – 207.

⁶⁰ Envestra 2008, *Amended Access Arrangement Information for Envestra's Victorian Distribution System*, 28 March, p. 34.

Accordingly, the Commission is not satisfied that Multinet's amended revisions incorporate the amendments specified by the Commission in the final decision in relation to the equity beta. The Commission is also not satisfied that the amended revisions to Multinet's Access Arrangement either substantially incorporate the amendments specified by the Commission or otherwise address to the Commission's satisfaction the matters the Commission identified in its final decision.

In the Access Arrangement drafted and approved by the Commission, consistent with the final decision and for the reasons set out in the final decision, the Commission has adopted an equity beta value of 0.7 in determining the Rate of Return. It has also continued to establish Total Revenue on a basis consistent with an equity beta of 0.8.

2.2.4 Imputation credits

In section 10.8 of the final decision the Commission considered that the taxation wedge should reflect an unbiased estimate of the cost of taxation for an efficient company arrived at on a reasonable basis, consistent with section 8.2(e) of the Code.

Consistent with previous regulatory decisions the Commission in its final decision determined the benchmark taxation allowance for Multinet with reference to a value for imputation credits of 0.50.

The final decision on the value of imputation credits was based on consideration of:

- a review of theory considering the utilisation, valuation and distribution of imputation credits and the impact of the price setting investor (that is, whether the price setting investor is the marginal or average investor)
- a review of regulatory precedent and
- the requirements of the Code.

Having reviewed the material submitted, the Commission considered that evidence to date implied a maximum value for imputation credits of either up to 1.00 or 0.72. Further, given the range of assumptions implicit in the derivation of empirical estimates of the value of imputation credits, the Commission was not persuaded that the theoretical and empirical propositions put by the distributors and its consultants justified a revision to the value for imputation credits.

The Commission therefore considered that it would be inappropriate to alter the value for imputation credits – up or down – from the value of 0.50. The Commission noted that it had reached this view having regard to the relative interests of the service providers and users and the broader public interest under section 2.24 of the Code. As the value for imputation credits of 0.35 proposed by Multinet was materially below the figure of 0.5, the Commission did not consider Multinet's proposal to have reasonably established the best estimate of the effect of the dividend imputation system on the taxation liability.

In response to the final decision, Multinet provided amended revisions to its Access Arrangement that reflected a value for imputation credits of 0.35. Multinet called on the Commission to review its final decision on the value for imputation credits. In particular, submissions from the distributors following the final decision addressed the Commission's consideration of:

- the Code
- market evidence
- theoretical evidence.

In restating its position on the value for imputation credits, Multinet resubmitted material that was considered by the Commission at the time of making the final decision, including a submission by Strategic Finance Group (SFG).

In relation to the value that should be given to imputation credits the Commission notes the following matters:

- There are differences of view amongst experts as to whether the value of imputation credits should be set by reference to the marginal (Australian non-resident) investor or to an average value across all investors.
- There are differences of view amongst experts as to whether consistency with application of the CAPM in determining the Rate of Return would require consideration of the value of imputation credits to Australian resident investors (segregated capital markets) or Australian and Australian non-resident investors (non-segregated capital markets).
- There are differences of view amongst experts as to the conclusions that can be drawn from empirical evidence on the value of imputation credits.
- The implications of the differences of view are that the value of imputation credits could lie at any point within the value range of zero to one.

There is a key theoretical difference of approach between determining the value of imputation credits by reference to the marginal investor or the weighted average of investors across the market. The issue is largely theoretical as opposed to empirical because market data can be used to estimate the value of imputation credits by reference to both the marginal investor or the weighted average of investors across the market. The central issue is whether the correct theoretical approach is to estimate the value of imputation credits by reference to the marginal investor or the weighted average of investors across the market. The conventional derivation of gamma terms from portfolio theory delivers an answer that is a weighted average across the market. Professor Gray's work challenges whether this conventional derivation of gamma terms is correct.

On the basis of the material before the Commission in this Access Arrangement review process, the Commission is not able to resolve the theoretical issue as to whether it is appropriate to determine the value of imputation credits by reference to the marginal investor or the weighted average of investors across the market, or issues such as the consistency of the CAPM with the approach adopted – be it the marginal investor or the weighted average of investors across the market. There is insufficient material before the Commission to resolve the differences of view amongst experts as to the theoretical approach that should be adopted to determine the value of imputation credits, in the context of the Code requirements including any Fixed Principles. A considerable amount of work would be required to begin to resolve these differences and achieve a consensus about the correct theoretical approach. This work would go beyond the scope of this Access Arrangement review.⁶¹

Accordingly, the Commission remains of the view that a value for imputation credits consistent with the Code is 0.50 and is not satisfied on the evidence before it that it should apply a value for imputation credits of 0.35. On this basis the Commission is not satisfied that the amended Access Arrangement revisions as submitted by Multinet incorporate the amendments specified by the Commission in the final decision in relation to the value to be placed on imputation credits. The Commission is also not satisfied that the amended Access

⁶¹ The Commission notes that under the National Electricity Rules relating to the economic regulation of transmission rules, the assumed utilisation of imputation credits is deemed to be 0.5 (Rule 6A.6.4(a)(q)). The AER is required under the National Electricity Rules to carry out a review of the value of and methodology used to calculate the assumed utilisation of imputation credits, with the first review to be initiated on 1 July 2009 and every five years after that (Rule 6A.6.4(b) – (d)). The National Electricity Rules also provide that where the value of the assumed utilisation rate of imputation credits cannot be determined with certainty, the AER must have regard to the need for **persuasive evidence** before adopting a value that differs from the value that has previously been adopted for it, as well as the need to achieve an outcome that is consistent with the national electricity objective (Rule 6A.6.4(e)). A forum, such as the one envisaged by the National Electricity Rules for the review of WACC parameters such as the gamma, would appear to be an appropriate forum in which the resolution of the very different positions of experts on the value to be given to imputation credits can start to be undertaken.

Arrangement revisions either substantially incorporate the amendments specified by the Commission or otherwise address to the Commission's satisfaction the matters the Commission identified in its final decision.

In the Access Arrangement drafted and approved by the Commission, consistent with the final decision, and for the reasons set out in the final decision, the Commission has adopted a value for imputation credits of 0.50 in determining the Rate of Return.

2.2.5 Conclusion

Table 1 sets out the parameters and weighted average Rate of Return used by the Commission in determining the P_0 and X factors set out in the Access Arrangement drafted and approved by the Commission.

As in the final decision, the Commission considers that it remains appropriate to transition the impact of moving from an equity beta of 1.0 to an equity beta of 0.7 by approving a Total Revenue amount based on an equity beta of 0.8.

Table 1 **Weighted average cost of capital and input parameters, including imputation credits**
Final decision and further final decision

	<i>Final decision</i>	<i>Further final decision</i>
Risk-free rate (real) (R_f)	3.26%	3.36%
Debt premium (R_d)	2.145%	2.145%
Equity premium ($R_m - R_f$)	6.00%	6.00%
Equity beta (β_e)	0.70	0.70
Gearing (debt:assets)	60:40	60:40
Imputation credit value (λ)	0.50	0.50
Inflation	2.70%	2.60%
Real after-tax 'vanilla' WACC	6.20%	6.30%

This after-tax WACC is equivalent to, in Multinet's case, a pre-tax WACC of 6.80 per cent. Amongst other things, this pre-tax WACC is used in the calculation of the efficiency carryover amount arising from the second regulatory period and which impacts upon tariffs in the third regulatory period.

2.3 Operating expenditure

In submitting amended revisions to the Commission in response to the final decision Multinet's calculation of the P_0 and X factor does not incorporate the operating expenditure forecasts set out in the final decision. The operating expenditure forecasts used by Multinet vary in two aspects from the final decision:

- the rate of change forecast
- the provision for direct costs
- the efficiency carryover amount, and
- the quantum of the EPG and OSA fees (discussed in section 2.1 above).

The issues raised by Multinet in relation to the rate of change forecast and direct costs are set out below.

2.3.1 Rate of change

The approach adopted by the Commission to determine the operating expenditure forecast in the final decision was to:

- establish for 2008 a base level of recurrent operating expenditure for each distributor using 2006 reported or 'revealed' expenditure (adjusted to incorporate the rate of change or trend in operating expenditure assumed for the second regulatory period for the movement from 2006 to 2007 and the trend assumed for the third regulatory period for the movement from 2007 to 2008)
- identify and incorporate into the 2008 base level of operating expenditure new obligations and functions that are assessed as materially impacting the scope of operations, and therefore operating costs, as a one-off (step) change
- apply a rate of change to the operating expenditure to reflect changes in input cost drivers (including volume growth) and productivity. The Commission's final decision provided for a rate of change of -0.12 per cent for Multinet.

In response to the final decision, Multinet argued that in the calculation of the rate of change the PFP should be set to zero if the 15 per cent base year cut to its operating expenditure is to remain. Multinet stated that the reasons for this include:

- the determination of PFP by the Commission is inconsistent with the base year cost determination, and will lead to an erroneous operating expenditure forecast;
- the imposition of any level of productivity improvement in the operating expenditure forecasts represents a 'double dip' vis-à-vis the 15+ per cent cut to the base year cuts, relative to the industry benchmarks; and
- when considering efficiencies to be achieved / productivity, the 15+ per cent base year cost cut can only be viewed as an early recognition of future efficiencies.⁶²

In response to the final decision, Multinet re-stated its opinion that the PFP parameter should be 1.41 per cent, and that it did not accept the Commission's final decision in relation to rate of change and PFP.⁶³ The Commission therefore assumes that Multinet continues to consider that the rate of change parameters that should be used are those set out in its response to the draft decision⁶⁴ which are reflected in the table below.

⁶² Multinet 2008, *Gas Access Arrangement Review 2008 to 2012 Final Decision Response Summary*, March, p. 26.

⁶³ *Ibid.*, p. 28.

⁶⁴ Multinet, *Submission to Essential Services Commission: Re Gas Access Arrangement Review 2008 to 2012 Draft Decision*, pp. 113–114.

Table 2 **Rate of change – final decision and Multinet response**

<i>Parameter</i>	<i>Final decision</i>	<i>Multinet response to final decision</i>
Labour price [A]	5.7%	5.7%
Labour share [B]	0.62	0.62
Non-labour price [C]	2.6%	2.6%
O&M input price	4.52%	4.52%
[D] = [B * A + (1 – B) * C]		
PFP [E]	2.87%	1.41%
Output [F]	0.93%	0.83%
CPI [G]	2.70%	2.60% ⁶⁵
Rate of change	-0.12%	1.44%
[H] = [D – E + F – G]		

Therefore, Multinet has not incorporated amendments required by the final decision with respect to PFP, output and CPI parameters.

PFP parameters

Multinet’s reasons for applying a PFP growth rate of 1.41 per cent is contained in its response to the Commission’s draft decision.⁶⁶ Multinet primarily relies on the Horton 4 consulting report, which suggests that an aggregate approach may be appropriate and references a figure of 1.4 per cent as used by the gas and electricity regulator in the United Kingdom for normal TFP growth in gas distribution.

For the reasons set out in the final decision the Commission does not consider that the aggregate approach advocated by Multinet will represent the best estimate of the PFP parameter arrived at on a reasonable basis.

Output

The value for the change in output quantity required by the final decision for Multinet was 0.93 per cent. This value was calculated on the basis of projected changes in Multinet’s customer numbers and delivery volumes using cost elasticity estimates from PEG’s US short run cost model.⁶⁷

For the reasons set out in the Commission’s final decision, the Commission is not satisfied that the rate of change estimate put forward by Multinet is consistent with the requirements of the Code.⁶⁸

CPI

In responding to the final decision, Multinet stated, in the context of the CPI to be used in the determination of the WACC, that a CPI of 2.60 per cent should be adopted.⁶⁹

⁶⁵ Multinet 2008, *Gas Access Arrangement Review 2008 to 2012 Final Decision Response Summary*, March, p. 14; Multinet 2007, *Submission to Essential Services Commission: Re Gas Access Arrangement Review 2008 to 2012 Draft Decision*, 29 October, p. 112 where Multinet notes that “[I]n relation to the CPI, later in this submission Multinet explains that its forecast of CPI has been updated as is now 2.6 per cent per annum”, although the figure of 2.5 per cent appears in the table on pages 114 and 152.

⁶⁶ Multinet 2007, *Submission to Essential Services Commission: Re Gas Access Arrangement Review 2008 to 2012 Draft Decision*, 29 October, pp. 112–114.

⁶⁷ PEG 2008, *Opex Rate of Change and Productivity: Response to Consultant Reports: Final Report*, February, pp. 63–66.

⁶⁸ Final Decision, pp. 224–251.

As set out in section 2.2, the Commission considers that a CPI of 2.60 per cent should be adopted in the revisions to Multinet's Access Arrangement.

In addition to the above submissions made by Multinet in response to the final decision, Multinet also provided further material to the Commission in the form of reports by Horton 4 Consulting (Horton) and Meyrick and Associates (Meyrick). The Commission's response to the matters raised in the further reports of Horton and Meyrick is set out below.

Issues raised by Horton

Horton stated that there is no response to its criticism that the PEG real wage forecast is lower than that of either of the two forecasts on which it is based.⁷⁰ However, as the wage forecast is no longer based on a weighted average of the forecasts of Access Economics and BIS Shrapnel, this issue was not relevant to the Commission's final decision and is not relevant to the Commission's amended revisions to Multinet's access arrangement. Similarly, as the PFP estimate is no longer based on the use of ANZ data, the issue raised by Horton as to the estimated cost models for the United States and Australia / New Zealand being different is not relevant to the Commission's final decision and is not relevant to the Commission's amended revisions to Multinet's Access Arrangement.⁷¹ In any event, because of the differences between the US and ANZ datasets it is not surprising that the estimated US and ANZ cost models are different. The differences include that capital cost is not measured consistently across the companies comprising the dataset and the operating expenditure of these companies is not their actual operating expenditure but what was allowed by regulators.⁷²

In relation to Horton's criticism that PEG's model suffers from dynamic mis-specification, the Commission notes that dynamic specification models are generally relevant to models where the value of the dependent variable (in this model, operating expenditure) is regressed against a value of the same variable from an earlier period or periods. As PEG's model does not involve the regression of operating expenditure against values of the same variables from previous periods, Horton's dynamic specification criticism is not relevant to PEG's model.

Horton goes on to comment that PEG's specification might have biased the estimates, in particular, that of the capital stock, which Horton states, is of the wrong sign.⁷³ The Commission notes its response to this issue in its final decision.⁷⁴ The Commission also notes that when PEG ran the same model but excluded the capital stock variable the result showed that the time trend was statistically unchanged from before, and the overall operating expenditure PFP projections were essentially identical to before.⁷⁵ PEG has also stated that its model includes other variables which measure the operating expenditure-capital substitution effects directly. This can be seen in the co-efficient on the percent of gas distribution main constructed of cast iron and bare steel, where the results show that distributors' operating expenditure declines when they have relatively less cast iron and bare steel main. The coefficient on the capital stock is not statistically significant when the cast iron and bare steel variable is included in the model. This finding supports the conclusion that

⁶⁹ Multinet 2008, *Gas Access Arrangement Review 2008 to 2012 Final Decision Response Summary*, 28 March, pp. 14–15.

⁷⁰ Horton 4 Consulting 2008, *Opex Rate of Change and Productivity: Pacific Economic Group's Response to Consultant Reports*, 27 March, p. 1.

⁷¹ *Ibid.*, p. 2.

⁷² See: PEG 2008, *Opex Rate of Change and Productivity: Response to Consultant Reports: Final Report*, February, p. 51.

⁷³ *Ibid.*, p. 3.

⁷⁴ Final Decision, pp. 248–249.

⁷⁵ PEG 2008, Memorandum to the Commission: updated regressions and projections, 13 May.

operating expenditure-capital substitution is captured directly in the cast iron and bare steel variable.⁷⁶ This issue was also raised by Meyrick.⁷⁷

Horton claimed that in relation to the issue of overshooting, PEG fails to address the arguments put forward by Horton. The issue of overshooting was not relevant to PEG's estimate of the rate of change measure, was not relevant to the Commission's final decision and is not relevant to the Commission's amended revisions to Multinet's Access Arrangement.

The remainder of the issues raised by Horton⁷⁸ do not impact upon the Commission's conclusion that the output of the PEG model represents the best estimate of the rate of change measure arrived at on a reasonable basis.

Issues raised by Meyrick

In Meyrick's response to PEG's report on the rate of change, Meyrick criticised the dismissing of the distributors' data forecasts as an evidential basis upon which an estimate of PFP could be determined. For the reasons set out in the Commission's final decision, the Commission does not consider that the distributor's forecasts of operating expenditure PFP growth provides a robust basis upon which the PFP parameter can be forecast.⁷⁹

Meyrick again raised the issue that the experience of electricity distribution businesses is a good guide to what is likely to happen with the gas distributors.⁸⁰ The Commission responded to this issue in its final decision.⁸¹ The Commission also notes the material in the PEG report demonstrates that the experience of the electricity distributors is not necessarily a good guide to what the gas distributors are likely to experience.⁸² The operating expenditure change for Victorian gas distributors during the period 1998 – 2002 was 5.43 per cent, and during the period 2002 – 2006 was 7.14 per cent. The figures for the corresponding period (that is, the same period after privatisation) for electricity distributors is 10.88 per cent and 2.09 per cent. While the operating expenditure PFP change for the period 1998 – 2006 for Victorian gas distributors of 6.41 per cent is similar to that in the corresponding period for Victorian electricity distributors, being 6.48 per cent, this of itself does not support a conclusion that the experience of the electricity distributors is a good guide to what is likely to happen for the Victorian gas distributors during the regulatory period 2008 – 2012.

Meyrick restated that it considers the BIS Shrapnel forecast is conservative and appropriate.⁸³ In the final decision the Commission noted that it was not satisfied that the BIS Shrapnel estimate of operating expenditure PFP growth for the gas distribution businesses in Victoria provided the best estimate of this measure arrived at on a reasonable basis.⁸⁴ Meyrick has not provided any additional material that has caused the Commission to change its view that the estimate of the rate of change measure put forward by Multinet based on the BIS Shrapnel estimate is not the best estimate of this measure arrived at on a reasonable basis. The Commission also notes that it is incorrect to say that PEG quotes US Bureau of Labor Statistics figures to support its own estimates despite criticising Meyrick for referring to

⁷⁶ See also the discussion in: PEG 2008, op. cit., pp. 59 – 60.

⁷⁷ Meyrick and Associates 2008, *Summary of Responses to PEG's February 2008 Report on Opex Rate of Change – Forecast Opex Partial Productivity*, pp. 2, 14.

⁷⁸ Horton 4 Consulting 2008, *Opex Rate of Change and Productivity: Pacific Economic Group's Response to Consultant Reports*, 27 March, pp. 5 – 8.

⁷⁹ Final Decision, pp. 239 – 240.

⁸⁰ Meyrick and Associates, op. cit., pp. 1, 7.

⁸¹ Final Decision, pp. 240 – 241.

⁸² PEG 2008 op. cit., p. 18.

⁸³ Meyrick and Associates, op. cit., p. 3.

⁸⁴ Final Decision, pp. 240 – 241; PEG 2008 op. cit., pp. 19–27.

broadly comparable ABS estimates in the Australian context.⁸⁵ The Commission notes that PEG's report refers to an estimate of labour productivity growth for the US gas distribution industry of 3.16 per cent per annum, and the comparable figure for the electric power sector was 1.37 per cent per annum.⁸⁶ This material highlights that operating expenditure PFP for gas and electricity industries can grow at different rates and therefore data (such as the ABS data) which encapsulates such a wide range of activities is unlikely to provide a robust basis upon which to estimate forecasts specific to gas distribution activities.

Meyrick claims that the issue it has raised in relation to the gas distributors' operating expenditure PFP being likely to be less than that for the economy as a whole is not answered.⁸⁷ The Commission again notes the wide variety of PFP growth rates across the economy. The proposition that gas distributors' PFP growth may exceed that of the economy-wide PFP trends is addressed in PEG's report. It notes, particularly, the more capital intensive nature of this function and the potential to achieve greater economies of scale.⁸⁸

Meyrick also restated that it considers North American productivity growth supports its estimate of operating expenditure PFP growth of 0.8 per cent per annum.⁸⁹ For the reasons set out in the Commission's final decision, the Commission does not consider that the use by Meyrick of the North American precedents identified by Meyrick provides the best estimate of operating expenditure PFP arrived at on a reasonable basis.⁹⁰ Meyrick has not provided any additional material that has caused the Commission to change the conclusion it reached on this point in the final decision.

Meyrick has argued that the PFP of operating expenditure excluding administrative and general expenses (A&G) will be a good proxy for total operating expenditure PFP.⁹¹ The Commission does not consider that the PFP of operating expenditure excluding A&G expenses will be a good proxy for total operating expenditure PFP because, as noted by PEG, A&G expenses are an important component of any gas distributor's operating expenses. The A&G expenses are included in the distributors' operating expenditure that is adjusted by the rate of change formula, and therefore, any measure of this parameter that does not include A&G expenses is not consistent with the costs to which the rate of change is applied.⁹²

It is claimed by Meyrick that the Victorian DPI rule change proposal argues that the main factors causing productivity growth are technological change and the realisation of economies of scale and density, and that the PEG approach is inconsistent with this proposition.⁹³ It is unclear why Meyrick considers that PEG's approach is inconsistent with the proposition that the main factors causing productivity growth are technological change and the realisation of economies of scale and density, since PEG's model controls for all of these factors. PEG's model quantifies the contribution of economies of scale to PFP growth directly. PEG's model includes total miles of distribution main (customer density) as a business condition variable in

⁸⁵ Meyrick and Associates, op. cit., p. 3.

⁸⁶ PEG 2008 op. cit., p. 38.

⁸⁷ Meyrick and Associates, op. cit., p. 4.

⁸⁸ PEG 2008 op. cit., pp. 32–33.

⁸⁹ Meyrick and Associates, op. cit., p. 4.

⁹⁰ Final Decision, pp. 242–243.

⁹¹ Meyrick and Associates, op. cit., p. 6.

⁹² PEG 2008 op. cit., p. 39.

⁹³ Meyrick and Associates, op. cit., p. 8.

the model.⁹⁴ The PEG model also includes a trend variable which includes the effect on cost of technological change.⁹⁵

Meyrick noted that greater weight should be placed on recent productivity growth and that an indexing method should be utilised.⁹⁶ As noted in the final decision, the estimated historical growth of the Victorian distributors on more than 6 per cent per annum is unlikely to be a good guide for future PFP growth.⁹⁷ The Commission notes that the use of an index-based operating expenditure PFP trend would lead to a PFP growth rate in the rate of change formula in the order of 6 per cent per annum.

Meyrick again raised issues in relation to the use of the translog functional form.⁹⁸ PEG has responded comprehensively to the matters that Meyrick has raised.⁹⁹ The Commission notes that economists may take legitimately different opinions on areas of discretion in economic modelling. However, the Commission does not consider that these criticisms alter the Commission's conclusion that the output of the PEG model represents the best estimate of the rate of change measure arrived at on a reasonable basis.

In relation to PEG not including system capacity variables, Meyrick stated that as Meyrick has constructed measures of this variable for the Victorian distributors, if US data is to be used, PEG 'has a responsibility' to obtain similar information for the US distributors in its data sample. The Commission responded to these concerns in the final decision.¹⁰⁰ The fact that this data does not exist in the US and is not used as a variable in PEG's model does not alter the Commission's view that the output of the PEG model represents the best estimate of the rate of change measure arrived at on a reasonable basis. In addition, data from Victoria show that including capacity as an output variable has a negligible impact on the gas distribution industry's measured TFP trend.¹⁰¹ Meyrick has not presented any new information to support its conclusion that PEG's results that do not include a capacity variable are biased.

In relation to the estimation of key parameters using US data, Meyrick again claimed that this will not provide a satisfactory basis for forecasting Victorian operating expenditure PFP.¹⁰² The Commission responded to this issue in the final decision.¹⁰³ In short, the Commission disagrees with Meyrick that the 'totality of operating environment conditions in the US are so different to Australia (and NZ)' that the estimation of key parameters using US data cannot provide the best estimate of forecast operating expenditure PFP arrived at on a reasonable basis.

In relation to the use of US data, Meyrick also claims that PEG's use of US data to recommend X factors in Ontario is currently being disputed by the Ontario electricity distribution businesses.¹⁰⁴ The Commission understands that the development of the third generation incentive regulation mechanism has not been concluded. Therefore, it is not

⁹⁴ PEG 2007, *Opex Rate of Change and Productivity: Response to Meyrick and Associates Reports*, July, p. 58.

⁹⁵ *Ibid.*

⁹⁶ Meyrick and Associates, *op. cit.*, pp. 5–6, 7.

⁹⁷ Final Decision, p. 247.

⁹⁸ Meyrick and Associates, *op. cit.*, pp. 8–9.

⁹⁹ PEG 2008 *op. cit.*, pp. 44–47.

¹⁰⁰ Final Decision, p. 248; PEG 2008 *op. cit.*, pp. 52–54.

¹⁰¹ PEG 2008, *op. cit.*, pp. 52–53.

¹⁰² Meyrick and Associates, *op. cit.*, pp. 10–11.

¹⁰³ Final Decision, pp. 247–248; PEG 2008 *op. cit.*, pp. 47–50.

¹⁰⁴ Meyrick and Associates, *op. cit.*, p. 10.

possible to draw any implications from the proceedings of the Ontario Energy Board for the use of PEG's model in relation to the matters currently before the Commission.

Meyrick has argued that physical capital units be used in productivity measurement for regulatory applications. The Commission notes that using changes in physical capital inputs would be internally inconsistent with the decomposition model used by PEG. PEG has noted that its estimated value for the capital coefficient, which is used to project PFP, is linked to monetary capital asset values. This coefficient would have been different if physical capital units were used in the cost function – assuming that this could even be done. Given this, PEG notes that it would be inappropriate to project PFP growth by multiplying a coefficient that is estimated using monetary capital values by a completely different measure of capital inputs.¹⁰⁵

Finally, Meyrick criticised the use of firm-specific targets as not being consistent with incentive regulation. The Commission noted in the final decision that using distributor-specific partial productivity forecasts is consistent with the Code requirements as it recognises that the distributors may have different potentials to achieve future partial factor productivity gains.¹⁰⁶

Further final decision on rate of change

The Commission is not satisfied that the amended revisions to Multinet's access arrangement incorporate the amendments specified by the Commission in its final decision. The Commission is also not satisfied that the amended revisions to Multinet's Access Arrangement either substantially incorporate the amendments specified by the Commission or otherwise address to the Commission's satisfaction the matters the Commission identified in its final decision. Specifically, Multinet has not adopted a PFP of 2.87 per cent or an output measure of 0.93 per cent in its calculation of the rate of change.

Given the above, and in accordance with section 2.41 of the Code, the Commission's further final decision is that it does not approve Multinet's amended revisions to its Access Arrangement in respect of the rate of change parameter.

The Commission's recalculated P_0 and X factor incorporated in the Access Arrangement drafted and approved by the Commission pursuant to this further final decision therefore do not include the revised amendment sought by Multinet. Instead, for the reasons set out above and in the final decision, they incorporate a rate of change of -0.02 per cent based on the parameters set out in table 3. This rate of change reflects a CPI of 2.6 per cent rather than the 2.7 per cent adopted in the final decision, as discussed above.

¹⁰⁵ PEG 2008 op. cit., pp 54–55.

¹⁰⁶ Final Decision, p. 249.

Table 3 **Further final decision – rate of change**

<i>Parameter</i>	<i>Amended revisions to Multinet's Access Arrangement</i>
Labour price [A]	5.7%
Labour share [B]	0.62
Non-labour price [C]	2.6%
O&M input price	4.52%
[D] = [B * A + (1 – B) * C]	
PFP [E]	2.87%
Output [F]	0.93%
CPI [G]	2.60%
Rate of change	-0.02%
[H] = [D – E + F – G]	

As noted above, the Commission has considered the additional material put forward by Multinet in response to the Commission's final decision in drafting and approving the amended revisions to Multinet's Access Arrangement. This information includes two additional reports from Meyrick and Horton 4 Consulting.

Multinet has not provided any additional material that has caused the Commission to change its view that the estimate of the rate of change measure put forward by Multinet is not the best estimate on a reasonable basis. Further, Multinet has not provided any additional information that has caused the Commission to alter its opinion that the decomposition model developed by PEG is not the best estimate on a reasonable basis of the rate of change measure.

2.3.2 Direct costs

In response to the final decision, Multinet stated that it does not accept the Commission's final decision in relation to the calculation of the base operating expenditure as Multinet considers there has been an oversight in the calculation of the operating (non-capital) cost expenditure allowance by the Commission. Multinet submitted that unlike the Commission's draft decision, the calculation of Multinet's total 2006 operating expenditure base in the final decision has not taken into account Multinet's direct costs of \$2.8 million in its build-up of Multinet's operating cost base for 2006.¹⁰⁷ Multinet also stated that it had provided details of its direct costs previously to the Commission on several occasions.

The Commission notes that in a response to a request for further information on direct costs, Multinet provided a letter to the Commission on 15 May 2007 which outlined that the majority of the \$2.8 million direct costs comprises the insurance cost to Multinet as a result of insurance categories including public liability, property, and directors and officers. The other costs comprising the \$2.8 million of direct costs were stated to include costs relating to the audit of statutory and regulatory accounts, professional and consulting fees, and membership of associations such as the ESAA. In a further letter to the Commission dated 25 May 2007, Multinet again responded to a request from the Commission asking it to provide a complete breakdown of these direct costs. The accompanying spreadsheet to that letter outlined that the direct operating and maintenance costs of Multinet in 2006 were \$2.54 million.

On 4 April 2008 the Commission wrote to Multinet seeking clarification that the costs that form part of the \$2.54 million of 'direct operating costs':

¹⁰⁷ Multinet 2008, *Gas Access Review 2008 to 2012 Final Decision Response Summary*, 28 March, pp. 21-22.

- (a) are not costs that are otherwise accounted for as part of the OSA fee and / or the EPG fee; and
- (b) are not incurred in respect of the same or similar functions in respect of which the costs are incurred by:
 - (i) DUET/Multinet Group Holdings; and/or
 - (ii) Alinta/AAM.

On 10 April 2008, the Commission received a letter from Multinet enclosing an affidavit from the Chief Financial Officer (David Strang). The affidavit of Mr Strang stated that to the best of his knowledge, the amount of direct operating costs totalling \$2,559,100: (a) are not costs that are otherwise accounted for as part of the OSA fee and / or the EPG fee; and (b) are not incurred in respect of the same or similar functions in respect of which the costs are incurred by (i) DUET / Multinet Group Holdings and / or (ii) Alinta / AAM.

On 18 April 2008, Multinet provided the Commission with further detail on Multinet's direct costs and a report from KPMG.

In relation to the direct cost figure of \$2.54 million, this figure included amounts for:

- [REDACTED] for UAFG; and
- [REDACTED] for audit fees relating to 2004 and 2005.

In relation to the amount included for UAFG, Multinet agreed that the UAFG fees of [REDACTED] attributed to Multinet's direct costs is dealt with outside Reference Tariffs and advised that this figure had inadvertently been included in Multinet's direct costs.¹⁰⁸

In relation to the amount included for audit fees relating to 2004 and 2005, these are not costs incurred in respect of the base year for establishing forecast operating costs, which is 2006. The Commission does not consider it would be consistent with Code requirements, in particular section 8.37, to provide an allowance for regulatory and statutory account audit fees covering years other than the base year. The Commission has therefore not included an amount of [REDACTED] for audit fees in the amount allowed for Multinet's direct operating costs.

The Commission also notes that various costs which Multinet submits are its direct costs, and which it has itemised in its additional information, are in fact invoiced to other related companies, such as UED and EPG. Whilst acknowledging Multinet's submission that these invoices were simply wrongly addressed, these invoicing errors have raised a question as to whether costs said to be directly incurred by Multinet are also included in the underlying costs relied on in support of the EPG fee. The Commission has had a limited opportunity to review this material and has not identified any double counting and in general terms, there appears to be no duplication of costs in relation to the same activities.

Therefore, the amount that may be included in the 2006 base year amount in respect of Multinet's direct costs is \$2.29 million.

The further detail provided by Multinet also highlighted that there were a number of categories of costs claimed as part of the direct operating costs of Multinet that overlapped with categories of costs that are said to be incurred under the EPG fee. Specifically, these categories included insurance, audit fees and consulting.

In relation to the cost of insurance stated to be incurred as part of Multinet's direct operating costs, an amount of [REDACTED] was claimed for insurance.¹⁰⁹ In the final decision, the Commission considered that an allowance of [REDACTED] in respect of the EPG

¹⁰⁸ Multinet letter to Essential Services Commission, 22 April 2008.

¹⁰⁹ Affidavit of David Nicholas Strang, 10 April 2008, Appendix.

fee was appropriate.¹¹⁰ The additional information provided by Multinet in respect of its claimed direct operating costs revealed that [REDACTED] of the EPG fee related to insurance in respect of the Responsible Entities. Specifically, in a letter provided to the Commission by Multinet, Mr Lockey of KPMG states:¹¹¹

[REDACTED] of cost arising in the Responsible Entities (REs) has been allocated to Multinet.

These are costs of insurance cover purchased by the REs is [sic] to insure the REs against risks specific to the REs

The Responsible Entities are AMPCI Macquarie Infrastructure Management No 1 Ltd and AMPCI Macquarie Infrastructure Management No 2 Ltd.¹¹² While the Commission recognises that the Responsible Entities provide management services to DUET, it is not satisfied that Multinet is entitled to recover the costs for insurance of what is essentially a standalone commercial enterprise separate from the Multinet group of companies and that is unrelated to the provision of Reference Services to an even greater degree than DUET itself.

In allowing Multinet [REDACTED] million of the EPG fee in its final decision, the Commission expressed significant concern as to whether costs allocated to Multinet by DUET and MGH were actually the costs of providing the Reference Services and whether they should be included in setting the 2006 base for determining Multinet's operating cost benchmarks.¹¹³ The Commission stated that [REDACTED] represented an upper bound of the identified and substantiated actual DUET/MGH group costs but noted that this amount almost certainly included costs for activities which would not properly be considered costs of providing Reference Services.¹¹⁴ The Commission had regard to the requirement in the Code that the service provider have an opportunity to recover an efficient level of costs and allowed the [REDACTED] million on the basis that if it set the figure too low, it would not be providing Multinet with that opportunity.

As the Commission has now made an allowance for insurance of [REDACTED] as part of Multinet's direct operating costs, the Commission considers it is appropriate to adjust the allowance for the EPG fee by the amount of the Responsible Entities' insurance fees of [REDACTED].¹¹⁵

2.3.3 Efficiency carryover mechanism

In its response to the Commission's final decision, Multinet submitted that it does not accept the Commission's decision in relation to its assumed 2007 efficiency.¹¹⁶ Multinet submitted that since October 2002, there have been a number of changes in circumstances that the Commission has not taken into account in its final decision. Multinet stated that the \$0.4 million of efficiencies that the Commission (in its 2002 GAAR decision) had previously indicated should be achievable in 2007 were achieved well ahead of schedule. In its response to the draft decision Multinet pointed out that in aggregate it had made substantial efficiency savings (of \$3.9 million over four years) which were above and beyond those assumed by the

¹¹⁰ Final Decision, p. 131.

¹¹¹ See letter from KPMG to Multinet, 18 April 2008, p. 3.

¹¹² KPMG report October 2007, p. 2.

¹¹³ See generally, Final Decision, pp. 127-131.

¹¹⁴ Final Decision, p. 131.

¹¹⁵ It also appears from Mr Lockey's letter that [REDACTED] in audit fee costs for the Responsible Entities' are included in the EPG fee. However, given the relatively immaterial nature of this amount the Commission has not adjusted the EPG fee allowance.

¹¹⁶ Multinet 2008, *Gas Access Review 2008 to 2012 Final Decision Response Summary*, 28 March, p. 23.

Commission (\$1.7 million over 5 years). In Multinet's view the Commission has no basis to now apply the same \$0.4 million of efficiencies assumed between 2006 and 2007 given the early achievement of efficiencies that has now occurred, and to do so would be an inconsistent use of the 2003 determination and in error.¹¹⁷ Multinet submitted that the Commission has double counted the efficiencies by again deducting the 2007 figure even though the saving has already been made.

The Commission dealt with Multinet's submissions on this issue in the final decision.¹¹⁸ In the final decision the Commission set out that it does not agree with Multinet that it has double counted efficiency savings as there is an opportunity for all distribution businesses to achieve ongoing efficiency savings (i.e. a reduction in operating expenditure) between the years 2006 and 2007 which will be realised during the first year of the third regulatory period.¹¹⁹ Although Multinet does not consider it is reasonable to achieve the \$0.4 million savings between 2006 and 2007, Multinet's previous forecasts of potential savings have proven to be somewhat pessimistic. As noted above Multinet has already been able to achieve efficiency savings of more than double that assumed by the Commission in 2002. This is despite Multinet's comments in its response to the 2002 GAAR draft decision that:¹²⁰

Multinet considers that the assumed rate of productivity in non-capital costs over the Second Access Arrangement Period cannot reasonably be expected to exceed 1% per annum.

In its response to the final decision Multinet disagreed with the Commission's assertion that Multinet had considered the Commission's approach to the ECM and the setting of benchmarks as 'reasonable'. Multinet pointed to its response to the draft decision to demonstrate this point. However, as the Commission noted in the final decision, in response to *Consultation Paper No. 1* Multinet appeared to support the approach and stated that:¹²¹

Given the constraints imposed by the cost of service framework, Multinet considers that the approach – including the efficiency carry over mechanism – adopted by the Commission at the last review provides a reasonable basis for the establishment of expenditure benchmarks in this review. This approach is founded on the reasonable proposition that the incentives provided by the regulatory framework would lead to efficient expenditure levels.

The approaches adopted by the Commission to establishing benchmarks and the workings of the ECM are closely entwined and rely on each other in order to ensure that distributors have the appropriate incentive to make savings. Multinet has objected to the Commission's assumption of \$0.4 million in efficiency savings between 2006 and 2007, and has noted that overall this reduces the 2008 to 2012 expenditure benchmarks by \$2.0 million. However the Commission wishes to point out that the ECM has provided Multinet with a substantial positive efficiency carryover of \$34.2 million into the third regulatory period.

Finally, the Commission notes that the approach it has adopted is as set out in Multinet's existing Reference Tariff Policy, in which clause 6.4(b)(1) states in relation to the operating expenditure benchmarks and ECM mechanism:

(b) The mechanism for carrying over efficiency gains

(1) For operating expenditure, it will be assumed that the Service Provider does not achieve more than the forecast productivity gain between the

¹¹⁷ Ibid., p. 23.

¹¹⁸ Final Decision, p. 221.

¹¹⁹ Final Decision, p. 221.

¹²⁰ Multinet 2002, *Response to ESC Draft Decision*, 7 August, p. 42.

¹²¹ Multinet 2006, *Response to 2008 GAAR Consultation Paper*, 1 August, p. 17.

penultimate and last years of the Second Access Arrangement Period. As a result, if the Service Provider makes an efficiency gain in the last year of the Second Access Arrangement Period, there would be no carryover in respect of that year. However, the operating expenditure benchmark for the Third Access Arrangement Period will then be higher than otherwise for the Third Access Arrangement Period by the amount of the efficiency gain. This would provide the Service Provider with precisely the same reward had the expenditure level in the last year been known.

In summary, the Commission considers that Multinet has not provided any new material that would warrant the Commission altering its approach. In relation to the establishment of the base level of operating expenditure, the Commission has adopted the approach followed in the final decision which is consistent with its previous consultation papers and as outlined in the 2002 GAAR.

2.4 Capital expenditure

In the final decision the Commission adopted a capital escalation factor which was applied to the units of expenditure forecast to be undertaken so as to give a best estimate of the total future cost of the capital program. For SP AusNet and Envestra the capital escalation factor was calculated according to the formula:

$$\text{Annual capital escalation factor} = (L_p * L_e) + (M_p * M_e) - \text{PFP}$$

Where L_p = Proportion of capital expenditure attributable to labour

L_e = Labour cost escalation factor

M_p = Proportion of capital expenditure attributable to materials

M_e = Materials cost escalation factor

PFP = Capital partial factor productivity

However Multinet did not provide sufficient information for the Commission to directly calculate a capital escalation factor. In the final decision the Commission adopted an escalation factor of 1.98 per cent as proposed by Multinet, noting that this factor was very similar to those calculated for Envestra (2.01 per cent) and SP AusNet (2.02 per cent).

As set out above, the Commission has amended its view of the forecast rate of inflation in this further final decision as compared to the final decision. This has resulted in a marginal increase to SP AusNet's capital escalation factor (from 2.02 per cent to 2.07 per cent) but no material change to Envestra's capital escalation factor (which remains at 2.01 per cent when rounded to two decimal places). Given these very small changes for SP AusNet and Envestra in the Access Arrangement for Multinet drafted and approved by the Commission pursuant to this further final decision the Commission has not adjusted Multinet's capital escalation factor.

2.5 Demand

The Commission notes that in determining the P_0 adjustments and X factor set out below Multinet has adopted the usage and customer number forecasts set out in the final decision.

The Commission's recalculated P_0 and X factor incorporated in the Access Arrangement drafted and approved by the Commission include the usage and customer number forecasts set out in the final decision.

2.6 P₀ adjustments and X factor

As set out above, the Commission is not satisfied that Multinet's amended revisions to its Access Arrangement incorporate the amendments which the final decision provided would have to be made in order for the Commission to approve them. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

The Commission has therefore, pursuant to section 2.41 of the Code, not approved Multinet's amended revisions. As a result, the Commission has drafted and approved its own amended revisions to the Access Arrangement for Multinet's network pursuant to section 2.42 of the Code.

In drafting and approving revisions to Multinet's Access Arrangement the Commission has recalculated Multinet's P₀ and X factor. With the exception of the matters dealt with in this further final decision, the Commission's amended revisions to Multinet's Access Arrangement incorporates the amended revisions proposed by Multinet in its response to the final decision. The reasons for incorporating these amended revisions are set out in the final decision.

In relation to the matters dealt with in this further final decision, the Commission has calculated the P₀ and X factor consistent with the discussion in this further final decision. Table 4 sets out the P₀ and X factor contained in the Commission's amended revisions to Multinet's Access Arrangement:

Table 4 **Multinet P₀ and X factor**

	<i>P₀</i>	<i>X factor</i>
Final decision	2.5	0.0
Redrafted Access Arrangement	0.8	0.0

Following the Commission's consideration of the matters above and in section 3 of this further final decision, information contained in a number of figures and tables in the final decision has now been superseded. These tables are set out in Appendix A.

3 | REQUIRED AMENDMENTS – OTHER MATTERS

3.1 Services

The Code requires an Access Arrangement to include a policy on the Service(s) to be offered, known as the Services Policy.

The final decision provided for a number of amendments which would be required to be made to the revisions proposed by Multinet with respect to the Services to be offered, including the terms and conditions under which they are to be provided, in order for the Commission to approve them. These are discussed below.

3.1.1 Ancillary Reference Services

Multinet was required to delete the words ‘but Ancillary Reference Services shall not include the lighting of appliances which shall be the responsibility of the Customer’ from its proposed turn on and reconnection Ancillary Reference Services and replace them with the words ‘and the performance of a safety check and the lighting of appliances where necessary’. The Commission notes that Multinet has made the required amendment. The Commission is satisfied that Multinet’s amended revision incorporates the amendment specified by the Commission in its final decision.

Multinet was required to delete the sentence ‘In addition to the hours specified below, this service will be provided between the hours of 4.00pm and 8.00pm as a non-reference service’ from its proposed turn on and reconnection Ancillary Reference Services. The Commission notes that Multinet has made the required amendment. The Commission is satisfied that Multinet’s amended revision incorporates the amendment specified by the Commission in its final decision.

3.1.2 Non-Reference Services

Multinet was required to include after hours connection and reconnection for tariff V customers in the schedule to its terms and conditions titled ‘Services other than Reference Services’. The Commission notes that Multinet’s amended revision includes after hours connection and reconnection for tariff V customers *between the hours of 4.00pm and 8.00pm* in the schedule to its terms and conditions titled ‘Services other than Reference Services’. It considers that Multinet’s amended revision does not address after hours connection and reconnection for tariff V customers outside the hours of 4.00pm and 8.00pm.

The Commission is not satisfied that Multinet’s amended revisions to its Access Arrangement incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission’s satisfaction the reasons specified in the final decision for requiring the amendments.

In the Access Arrangement drafted and approved by the Commission pursuant to this further final decision, for the reasons set out in the final decision the Commission has therefore amended Multinet’s Access Arrangement consistent with the final decision.

The Commission notes that the schedule titled ‘Services other than Reference Services’ in Multinet’s amended revisions also includes four additional non-Reference Services that were not proposed in Multinet’s October 2007 revisions, namely (1) on-site meter and gas

installation test, (2) meter and gas installation test at a NATA accredited laboratory, (3) disconnection by excavating and shutting the service tee in the street and (4) reconnection by excavating and reconnecting the service tee in the street.

The Commission considers that Multinet's proposal to include on-site meter and gas installation testing as a non-Reference Service is not reasonable because this Service is an Ancillary Reference Service.

In the Access Arrangement drafted and approved by the Commission pursuant to this further final decision, the Commission has removed on-site meter and gas installation testing from the list of non-Reference Services.

In relation to the other three non-Reference Services proposed by Multinet, the Commission notes that it approved the removal of these Services as Ancillary Reference Services in the draft decision and agreed that, if requested, they should be provided as non-Reference Services.

The Commission is therefore satisfied that the amended revisions address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

The Access Arrangement drafted and approved by the Commission pursuant to this further final decision, for the reasons set out in the draft decision, therefore includes (1) meter and gas installation test at a NATA accredited laboratory, (2) disconnection by excavating and shutting the service tee in the street and (3) reconnection by excavating and reconnecting the service tee in the street as non-Reference Services.

3.1.3 Terms and conditions

In the final decision Multinet was required to delete clause 7.3(e) of its proposed terms and conditions. The Commission notes that Multinet has not made the required amendment. Multinet stated that clause 7.3(e) is contained in its current Access Arrangement and is technically compliant with the Code. It also claimed that the Commission has given no valid reason why the clause should be removed.

The Commission is not satisfied that Multinet's amended revisions to its Access Arrangement incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

Consistent with the final decision, and for the reasons set out in the final decision, in the Access Arrangement drafted and approved by the Commission pursuant to this further final decision the Commission has deleted clause 7.3(e).

In the final decision Multinet was required to replace clause 7.4(d) of its proposed terms and conditions with the following drafting:

Subject to clause 7.5(c), if the Service Provider has undercharged or not charged a User for Distribution Services provided in respect of a Customer, the Service Provider may recover the amount undercharged or not charged to the User, however the User will not be obliged to pay such charges to the extent that the User is precluded from recovering those costs from the relevant Customers by operation of the Regulatory Instruments.

The Commission notes that Multinet has not made the required amendment.

Multinet has submitted that the Commission's revised clause 7.4(d) sets no timeframe and that a retailer could claim that it was unable to recover costs from the relevant customers. Multinet's amended revision reduced the timeframe specified in the current clause 7.4(d) from 11 months to nine months. The Commission considers that Multinet's amended revision does

not have the effect that the period during which back billing is permitted by the distributors is aligned with the period during which back billing is permitted by the retailers under the relevant regulatory instruments, even if the period in those regulatory instruments varies over time.

The Commission is not satisfied that Multinet's amended revisions to its Access Arrangement incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

For the reasons set out above and in the final decision, the Access Arrangement drafted and approved by the Commission pursuant to this further final decision incorporates an amended clause 7.4(d) as specified in the final decision.

3.2 Reference Tariff Policy and glossary

The Code requires an Access Arrangement to include a Reference Tariff for each Reference Service and to incorporate a Reference Tariff Policy which sets out the principles that are to be used to determine Reference Tariffs. In the final decision the Commission required Multinet to give effect to a number of amendments to its Reference Tariff Policy, including several terms which are defined in the glossary which forms part of the Access Arrangement. These required amendments are outlined in the following sections.

In the final decision the Commission required Multinet to give effect to a number of required amendments to the Services to be offered in the third regulatory period. These required amendments are outlined in the following sections.

3.2.1 Part year tariffs

In the final decision the Commission required Multinet to amend its Reference Tariff Policy to make clear that:

- the Reference Tariffs which applied in 2007 will continue to apply in nominal terms until 1 July 2008
- 2008 tariffs will only apply for the period 1 July 2008 to 31 December 2008
- the process set out in section 4 of each distributors' Reference Tariff Policy will be followed to determine tariffs for the period 1 July to 31 December 2008, however the time frames are amended to reflect the fact that new tariffs will commence on 1 July rather than at the start of the Calendar Year.

In response to the final decision Multinet has amended clause 1.1 of its Reference Tariff Policy which provides as follows:

1.1 Haulage Reference Tariffs

(a) Haulage Reference Tariffs for 2008

For Calendar Year 2008, the Haulage Reference Tariffs to apply from 1 January 2008 are those tariffs which applied in 2007 in nominal terms until 30 June 2008. From 1 July 2008 through to 31 December 2008 the tariffs as at 30 June 2008 will be adjusted to comply with the Tariff Control Formula and rebalancing control formula in clause 3 and verified by the Regulator as if clause 4 applied (but for the timing requirements of clause 4.1). The timeframes are amended to reflect the fact that the new tariffs will commence on 1 July 2008 rather than the start of the Calendar Year.

However, the Commission notes that Multinet's amendment only applies to Haulage Reference Service tariffs, and not Ancillary Reference Service tariffs.

The Commission is not satisfied that Multinet's amended revisions to its Access Arrangement incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

To give full effect to the Commission's required amendment, the Access Arrangement drafted and approved by the Commission pursuant to this further final decision includes an amended clause 2.1 of Multinet's Reference Tariff Policy, as shown below. Words inserted by the Commission are underlined.

2.1 Existing Ancillary Reference Tariffs

For Calendar Year 2008, the Ancillary Reference Tariffs for Ancillary Reference Services that are to apply from 1 January 2008, are those tariffs which applied in 2007 in nominal terms. These tariffs will apply until 30 June 2008. From 1 July 2008 through to 31 December 2008 the tariffs are as set out in Schedule 2.

Given the release date for this further final decision the timeframes for submission and approval of 2008 (July 1 to December 31) Reference Tariffs need to be amended. The Access Arrangement drafted and approved by the Commission pursuant to this further final decision therefore amends clause 1.1(a) of Multinet's Reference Tariff Policy to provide as follows:

- proposed 2008 (July 1 to December 31) Haulage Reference Tariffs must be submitted to the Commission at least 15 business days before 30 June – i.e. by Friday 6 June
- the Commission will approve the proposed 2008 tariffs, or notify Multinet that the tariffs are not compliant, within 5 business days of receiving the proposed tariffs – i.e. by Friday 13 June (assuming there are no major issues of non-compliance with Multinet's proposed tariffs).

The dates set out above are the latest times at which tariffs will be proposed and approved and are determined in part by the fact that the Code provides the revised Access Arrangements cannot come into effect until 2 June 2008. However, the Commission is cognisant of the need to provide retailers and other stakeholders with information on the revised tariffs at the earliest opportunity. The Commission has therefore held discussions with each of the distributors, including Multinet, and anticipates that Multinet will voluntarily provide revised tariffs by around 23 May. This should enable the Commission to approve tariffs immediately upon Multinet's revised Access Arrangements coming into effect.

The Commission has also amended Multinet's Reference Tariff Policy with the effect that it must submit its 2008 Annual Tariff Report by Friday 20 June.

July 1 to December 30 2008 Ancillary Reference Tariffs have been established as part of this further final decision and are included in the Access Arrangement drafted and approved by the Commission. These tariffs are discussed in section 3.2.2 below.

The Commission has also identified that in amending the timeframes in clause 4.1 of its Reference Tariff Policy in response to the draft decision, Multinet appears to have inadvertently not correspondingly amended clause 4.4. The Access Arrangement drafted and approved by the Commission pursuant to this further final decision therefore amends the timeframe in clause 4.4 of 30 business days to 35 business days.

3.2.2 Ancillary Reference Service prices

In the final decision the Commission approved Ancillary Reference Services prices (in 2006 dollars) as set out in table 12.5 of the final decision. Accordingly, in Chapter 2 of the final decision the Commission required Multinet to change the 2008 tariff for special meter reads in

Gippsland to \$9.00 (in 2006 dollars) and the reconnection charge for Gippsland to \$110.91 (in 2006 dollars).

However, the Commission notes that the requirement to change the reconnection price for Gippsland to \$110.91 (in 2006 dollars) set out in Chapter 2 of the final decision is incorrect and is not consistent with table 12.5. Chapter 2 should have reflected the same price as table 12.5 - \$106.71 (in 2006 dollars).

In any case, prices set out by Multinet in Schedule 2 of its amended Reference Tariff Policy are not consistent with either table 12.5 of the final decision or Chapter 2. Give that the prices in the final decision are specified in 2006 dollars, the prices set out in Multinet's Reference Tariff Policy (which are in 2008 dollars) are lower in real terms.

The Commission is not satisfied that Multinet's amended revisions to its Access Arrangement incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

The Access Arrangement drafted and approved by the Commission pursuant to this further final decision incorporates an amended Schedule 2 of Multinet's Reference Tariff Policy, as shown below, to ensure the prices are consistent with the final decision.

Schedule 2 – Initial Ancillary Reference Tariffs (\$2008 excl GST)

<i>Ancillary Reference Service</i>	<i>Tariff Excl GST</i>	<i>Gippsland Towns Excl GST</i>
Meter Investigation – High Account Investigation	122.65	163.39
Meter Disconnection – Use of locks & plugs	60.68	75.95
Meter Removal - Various	121.37	162.12
Reconnect Between the hours of 8am and 4pm on a Business Day	84.73	112.98
Special Meter Reads	7.13	9.53

3.2.3 Arrangements if tariffs not submitted or approved

In the final decision the Commission required Multinet to amend its Reference Tariff Policy to provide that if tariffs are not approved as compliant by 1 January then:

- if the price control formulae provide that tariffs will otherwise increase, on average, in nominal terms, then no change will be made to tariffs on 1 January
- if tariffs would otherwise decrease, on average, in nominal terms, then a decrease to all tariffs will be made on 1 January.

In response to the final decision Multinet has made amendments to clauses 4.2(c), 4.2(d) and 4.4(a) of its Reference Tariff Policy.

The Commission is satisfied that Multinet's amended revision incorporates the amendment specified by the Commission in its final decision.

3.2.4 Changes in taxes that affect revenue

In the final decision the Commission required Multinet to amend the definition of a Change in Taxes Event to the following:

a variation, or withdrawal or introduction of a Relevant Tax, or a change in the way or rate at which a Relevant Tax is calculated, which has a material

impact on the costs to the Service Provider of providing the Reference Services or which has a direct and material impact on the revenue received (after payment of Relevant Taxes) by the Service Provider for providing the Reference Services.

In response to the final decision Multinet has amended the definition as per the above.

The Commission is satisfied that Multinet's amended revision incorporates the amendment specified by the Commission in its final decision.

3.2.5 Definition of relevant tax

In the final decision the Commission required Multinet to remove the phrase 'or the receipt of revenue in respect of the provision of Reference Services' in the definition of Relevant Tax in the Glossary.

In response to the final decision Multinet has amended the definition as per the above.

The Commission is satisfied that Multinet's amended revision incorporates the amendment specified by the Commission in its final decision.

Although not a required amendment, in the final decision the Commission invited Multinet to amend clause (a)(3) of its definition of Relevant Tax to bring it into line with the definition approved by the Commission for Envestra.

The Commission notes that Multinet has made the amendment. The Commission has incorporated this amendment in the Access Arrangement it has drafted and approved for Multinet.

3.2.6 Length of the fixed period

Included in Multinet's proposed amended revisions to its Access Arrangement were proposed amendments to its Fixed Principles. As noted above in relation to the rate of return, section 8.47 of the Code provides that a Reference Tariff Policy may provide that certain principles are fixed for a specified period and not subject to change when a Service Provider submits reviews to an access arrangement without the agreement of the Service Provider. A Fixed Principle is an element of the Reference Tariff Policy that cannot be change without the agreement of the Service Provider. The discussion below and in section 3.2.7 relates to Multinet's proposed amendments to the Fixed Principles in its Access Arrangement.

In the final decision the Commission required Multinet to amend its proposed revisions to the Fixed Period for Fixed Principles 7.2(a)(1), 7.2(a)(2) and 7.2(a)(5) such that they apply until the end of the third regulatory period. Multinet had proposed that a number of Fixed Principles extend to the end of the fourth regulatory period however the Commission did not consider that such an approach was in the interests of Service Providers, Users and Prospective Users.

In response to the final decision Multinet has amended Fixed Principles 7.2(a)(1) and 7.2(a)(5) so that each now states that 'This Fixed Principle will apply until the end of the Third Access Arrangement Period.' However, in what appears to be an oversight Multinet has not made all the necessary amendments to clause 7.2(a)(2). This clause requires the adoption of a single X factor for the second and subsequent years of a regulatory period.

The Commission is therefore not satisfied that Multinet's amended revisions to its Access Arrangement incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

Consistent with the final decision, and for the reasons set out in the final decision, in the Access Arrangement drafted and approved by the Commission pursuant to this further final decision the Commission has adjusted clause 7.2(a)(2) so that it is consistent with the final decision and provides that it will only apply until the end of the third regulatory period.

In reviewing this clause the Commission has also identified that clause 7.2(a)(3) of Multinet's Reference Tariff Policy incorrectly refers to the calculation of the value of the Capital Base at the start of the Third Access Arrangement Period when it should refer to the calculation of the value of the Capital Base at the start of the Fourth Access Arrangement Period. In the Access Arrangement drafted and approved by the Commission pursuant to this further final decision the Commission has amended this oversight and notes that this amendment is supported by Multinet.

3.2.7 Fixed Principles

In the final decision the Commission required Multinet to remove the following Fixed Principles that it proposed to include in its amended revisions to its Access Arrangement:

- 7.2(a)(7) relating to negative carryovers resulting from the Efficiency Carryover Mechanism
- 7.2(a)(8) relating to the tax wedge
- 7.2(a)(3)(H) relating to capital expenditure incurred in relation to certain IT expenditure.

Multinet has removed clauses 7.2(a)(8) and 7.2(a)(3)(H) but it has not removed clause 7.2(a)(7). This clause is intended to prevent the Commission from carrying over a net negative carryover from the third to the fourth regulatory period. Multinet's rationale for this clause is as follows:

Multinet is mindful that the operating and maintenance forecasts for the 2008-2012 period set out in the Final Decision are well below that required to operate the business... As such it is expected that, in the outturn, Multinet's regulatory accounts will show expenditure well above the Commission's benchmarks.

Based on the approach in the Final Decision Multinet will potentially be penalised twice. Once for overspending against the benchmarks and then again in the following period in the form of a negative carryover. This is not a symmetrical outcome for the company and places Multinet in a position where it has to rely on the goodwill of the regulator rather than providing the company with certainty that it can at least recover its forecast costs.¹²²

The Commission has confirmed previously that a negative carryover is not prohibited by the Code and that it is not appropriate to fix a 'no negative carryover' position from one regulatory period to the next. The Commission's position has been set out in its 2002 final decision (see section 3.8.5) as well as in section 13.5.6 of the draft decision and sections 12.14 and 13.7.4 of the final decision. In summary,

- such an approach is not symmetric in the treatment of efficiency savings and losses
- under Multinet's proposal there would be an incentive for the distributor to defer making efficiency savings in the latter years of a regulatory period in the face of efficiency losses in earlier years of the period
- without such an approach there would be an incentive to artificially increase reported expenditure in the second last year of the regulatory period in order to increase base level expenditure for the subsequent regulatory period.

¹²² Multinet 2008, *Gas Access Arrangement Review 2008 to 2012 Final Decision Response Summary*, March, p. 12.

Incorporating a no negative carryover principle would undermine the effectiveness of the efficiency carryover incentive mechanism and therefore would be inconsistent with sections 8.1(a), (e) and (f) of the Code.

Further, the application of a negative carryover no more reflects 'double counting', as suggested by Multinet, than the application of positive carryover reflects double counting.

The Commission also notes that, as discussed in section 2.3 above, it has increased Multinet's operating expenditure benchmarks for the third regulatory period.

The Commission is not satisfied that Multinet's amended revisions to its Access Arrangement incorporate the amendments specified in the final decision. Further, the Commission is also not satisfied that the amended revisions substantially incorporate the amendments specified by the Commission in its final decision or otherwise address to the Commission's satisfaction the reasons specified in the final decision for requiring the amendments.

Consistent with the final decision, and for the reasons set out in the final decision, in the Access Arrangement drafted and approved by the Commission pursuant to this further final decision the Commission has removed clause 7.2(a)(7).

3.3 Extensions/Expansions Policy

The Code requires an Access Arrangement to include an Extensions/Expansions Policy which sets out the method for determining whether an extension or expansion to the network is or is not to be regulated under the Code.

In the final decision the Commission required Multinet to make a minor amendment to its Extensions/Expansions policy. The Commission required Multinet to replace the term 'section 3.5' with the term 'Appendix 2' in clause 5.3.3(4A) of its Extensions/Expansions policy.

Multinet has made the amendment sought by the Commission and in doing so has correctly pointed out that the Commission's reference to clause 5.3.3(4A) should have been a reference to clause 5.5.3(4A).

The Commission is satisfied that Multinet's amended revision substantially incorporates the amendment specified by the Commission in its final decision.

3.4 Unaccounted for gas (UAFG)

In its response to the final decision Multinet has again expressed concern that the Commission's approach to setting Class B UAFG benchmarks for the third regulatory period places little emphasis on Multinet's actual UAFG result for 2006 of 3.8 per cent. Multinet stated that it is unclear why the Commission did not adopt a similar approach to establishing UAFG benchmarks as it did for establishing operating cost forecasts, by taking the latest number and adjusting for actual conditions. In its response to the draft decision, Multinet proposed to retain its current Class B UAFG benchmark of 3.6 per cent as the starting point for 2008. Multinet claimed that using an average of each distributor's actual UAFG performance over a number of years to calculate the starting point for the benchmark is inconsistent with section 8.1(a) of the Code because it does not provide an opportunity to earn a stream of revenue that recovers the efficient costs of delivering the reference services.

The Commission continues to consider that – due to the variability of each distributor's UAFG performance from year to year – using an average of actual UAFG data over a number of years provides a more accurate starting point than using data for one year only, and is therefore reasonable. On this basis, the Commission has retained its view from the final decision that the starting point to determine Class B UAFG benchmarks for the third regulatory period should be the average of each distributor's actual UAFG performance for the period 2003 to 2006.

4 | REVISED ACCESS ARRANGEMENTS

For the reasons discussed in sections 2 and 3 of this further final decision the Commission has drafted and approved its own revisions to Multinet's Access Arrangement.

The Access Arrangement, as revised, forms part of this further final decision and comprises:

- Part A – Principal Arrangements (including a glossary)
- Part B – Reference Tariffs and Reference Tariff Policy
- Part C – Terms and Conditions

In accordance with section 2.48 of the Code the revised Access Arrangement comes into effect on 2 June 2008.

APPENDIX A - AMENDMENTS TO TABLES

This Appendix shows the tables that have changed since the final decision. Numbers that have altered from those in the final decision are shaded. Note that:

- some other figures have changed marginally as a result of the further final decision, but due to rounding the figures shown in the table have not altered, and
- other than to update for the further final decision, the Commission has not altered any other numbers shown in the tables. Thus, for example, table 1.5 continues to show the distributors' proposals as they stood at October 2007 and not the distributor's proposals in March or April 2008. Where relevant, updated information regarding the distributors' proposals is located in the main body of this document.

Table 1.4 **Final decision – P₀ and X factors 2008 – 2012**
per cent

	<i>2008 P₀</i>	<i>2008 P₀ excluding impact of FRC</i>	<i>2009 to 2012 X factor</i>
Envestra (Victoria)	-5.7	-0.6	0.0
Envestra (Albury)	0.8	6.1	0.0
Multinet	2.5	6.2	0.0
SP AusNet	-2.3	1.9	0.0

Note: a positive number in this table indicates a real reduction in prices. The calculation of the P₀ factor for each distributor has taken into account the fact that the new tariffs will only apply for six months. Tariffs will be amended on 1 January 2009 and on an annual basis thereafter.

Table 1.4 **Further final decision – P₀ and X factors 2008 – 2012**
per cent

	<i>2008 P₀</i>	<i>2008 P₀ excluding impact of FRC</i>	<i>2009 to 2012 X factor</i>
Envestra (Victoria)	-6.7	-1.6	0.0
Envestra (Albury)	-0.2	5.2	0.0
Multinet	0.8	4.5	0.0
SP AusNet	-5.1	-0.9	0.0

Note: a positive number in this table indicates a real reduction in prices. The calculation of the P₀ factor for each distributor has taken into account the fact that the new tariffs will only apply for six months. Tariffs will be amended on 1 January 2009 and on an annual basis thereafter.

Table 1.5 **Final decision – Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>		<i>Envestra (Albury)</i>		<i>Multinet</i>		<i>SP AusNet</i>	
	<i>October 2007 proposal</i>	<i>Final decision</i>	<i>October 2007 proposal</i>	<i>Final decision</i>	<i>October 2007 proposal</i>	<i>Final decision</i>	<i>October 2007 proposal</i>	<i>Final decision</i>
Operating costs	261.3	222.0	11.0	7.7	230.1	196.5	249.1	219.9
Return on assets	368.8	302.3	11.4	9.8	335.2	297.8	352.6	333.4
Regulatory depreciation	139.0	169.0	3.6	5.6	205.8	220.3	227.6	218.8
Cost of tax	19.1	7.3	0.8	0.4	55.0	22.0	25.6	15.1
Efficiency carryover	15.9	18.2	0.0	-0.6	25.3	35.3	35.5	39.1
Total Revenue	804.1	718.8	26.9	22.9	851.3	771.9	890.4	826.2

Table 1.5 **Further final decision – Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>		<i>Envestra (Albury)</i>		<i>Multinet</i>		<i>SP AusNet</i>	
	<i>October 2007 proposal</i>	<i>Further final decision</i>	<i>October 2007 proposal</i>	<i>Further final decision</i>	<i>October 2007 proposal</i>	<i>Further final decision</i>	<i>October 2007 proposal</i>	<i>Further final decision</i>
Operating costs	261.3	222.8	11.0	7.7	230.1	204.5	249.1	220.6
Return on assets	368.8	307.1	11.4	9.9	335.2	302.4	352.6	338.6
Regulatory depreciation	139.0	169.0	3.6	5.6	205.8	220.3	227.6	218.8
Cost of tax	19.1	8.0	0.8	0.4	55.0	22.8	25.6	15.9
Efficiency carryover	15.9	18.3	0.0	-0.6	25.3	34.2	35.5	39.0
Total Revenue	804.1	725.2	26.9	23.1	851.3	784.1	890.4	832.9

Table 1.6 **Final decision – operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

<i>Distributor</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)	43.08	44.71	44.25	44.63	45.38	222.04
Envestra (Albury)	1.49	1.52	1.54	1.57	1.60	7.72
Multinet	39.68	39.71	39.23	39.04	38.87	196.53
SP AusNet	42.95	43.08	43.78	44.49	45.55	219.85
Total	127.20	129.02	128.81	129.72	131.40	646.15

Table 1.6 **Further final decision – operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

<i>Distributor</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)	43.12	44.84	44.42	44.82	45.60	222.79
Envestra (Albury)	1.49	1.52	1.55	1.58	1.61	7.75
Multinet	41.19	41.26	40.82	40.66	40.53	204.47
SP AusNet	43.00	43.18	43.92	44.68	45.79	220.57
Total	128.80	130.79	130.71	131.74	133.53	655.57

Table 1.7 **Final decision – net capital expenditure 2008 – 2012**
\$ million in July 2006 dollars

	<i>Distributors' March 2007 proposals</i>	<i>Draft decision</i>	<i>Distributors' October 2007 proposals</i>	<i>Final decision</i>
Envestra (Victoria)	701.0	313.3	576.1	377.8
Envestra (Albury)	8.0	4.8	8.5	6.7
Multinet	248.8	192.2	240.2	228.3
SP AusNet	354.5	267.5	353.0	319.8
Total	1,312.3	777.8	1,177.8	932.6

Note: figures in the table above are net of customer and government contributions and include new area expenditure.

Table 1.7 **Further final decision – net capital expenditure 2008 – 2012**
\$ million in July 2006 dollars

	<i>Distributors' March 2007 proposals</i>	<i>Draft decision</i>	<i>Distributors' October 2007 proposals</i>	<i>Further final Decision</i>
Envestra (Victoria)	701.0	313.3	576.1	379.1
Envestra (Albury)	8.0	4.8	8.5	6.7
Multinet	248.8	192.2	240.2	228.3
SP AusNet	354.5	267.5	353.0	320.3
Total	1,312.3	777.8	1,177.8	934.4

Note: figures in the table above are net of customer and government contributions and include new area expenditure.

Table 2.1 **Final decision – P₀ and X factors 2008-2012**

	<i>2008 P₀</i>	<i>2009 to 2012 X factor</i>
Envestra (Victoria)	-5.7	0.0
Envestra (Albury)	0.8	0.0
Multinet	2.5	0.0
SP AusNet	-2.3	0.0

Table 2.1 **Further final decision – P₀ and X factors 2008-2012**

	<i>2008 P₀</i>	<i>2009 to 2012 X factor</i>
Envestra (Victoria)	-6.7	0.0
Envestra (Albury)	-0.2	0.0
Multinet	0.8	0.0
SP AusNet	-5.1	0.0

Table C2 **Final decision – Total Revenue 2008-2012**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>		<i>Envestra (Albury)</i>		<i>Multinet</i>		<i>SP AusNet</i>	
	<i>October 2007 proposal</i>	<i>Final decision</i>	<i>October 2007 proposal</i>	<i>Final decision</i>	<i>October 2007 proposal</i>	<i>Final decision</i>	<i>October 2007 proposal</i>	<i>Final decision</i>
Operating costs	261.3	222.0	11.0	7.7	230.1	196.5	249.1	219.9
Return on assets	368.8	302.3	11.4	9.8	335.2	297.8	352.6	333.4
Regulatory depreciation	139.0	169.0	3.6	5.6	205.8	220.3	227.6	218.8
Cost of tax	19.1	7.3	0.8	0.4	55.0	22.0	25.6	15.1
Efficiency carryover	15.9	18.2	0.0	-0.6	25.3	35.3	35.5	39.1
Total Revenue	804.1	718.8	26.9	22.9	851.3	771.9	890.4	826.2

Table C2 **Further final decision – Total Revenue 2008-2012**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>		<i>Envestra (Albury)</i>		<i>Multinet</i>		<i>SP AusNet</i>	
	<i>October 2007 proposal</i>	<i>Further final decision</i>	<i>October 2007 proposal</i>	<i>Further final decision</i>	<i>October 2007 proposal</i>	<i>Further final decision</i>	<i>October 2007 proposal</i>	<i>Further final decision</i>
Operating costs	261.3	222.8	11.0	7.7	230.1	204.5	249.1	220.6
Return on assets	368.8	307.1	11.4	9.9	335.2	302.4	352.6	338.6
Regulatory depreciation	139.0	169.0	3.6	5.6	205.8	220.3	227.6	218.8
Cost of tax	19.1	8.0	0.8	0.4	55.0	22.8	25.6	15.9
Efficiency carryover	15.9	18.3	0.0	-0.6	25.3	34.2	35.5	39.0
Total Revenue	804.1	725.2	26.9	23.1	851.3	784.1	890.4	832.9

Table C3 **Final decision – Envestra (Victoria) Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	43.08	44.71	44.25	44.63	45.38
Return on assets	54.74	57.76	60.85	63.30	65.64
Regulatory depreciation	28.45	31.52	34.32	36.53	38.15
Cost of tax	1.44	1.38	1.37	1.50	1.61
Efficiency carryover	6.76	6.73	5.42	-0.70	0.00
Total	134.46	142.11	146.21	145.27	150.79

Table C3 **Further final decision – Envestra (Victoria) Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	43.12	44.84	44.42	44.82	45.60
Return on assets	55.58	58.66	61.81	64.32	66.72
Regulatory depreciation	28.45	31.52	34.33	36.55	38.18
Cost of tax	1.58	1.53	1.52	1.65	1.76
Efficiency carryover	6.78	6.75	5.44	-0.69	0.00
Total	135.52	143.30	147.51	146.65	152.26

Table C4 **Final decision – Envestra (Albury) Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	1.49	1.52	1.54	1.57	1.60
Return on assets	1.91	1.93	1.96	1.99	1.98
Regulatory depreciation	1.01	1.05	1.12	1.19	1.23
Cost of tax	0.06	0.07	0.08	0.08	0.10
Efficiency carryover	-0.03	-0.17	-0.13	-0.28	0.00
Total	4.45	4.40	4.57	4.55	4.91

Table C4 **Further final decision – Envestra (Albury) Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	1.49	1.52	1.55	1.58	1.61
Return on assets	1.94	1.96	1.99	2.02	2.01
Regulatory depreciation	1.01	1.05	1.12	1.19	1.23
Cost of tax	0.07	0.08	0.08	0.09	0.10
Efficiency carryover	-0.03	-0.17	-0.13	-0.28	0.00
Total	4.48	4.44	4.61	4.59	4.95

Table C5 **Final decision – Multinet Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	39.68	39.71	39.23	39.04	38.87
Return on assets	58.83	59.38	60.03	59.95	59.61
Regulatory depreciation	41.03	43.28	44.79	45.32	45.85
Cost of tax	4.80	4.58	3.93	4.22	4.52
Efficiency carryover	15.92	15.01	1.83	2.50	0.00
Total	160.26	161.96	149.82	151.02	148.85

Table C5 **Further final decision – Multinet Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	41.19	41.26	40.82	40.66	40.53
Return on assets	59.74	60.29	60.96	60.87	60.53
Regulatory depreciation	41.03	43.28	44.79	45.32	45.85
Cost of tax	4.96	4.73	4.08	4.36	4.66
Efficiency carryover	14.54	13.61	3.76	2.30	0.00
Total	161.45	163.18	154.42	153.52	151.58

Table C6 **Final decision – SP AusNet Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	42.95	43.08	43.78	44.49	45.55
Return on assets	63.68	65.52	67.08	68.12	68.99
Regulatory depreciation	39.57	42.87	45.11	45.14	46.06
Cost of tax	2.63	2.91	3.12	3.12	3.31
Efficiency carryover	9.60	15.45	11.23	2.79	0.00
Total	158.43	169.84	170.31	163.66	163.92

Table C6 **Further final decision – SP AusNet Total Revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Operating costs	43.00	43.18	43.92	44.68	45.79
Return on assets	64.66	66.54	68.12	69.19	70.08
Regulatory depreciation	39.57	42.87	45.12	45.14	46.07
Cost of tax	2.80	3.08	3.28	3.29	3.48
Efficiency carryover	9.59	15.44	11.21	2.78	0.00
Total	159.62	171.11	171.66	165.08	165.42

Table C7 **Final decision – Haulage Reference Service and Ancillary Reference Service tariff revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Envestra (Victoria)					
Haulage Reference Service tariff revenue	133.04	140.13	142.99	146.19	149.24
Ancillary Reference Service tariff revenue	1.34	1.46	1.51	1.55	1.59
Total	134.38	141.59	144.49	147.74	150.83
Envestra (Albury)					
Haulage Reference Service tariff revenue	4.28	4.39	4.47	4.55	4.64
Ancillary Reference Service tariff revenue	0.10	0.11	0.11	0.11	0.12
Total	4.38	4.49	4.58	4.67	4.76
Multinet					
Haulage Reference Service tariff revenue	150.97	151.60	153.22	154.79	155.86
Ancillary Reference Service tariff revenue	1.61	1.65	1.66	1.68	1.69
Total	152.58	153.25	154.88	156.47	157.56
SP AusNet					
Haulage Reference Service tariff revenue	156.41	162.09	165.03	168.12	170.99
Ancillary Reference Service tariff revenue	1.00	1.04	1.07	1.09	1.12
Total	157.41	163.13	166.10	169.21	172.11

Table C7 **Further final decision – Haulage Reference Service and Ancillary Reference Service tariff revenue 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Envestra (Victoria)					
Haulage Reference Service tariff revenue	133.78	141.50	144.40	147.63	150.71
Ancillary Reference Service tariff revenue	1.34	1.46	1.51	1.55	1.59
Total	135.11	142.97	145.90	149.18	152.30
Envestra (Albury)					
Haulage Reference Service tariff revenue	4.31	4.43	4.51	4.60	4.69
Ancillary Reference Service tariff revenue	0.10	0.11	0.11	0.11	0.12
Total	4.40	4.53	4.62	4.71	4.80
Multinet					
Haulage Reference Service tariff revenue	152.38	154.25	155.90	157.50	158.59
Ancillary Reference Service tariff revenue	1.61	1.65	1.66	1.68	1.69
Total	153.99	155.90	157.56	159.18	160.28
SP AusNet					
Haulage Reference Service tariff revenue	156.16	163.76	166.80	169.98	172.94
Ancillary Reference Service tariff revenue	1.00	1.04	1.07	1.09	1.12
Total	157.16	164.80	167.87	171.07	174.06

Table 7.5 **Final decision – base level operating expenditure adjustments**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>	<i>Envestra (Albury)</i>	<i>Multinet</i>	<i>SP AusNet</i>
Reported base level operating expenditure	35.80	1.63	40.04	37.20
Adjustments to reflect actual, prudent and efficient service costs	-0.94	-0.03	-6.79	-0.98
Licence fees	-0.62	-0.03	-0.33	-1.11
GSL payments	-0.01	0.00	0.00	-0.02
FRC costs	6.62	0.24	6.03	6.52
Assumed efficiency adjustment	-0.34	-0.01	-0.42	-0.44
Environmental management costs	0.00	-0.36	0.00	0.00
Adjusted base level operating expenditure	40.51	1.43	38.52	41.18

Table 7.5 **Further final decision – base level operating expenditure adjustments**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>	<i>Envestra (Albury)</i>	<i>Multinet</i>	<i>SP AusNet</i>
Reported base level operating expenditure	35.80	1.63	40.04	37.20
Adjustments to reflect actual, prudent and efficient service costs	-0.94	-0.03	-5.31	-0.98
Licence fees	-0.62	-0.03	-0.33	-1.11
GSL payments	-0.01	0.00	0.00	-0.02
FRC costs	6.62	0.24	6.03	6.52
Assumed efficiency adjustment	-0.34	-0.01	-0.42	-0.44
Environmental management costs	0.00	-0.36	0.00	0.00
Adjusted base level operating expenditure	40.51	1.43	40.00	41.18

Table 7.15 **Final decision - rate of change in real operating expenditure 2008 – 2012**
per cent

<i>Rate of change in real operating expenditure</i>	
Envestra (Victoria)	1.83
Envestra (Albury)	1.83
Multinet	-0.12
SP AusNet	1.64

Table 7.15 **Further final decision - rate of change in real operating expenditure 2008 – 2012**
per cent

<i>Rate of change in real operating expenditure</i>	
Envestra (Victoria)	1.93
Envestra (Albury)	1.93
Multinet	-0.02
SP AusNet	1.75

Table 7.16 **Final decision - rate of change inputs**
per cent

	<i>Envestra</i>	<i>Multinet</i>	<i>SP AusNet</i>
Labour price [A]	5.70	5.70	5.70
Labour share of O&M costs [B]	0.62	0.62	0.62
Non-labour price [C]	2.60	2.60	2.60
O&M input price	4.52	4.52	4.52
[D] = [B * A + (1 - B) * C]			
PFP [E]	2.31	2.87	2.25
Output [F]	2.32	0.93	2.07
CPI [G]	2.70	2.70	2.70
Rate of Change [H] = [D - E + F - G]	1.83	-0.12	1.64

Table 7.16 **Further final decision - rate of change inputs**
per cent

	<i>Envestra</i>	<i>Multinet</i>	<i>SP AusNet</i>
Labour price [A]	5.70	5.70	5.70
Labour share of O&M costs [B]	0.62	0.62	0.62
Non-labour price [C]	2.60	2.60	2.60
O&M input price	4.52	4.52	4.52
[D] = [B * A + (1 - B) * C]			
PFP [E]	2.31	2.87	2.24
Output [F]	2.32	0.93	2.07
CPI [G]	2.60%	2.60%	2.60%
Rate of Change [H] = [D - E + F - G]	1.93%	-0.02%	1.75%

Table 7.20 **Final decision - Envestra (Victoria) step changes 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012	Total
GSL payments	0.06	0.06	0.06	0.06	0.06	0.28
Gas extension - Bairnsdale	0.01	0.02	0.02	0.02	0.03	0.10
Gas extension - Paynesville	0.00	0.00	0.01	0.01	0.01	0.02
Code of Practice (public transport)	0.10	0.10	0.10	0.10	0.11	0.51
Emergency calls	0.05	0.05	0.05	0.05	0.05	0.25
Pigging Dandenong / Crib Point	0.00	0.34	0.05	0.00	0.00	0.39
Pigging inner ring main	0.33	0.21	0.05	0.00	0.00	0.59
Pipeline coating repairs	0.24	0.52	0.41	0.11	0.05	1.33
Liquid traps	0.34	0.69	0.00	0.00	0.00	1.04
Network development (I&C)	■	■	■	■	■	■
Network development (electric to gas conversions)	■	■	■	■	■	■
Cathodic protection units	0.03	0.05	0.05	0.05	0.05	0.22
Total	1.82	2.71	1.47	1.07	1.02	8.09

Table 7.20 **Further final decision - Envestra (Victoria) step changes 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012	Total
GSL payments	0.06	0.06	0.06	0.06	0.06	0.28
Gas extension - Bairnsdale	0.01	0.02	0.02	0.02	0.03	0.10
Gas extension - Paynesville	0.00	0.00	0.01	0.01	0.01	0.02
Code of Practice (public transport)	0.10	0.10	0.10	0.10	0.11	0.51
Emergency calls	0.05	0.05	0.05	0.05	0.05	0.25
Pigging Dandenong / Crib Point	0.00	0.34	0.05	0.00	0.00	0.39
Pigging inner ring main	0.33	0.21	0.05	0.00	0.00	0.59
Pipeline coating repairs	0.24	0.52	0.41	0.11	0.05	1.33
Liquid traps	0.34	0.69	0.00	0.00	0.00	1.04
Network development (I&C)	■	■	■	■	■	■
Network development (electric to gas conversions)	■	■	■	■	■	■
Cathodic protection units	0.03	0.05	0.05	0.05	0.05	0.22
Heater Maintenance	0.00	0.04	0.04	0.02	0.00	0.11
Total	1.82	2.75	1.51	1.09	1.02	8.20

Table 7.28 **Final decision – Envestra (Victoria) operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	40.51	40.51	40.51	40.51	40.51
Rate of change	0.74	1.50	2.27	3.05	3.85
Step changes	1.82	2.71	1.47	1.07	1.02
Total	43.08	44.71	44.25	44.63	45.38

Table 7.28 **Further final decision – Envestra (Victoria) operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	40.51	40.51	40.51	40.51	40.51
Rate of change	0.78	1.58	2.39	3.22	4.06
Step changes	1.82	2.75	1.51	1.09	1.02
Total	43.12	44.84	44.42	44.82	45.60

Table 7.29 **Final decision – Envestra (Albury) operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	1.43	1.43	1.43	1.43	1.43
Rate of change	0.03	0.05	0.08	0.11	0.14
Step changes	0.03	0.03	0.03	0.03	0.03
Total	1.49	1.52	1.54	1.57	1.60

Table 7.29 **Further final decision – Envestra (Albury) operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	1.43	1.43	1.43	1.43	1.43
Rate of change	0.03	0.06	0.08	0.11	0.14
Step changes	0.03	0.03	0.03	0.03	0.03
Total	1.49	1.52	1.55	1.58	1.61

Table 7.30 **Final decision – Multinet operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	38.52	38.52	38.52	38.52	38.52
Rate of Change	-0.05	-0.09	-0.14	-0.19	-0.24
Step Changes	1.20	1.28	0.85	0.70	0.58
Total	39.68	39.71	39.23	39.04	38.87

Table 7.30 **Further final decision – Multinet operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	40.00	40.00	40.00	40.00	40.00
Rate of Change	-0.01	-0.02	-0.02	-0.03	-0.04
Step Changes	1.20	1.28	0.85	0.70	0.58
Total	41.19	41.26	40.82	40.66	40.53

Table 7.31 **Final decision – SP AusNet operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	41.18	41.18	41.18	41.18	41.18
Rate of Change	0.68	1.36	2.06	2.77	3.49
Step Changes	1.10	0.54	0.54	0.54	0.88
Total	42.95	43.08	43.78	44.49	45.55

Table 7.31 **Further final decision – SP AusNet operating expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Base	41.18	41.18	41.18	41.18	41.18
Rate of Change	0.72	1.45	2.20	2.96	3.73
Step Changes	1.10	0.54	0.54	0.54	0.88
Total	43.00	43.18	43.92	44.68	45.79

Table 8.4 **Final decision – SP AusNet, Envestra and Multinet real capital expenditure escalation factors 2008 – 2012**
per cent

	2007	2008	2009	2010	2011	2012
SP AusNet	2.02	2.02	2.02	2.02	2.02	2.02
Envestra	2.01	2.01	2.01	2.01	2.01	2.01
Multinet	1.98	1.98	1.98	1.98	1.98	1.98

Table 8.4 **Further final decision – SP AusNet, Envestra and Multinet real capital expenditure escalation factors 2008 – 2012**
per cent

	2007	2008	2009	2010	2011	2012
SP AusNet	2.07	2.07	2.07	2.07	2.07	2.07
Envestra	2.01	2.01	2.01	2.01	2.01	2.01
Multinet	1.98	1.98	1.98	1.98	1.98	1.98

Table 8.6 **Final decision – SP AusNet LP pipe replacement 2008 – 2012**
July 2006 dollars

	2008	2009	2010	2011	2012	Total
Length (km)	90	90	90	90	90	450
Unit cost (\$/m) ^a	127	130	134	138	142	134
Total cost (\$ million)	11.4	11.7	12.1	12.4	12.8	60.4

Note: costs include escalation and exclude capital overheads. ^a includes 0.75 per cent additional escalation for 2007 and for each year of the third regulatory period.

Table 8.6 **Further final decision – SP AusNet LP pipe replacement 2008 – 2012**
July 2006 dollars

	2008	2009	2010	2011	2012	Total
Length (km)	90	90	90	90	90	450
Unit cost (\$/m) ^a	127	131	134	138	142	134
Total cost (\$ million)	11.4	11.7	12.1	12.4	12.8	60.5

Note: costs include escalation and exclude capital overheads. ^a includes 0.75 per cent additional escalation for 2007 and for each year of the third regulatory period.

Table 8.13 **Final decision – residential connection capital expenditure
2008 – 2012**

<i>July 2006 dollars</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)						
Total connections	13,247	14,084	14,459	14,334	13,122	69,246
Direct gross cost (\$m)	17.5	19.0	19.9	20.1	18.8	95.2
Gross unit cost per connection (\$)	1,320	1,347	1,374	1,402	1,429	1,374
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	17.5	19.0	19.9	20.1	18.8	95.2
Envestra (Albury)						
Total connections	370	393	404	404	404	1,975
Cost (\$m)	0.42	0.46	0.48	0.49	0.50	2.35
Gross unit cost per connection (\$)	1,141	1,164	1,188	1,212	1,236	1,189
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	0.42	0.46	0.48	0.49	0.50	2.35
Multinet						
New connections	8,229	8,652	8,845	9,116	8,573	43,415
Direct gross cost (\$m)	10.1	10.8	11.2	11.8	11.3	55.2
Gross unit cost per connection (\$)	1,222	1,246	1,271	1,296	1,322	1,272
Customer contributions (\$m)	0.85	0.90	0.95	0.99	1.01	4.70
Direct net cost (\$m)	9.2	9.9	10.3	10.8	10.3	50.5
SP AusNet						
New connections	13,299	14,082	14,301	13,943	12,773	68,398
Direct gross cost (\$m)	19.4	21.0	21.8	21.7	20.2	104.1
Gross unit cost per connection (\$)	1,462	1,492	1,522	1,553	1,584	1,522
Customer contributions (\$m)	0.74	0.80	0.83	0.82	0.79	3.98
Direct net cost (\$m)	18.7	20.2	20.9	20.8	19.4	100.1

Table 8.13 **Further final decision – residential connection capital expenditure 2008 – 2012**

<i>July 2006 dollars</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)						
Total connections	13,247	14,084	14,459	14,334	13,122	69,246
Direct gross cost (\$m)	17.5	19.0	19.9	20.1	18.8	95.2
Gross unit cost per connection (\$)	1,320	1,347	1,374	1,402	1,429	1,374
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	17.5	19.0	19.9	20.1	18.8	95.2
Envestra (Albury)						
Total connections	370	393	404	404	404	1,975
Cost (\$m)	0.42	0.46	0.48	0.49	0.50	2.35
Gross unit cost per connection (\$)	1,141	1,164	1,188	1,212	1,236	1,189
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	0.42	0.46	0.48	0.49	0.50	2.35
Multinet						
New connections	8,229	8,652	8,845	9,116	8,573	43,415
Direct gross cost (\$m)	10.1	10.8	11.2	11.8	11.3	55.2
Gross unit cost per connection (\$)	1,222	1,246	1,271	1,296	1,322	1,272
Customer contributions (\$m)	0.85	0.90	0.95	0.99	1.01	4.70
Direct net cost (\$m)	9.2	9.9	10.3	10.8	10.3	50.5
SP AusNet						
New connections	13,299	14,082	14,301	13,943	12,773	68,398
Direct gross cost (\$m)	19.5	21.0	21.8	21.7	20.3	104.3
Gross unit cost per connection (\$)	1,464	1,494	1,525	1,557	1,589	1,525
Customer contributions (\$m)	0.74	0.80	0.83	0.82	0.79	3.98
Direct net cost (\$m)	18.7	20.2	21.0	20.9	19.5	100.3

Table 8.17 **Final decision – commercial/industrial connections**
2008 – 2012
 July 2006 dollars

	2008	2009	2010	2011	2012	Total
Envestra (Victoria) ^a						
Total connections	707	704	816	869	854	3,950
Direct gross cost (\$m)	2.9	3.0	3.6	3.9	3.9	17.3
Gross unit cost per connection (\$)	4,112	4,191	4,377	4,505	4,584	4,369
Customer contributions (\$m)	0.15	0.15	0.15	0.15	0.15	0.77
Direct net cost (\$m)	2.8	2.8	3.4	3.8	3.8	16.5
Envestra (Albury) ^a						
Total connections	41	40	41	41	41	204
Direct gross cost (\$m)	0.12	0.12	0.12	0.12	0.13	0.61
Gross unit cost per connection (\$)	2,960	2,921	2,971	3,031	3,092	2,995
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	0.12	0.12	0.12	0.12	0.13	0.61
Multinet						
New connections	417	431	437	437	419	2,141
Direct gross cost (\$m)	1.5	1.6	1.6	1.7	1.6	7.9
Gross unit cost per connection (\$)	3,556	3,626	3,698	3,771	3,846	3,700
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	1.5	1.6	1.6	1.7	1.6	7.9
SP AusNet						
New connections	345	367	387	432	445	1,976
Direct gross cost (\$m)	3.8	4.1	4.5	5.1	5.3	22.9
Gross unit cost per connection (\$)	11,092	11,316	11,545	11,778	12,016	11,580
Customer contributions (\$m)	0.11	0.12	0.13	0.14	0.15	0.6
Direct net cost (\$m)	3.7	4.0	4.3	5.0	5.2	22.2

Note: costs include escalation but exclude capital overheads. ^a Combined new and multi user gross unit costs for Envestra (Victoria) and Envestra (Albury).

Table 8.17 **Further final decision – commercial/industrial connections**
2008 – 2012
 July 2006 dollars

	2008	2009	2010	2011	2012	Total
Envestra (Victoria) ^a						
Total connections	707	704	816	869	854	3,950
Direct gross cost (\$m)	2.9	3.0	3.6	3.9	3.9	17.3
Gross unit cost per connection (\$)	4,112	4,191	4,377	4,505	4,584	4,369
Customer contributions (\$m)	0.15	0.15	0.15	0.15	0.15	0.77
Direct net cost (\$m)	2.8	2.8	3.4	3.8	3.8	16.5
Envestra (Albury) ^a						
Total connections	41	40	41	41	41	204
Direct gross cost (\$m)	0.12	0.12	0.12	0.12	0.13	0.61
Gross unit cost per connection (\$)	2,960	2,921	2,971	3,031	3,092	2,995
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	0.12	0.12	0.12	0.12	0.13	0.61
Multinet						
New connections	417	431	437	437	419	2,141
Direct gross cost (\$m)	1.5	1.6	1.6	1.7	1.6	7.9
Gross unit cost per connection (\$)	3,556	3,626	3,698	3,771	3,846	3,700
Customer contributions (\$m)	-	-	-	-	-	-
Direct net cost (\$m)	1.5	1.6	1.6	1.7	1.6	7.9
SP AusNet						
New connections	345	367	387	432	445	1,976
Direct gross cost (\$m)	3.8	4.2	4.5	5.1	5.4	22.9
Gross unit cost per connection (\$)	11,103	11,333	11,567	11,807	12,051	11,604
Customer contributions (\$m)	0.11	0.12	0.13	0.14	0.15	0.6
Direct net cost (\$m)	3.7	4.0	4.4	5.0	5.2	22.3

Note: costs include escalation but exclude capital overheads. ^a Combined new and multi user gross unit costs for Envestra (Victoria) and Envestra (Albury).

Table 8.21 **Final decision – SP AusNet augmentation expenditure 2008 – 2012**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Augmentation	2.31	1.53	0.27	1.72	0.53	6.36

Note: costs in this table exclude overheads and include capital expenditure escalation accepted by the Commission.

Table 8.21 **Further final decision – SP AusNet augmentation expenditure 2008 – 2012**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Augmentation	2.31	1.53	0.27	1.73	0.53	6.38

Note: costs in this table exclude overheads and include capital expenditure escalation accepted by the Commission.

Table 8.25 **Final decision – direct augmentation costs 2008 – 2012**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)	8.20	21.23	11.84	6.33	12.44	60.04
Envestra (Albury)	-	0.14	0.82	-	-	0.96
Multinet	3.24	3.78	10.98	3.18	4.33	25.51
SP AusNet	2.31	1.53	0.27	1.72	0.53	6.36

Note: costs in this table for SP AusNet and Envestra exclude capital overheads and include the capital expenditure escalation proposed by the Commission. The costs for Multinet are the gross all inclusive cost charged by AAM as proposed by Multinet in its submission.

Table 8.25 **Further final decision – direct augmentation costs 2008 – 2012**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)	8.20	21.23	11.84	6.33	12.44	60.04
Envestra (Albury)	-	0.14	0.82	-	-	0.96
Multinet	3.24	3.78	10.98	3.18	4.33	25.51
SP AusNet	2.31	1.53	0.27	1.73	0.53	6.38

Note: costs in this table for SP AusNet and Envestra exclude capital overheads and include the capital expenditure escalation proposed by the Commission. The costs for Multinet are the gross all inclusive cost charged by AAM as proposed by Multinet in its submission.

Table 8.38 **Final decision – residential meter replacements
2008 – 2012**
July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)						
Meters replaced	32,604	37,145	35,453	21,920	19,140	146,262
Unit cost (\$/meter)	114	117	119	122	124	119
Cost (\$m)	3.73	4.34	4.22	2.66	2.37	17.33
Envestra (Albury)						
Meters replaced	3,930	2,081	2,133	2,254	2,638	13,036
Unit cost (\$/meter)	114	117	119	122	124	119
Cost (\$m)	0.45	0.24	0.25	0.27	0.33	1.55
SP AusNet						
Meters replaced	55,529	38,727	23,484	37,381	22,843	177,964
Unit cost (\$/meter)	107	100	104	111	105	106
Cost (\$m)	5.92	3.86	2.44	4.17	2.40	18.80
Multinet						
Meters replaced	13,055	9,691	8,168	8,081	8,081	47,076
Unit cost (\$/meter)	121	123	126	129	131	125
Cost (\$m)	1.58	1.20	1.03	1.04	1.06	5.90

Note: the information in the table combines both new and refurbished meters except for Multinet which only contains replacements with new meters.

Table 8.38 **Further final decision – residential meter replacements
2008 – 2012**
July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Envestra (Victoria)						
Meters replaced	32,604	37,145	35,453	21,920	19,140	146,262
Unit cost (\$/meter)	114	117	119	122	124	118
Cost (\$m)	3.73	4.34	4.22	2.66	2.37	17.33
Envestra (Albury)						
Meters replaced	3,930	2,081	2,133	2,254	2,638	13,036
Unit cost (\$/meter)	114	117	119	122	124	119
Cost (\$m)	0.45	0.24	0.25	0.27	0.33	1.55
SP AusNet						
Meters replaced	55,529	38,727	23,484	37,381	22,843	177,964
Unit cost (\$/meter)	107	100	104	112	106	106
Cost (\$m)	5.93	3.87	2.45	4.18	2.41	18.83
Multinet						
Meters replaced	13,055	9,691	8,168	8,081	8,081	47,076
Unit cost (\$/meter)	121	123	126	129	131	125
Cost (\$m)	1.58	1.20	1.03	1.04	1.06	5.90

Note: the information in the table combines both new and refurbished meters except for Multinet which only contains replacements with new meters.

Table 8.41 **Final decision – commercial/industrial meter replacements 2008 – 2012**
July 2006 dollars

	2008	2009	2010	2011	2012	Total
Envestra (Victoria)						
Meters replaced	1,356	1,126	1,054	1,105	1,188	5,829
Unit Cost (\$/meter)	822	839	855	873	890	855
Cost (\$m)	1.11	0.945	0.90	0.96	1.06	4.98
Envestra (Albury)						
Meters replaced	35	35	35	35	35	175
Unit cost (\$/meter)	822	839	855	873	890	856
Cost (\$m)	0.03	0.03	0.03	0.03	0.03	0.15
SP AusNet						
Meters replaced	611	708	720	1,120	1,219	4,378
Unit cost (\$/meter)	1,834	1,486	1,610	1,872	1,552	1,672
Cost (\$m)	1.12	1.05	1.16	2.10	1.89	7.32
Multinet						
Meters replaced	476	477	504	552	562	2,571
Unit cost (\$/meter)	1,178	1,201	1,225	1,249	1,274	1,228
Cost (\$m)	0.56	0.57	0.62	0.69	0.72	3.16

Note: the information in the table combines replacements with both new and refurbished meters for Envestra and SP AusNet. The information in the table for Multinet is for new meter replacements only.

Table 8.41 **Further final decision – commercial/industrial meter replacements 2008 – 2012**
July 2006 dollars

	2008	2009	2010	2011	2012	Total
Envestra (Victoria)						
Meters replaced	1,356	1,126	1,054	1,105	1,188	5,829
Unit Cost (\$/meter)	854	871	888	906	924	888
Cost (\$m)	1.16	0.98	0.94	1.00	1.10	5.17
Envestra (Albury)						
Meters replaced	35	35	35	35	35	175
Unit cost (\$/meter)	854	871	888	906	924	889
Cost (\$m)	0.03	0.03	0.03	0.03	0.03	0.16
SP AusNet						
Meters replaced	611	708	720	1,120	1,219	4,378
Unit cost (\$/meter)	1,836	1,488	1,613	1,876	1,556	1,675
Cost (\$m)	1.12	1.05	1.16	2.10	1.90	7.34
Multinet						
Meters replaced	476	477	504	552	562	2,571
Unit cost (\$/meter)	1,178	1,201	1,225	1,249	1,274	1,228
Cost (\$m)	0.56	0.57	0.62	0.69	0.72	3.16

Note: the information in the table combines replacements with both new and refurbished meters for Envestra and SP AusNet. The information in the table for Multinet is for new meter replacements only.

Table 8.44 **Final decision – SP AusNet SCADA and other capital expenditure 2008 – 2012**
 \$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
SCADA	0.99	1.94	0.35	0.31	0.31	3.90
Other demand	2.04	2.08	2.13	2.17	2.22	10.64
Other general	1.26	0.84	1.24	0.54	0.20	4.08
Other non-demand	4.08	2.57	2.98	2.79	3.33	15.75
Total SCADA & Other Expenditure	8.37	7.43	6.70	5.81	6.06	34.37

Table 8.44 **Further final decision – SP AusNet SCADA and other capital expenditure 2008 – 2012**
 \$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
SCADA	0.99	1.94	0.35	0.31	0.31	3.90
Other demand	2.04	2.08	2.13	2.18	2.23	10.66
Other general	1.26	0.84	1.24	0.54	0.20	4.08
Other non-demand	4.08	2.58	2.99	2.80	3.34	15.78
Total SCADA & Other Expenditure	8.38	7.44	6.71	5.82	6.08	34.43

Table 8.49 **Final decision – net new area capital expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012	Total
Envestra – Bairnsdale	1.10	0.52	0.50	0.34	0.29	2.75
Envestra – Paynesville ^b	0.31	0.47	0.23	0.26	0.30	1.57
Envestra - Berwick, Officer, Beveridge	1.61	1.37	2.64	3.26	2.88	11.75
Multinet – Yarra Ranges	1.16	-	-	-	-	1.16
Multinet – South Gippsland ^a	-1.32	3.18	0.21	0.21	0.13	2.40
SP AusNet	1.89	2.26	1.83	1.35	1.08	8.42

Note: costs in this table exclude capital overheads. ^a Includes 2008 and 2009 government contributions.
^b Includes 2008 government contribution.

Table 8.49 **Final decision – net new area capital expenditure 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012	Total
Envestra – Bairnsdale	1.10	0.52	0.50	0.34	0.29	2.75
Envestra – Paynesville ^b	0.31	0.47	0.23	0.26	0.30	1.57
Envestra - Berwick, Officer, Beveridge	1.61	1.37	2.64	3.26	2.88	11.75
Multinet – Yarra Ranges	1.16	-	-	-	-	1.16
Multinet – South Gippsland ^a	-1.32	3.18	0.21	0.21	0.13	2.40
SP AusNet	1.89	2.27	1.84	1.35	1.09	8.43

Note: costs in this table exclude capital overheads. ^a Includes 2008 and 2009 government contributions. ^b Includes 2008 government contribution.

Table 8.51 **Final decision – Envestra and SP AusNet capital overheads**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	Total
Envestra (Victoria)						
Gross direct cost	63.5	74.0	69.7	60.2	69.7	337.2
Overhead	7.34	8.98	8.48	8.10	9.07	42.0
Envestra (Albury)						
Gross direct cost	1.08	1.07	1.74	0.96	1.01	5.86
Overhead	0.17	0.15	0.23	0.15	0.16	0.86
SP AusNet						
Gross direct cost	60.9	67.6	58.0	55.5	54.2	296.2
Overhead	8.15	8.88	7.86	7.56	7.45	39.9

Table 8.51 **Further final decision – Envestra and SP AusNet capital overheads**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	Total
Envestra (Victoria)						
Gross direct cost	63.5	74.1	70.1	60.6	70.1	338.4
Overhead	7.34	8.98	8.52	8.14	9.11	42.09
Envestra (Albury)						
Gross direct cost	1.08	1.07	1.74	0.96	1.02	5.87
Overhead	0.17	0.15	0.23	0.15	0.16	0.86
SP AusNet						
Gross direct cost	60.9	67.7	58.1	55.6	54.3	296.6
Overhead	8.15	8.89	7.87	7.58	7.46	39.95

Table 8.53 **Final decision - adjusted customer contributions by category**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	Total
Envestra (Victoria)						
Commercial/industrial connections	0.18	0.18	0.18	0.18	0.18	0.90
Paynesville Government contributions	0.50	-	-	-	-	0.50
Envestra (Albury)						
Commercial/industrial connections	0.00	0.00	0.00	0.00	0.00	0.00
Multinet						
Residential connections	0.85	0.90	0.95	0.99	1.03	4.70
Augmentations	0.53	0.50	0.52	0.46	0.67	2.67
South Gippsland Gov. contributions	6.33	4.22	-	-	-	10.55
SP AusNet						
Residential connections	0.86	0.93	0.97	0.95	0.92	4.62
Commercial/industrial connections	0.13	0.14	0.14	0.16	0.17	0.74
Tariff D, Major alterations	2.04	2.08	2.13	2.17	2.21	10.64
NGEP	0.05	0.08	0.06	0.04	0.03	0.26

Table 8.53 **Further final decision - adjusted customer contributions by category**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	Total
Envestra (Victoria)						
Commercial/industrial connections	0.18	0.18	0.18	0.18	0.18	0.90
Paynesville Government contributions	0.50	-	-	-	-	0.50
Envestra (Albury)						
Commercial/industrial connections	0.00	0.00	0.00	0.00	0.00	0.00
Multinet						
Residential connections	0.85	0.90	0.95	0.99	1.03	4.70
Augmentations	0.53	0.50	0.52	0.46	0.67	2.67
South Gippsland Gov. contributions	6.33	4.22	-	-	-	10.55
SP AusNet						
Residential connections	0.86	0.93	0.97	0.96	0.93	4.63
Commercial/industrial connections	0.12	0.13	0.14	0.16	0.17	0.74
Tariff D, Major alterations	2.05	2.09	2.13	2.18	2.22	10.67
NGEP	0.05	0.08	0.06	0.04	0.03	0.26

Table 8.54 **Final decision – net capital expenditure**
\$ million in July 2006 dollars

	<i>Distributors' March 2007 proposals</i>	<i>Draft decision</i>	<i>Distributors' October 2007 proposals</i>	<i>Final decision</i>
Envestra (Victoria)	701.0	313.3	576.1	377.8
Envestra (Albury)	8.0	4.8	8.5	6.7
Multinet	248.8	192.2	240.2	228.3
SP AusNet	354.5	267.5	353.0	319.8
Total	1,312.3	777.8	1,177.8	932.6

Note: figures in the table above are net of customer and government contributions and include new area expenditure.

Table 8.54 **Further final decision – net capital expenditure**
\$ million in July 2006 dollars

	<i>Distributors' March 2007 proposals</i>	<i>Draft decision</i>	<i>Distributors' October 2007 proposals</i>	<i>Further final Decision</i>
Envestra (Victoria)	701.0	313.3	576.1	379.1
Envestra (Albury)	8.0	4.8	8.5	6.7
Multinet	248.8	192.2	240.2	228.3
SP AusNet	354.5	267.5	353.0	320.3
Total	1,312.3	777.8	1,177.8	934.4

Note: figures in the table above are net of customer and government contributions and include new area expenditure.

Table 8.55 **Final decision - capital expenditure by category**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>	<i>Envestra (Albury)</i>	<i>Multinet</i>	<i>SP AusNet</i>
LP pipe replacement	89.0	-	85.7	60.4
LP pipe – ad hoc replacements	7.6	0.1	4.0	-
Residential connections	95.2	2.3	55.2	104.1
Commercial/industrial connections	17.3	0.6	7.9	22.9
Augmentations	60.0	1.0	25.5	6.4
IT	21.6	0.0	25.8	33.3
Residential meter replacement	17.3	1.6	5.9	18.8
Commercial/industrial meter replacement	5.0	0.2	3.2	7.3
Other	7.7	0.1	18.9	34.4
Gas extensions - NGEP	4.8	-	14.1	8.7
Gas extensions – other	11.8	-	-	-
Capital overheads	42.0	0.9	-	39.9
Customer contributions	-0.9	-0.0	-7.3	-16.3
Government contributions	-0.5	-	-10.6	-
Total net capital expenditure	377.8	6.7	228.3	319.8

Table 8.55 **Further final decision - capital expenditure by category**
\$ million in July 2006 dollars

	<i>Envestra (Victoria)</i>	<i>Envestra (Albury)</i>	<i>Multinet</i>	<i>SP AusNet</i>
LP pipe replacement and CBD Planning	90.0	-	85.7	60.5
LP pipe – ad hoc replacements	7.6	0.1	4.0	-
Residential connections	95.2	2.3	55.2	104.3
Commercial/industrial connections	17.3	0.6	7.9	22.9
Augmentations	60.0	1.0	25.5	6.4
IT	21.6	0.0	25.8	33.3
Residential meter replacement	17.3	1.6	5.9	18.8
Commercial/industrial meter replacement	5.2	0.2	3.2	7.3
Other	7.7	0.1	18.9	34.4
Gas extensions - NGEP	4.8	-	14.1	8.7
Gas extensions – other	11.8	-	-	-
Capital overheads	42.1	0.9	-	40.0
Customer contributions	-0.9	-0.0	-7.3	-16.3
Government contributions	-0.5	-	-10.6	-
Total net capital expenditure	379.1	6.7	228.3	320.3

Table 8.56 **Final decision - SP AusNet capital expenditure
2008 – 2012**
\$ million in July 2006 dollars

<i>SP AusNet</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
LP pipe replacement	11.43	11.74	12.07	12.41	12.75	60.40
LP pipe - ad hoc replacements	-	-	-	-	-	-
Residential connections	19.45	21.01	21.77	21.65	20.23	104.11
Commercial/industrial connections	3.83	4.15	4.47	5.09	5.35	22.88
Augmentations	2.31	1.53	0.27	1.72	0.53	6.36
IT	6.52	14.49	7.25	1.16	3.85	33.27
Residential meter replacements	5.92	3.86	2.44	4.17	2.40	18.80
Commercial/industrial meter replacements	1.12	1.05	1.16	2.10	1.89	7.32
Other	8.37	7.43	6.70	5.81	6.06	34.37
Gas extensions - NGEF	1.94	2.34	1.89	1.39	1.12	8.68
Gas extensions - other	-	-	-	-	-	-
Capital overheads	8.15	8.88	7.86	7.56	7.45	39.91
Customer contributions	-3.08	-3.22	-3.29	-3.33	-3.35	-16.27
Government contributions	-	-	-	-	-	-
Total net capital expenditure	65.95	73.27	62.59	59.72	58.29	319.82

Table 8.56 **Further final decision - SP AusNet capital expenditure
2008 – 2012**
\$ million in July 2006 dollars

<i>SP AusNet</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
LP pipe replacement	11.43	11.75	12.08	12.42	12.78	60.46
LP pipe - ad hoc replacements	-	-	-	-	-	-
Residential connections	19.47	21.04	21.81	21.70	20.29	104.31
Commercial/industrial connections	3.83	4.16	4.48	5.10	5.36	22.93
Augmentations	2.31	1.53	0.27	1.73	0.53	6.38
IT	6.52	14.49	7.25	1.16	3.85	33.27
Residential meter replacements	5.93	3.87	2.45	4.18	2.41	18.83
Commercial/industrial meter replacements	1.12	1.05	1.16	2.10	1.90	7.34
Other	8.38	7.44	6.71	5.82	6.08	34.43
Gas extensions - NGEF	1.94	2.34	1.90	1.40	1.12	8.69
Gas extensions - other	-	-	-	-	-	-
Capital overheads	8.15	8.89	7.87	7.58	7.46	39.95
Customer contributions	-3.08	-3.23	-3.30	-3.34	-3.35	-16.30
Government contributions	-	-	-	-	-	-
Total net capital expenditure	65.99	73.33	62.68	59.85	58.43	320.27

Table 8.58 **Final decision - Envestra (Victoria) capital expenditure 2008 – 2012**

\$ million in July 2006 dollars

<i>Envestra (Victoria)</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2008-2012</i>
LP pipe replacement	13.21	15.09	17.05	19.12	24.56	89.03
LP pipe - ad hoc replacements	1.46	1.49	1.52	1.55	1.58	7.59
Residential connections	17.48	18.97	19.87	20.09	18.75	95.17
Commercial/industrial connections	2.90	2.95	3.57	3.91	3.91	17.26
Augmentations	8.20	21.23	11.84	6.33	12.44	60.04
IT	9.99	5.08	5.85	0.30	0.36	21.58
Residential meter replacements	3.73	4.34	4.22	2.66	2.37	17.33
Commercial/industrial meter replacements	1.11	0.94	0.90	0.96	1.06	4.98
Other	1.92	1.61	1.54	1.41	1.20	7.69
Gas extensions - NGEF	1.84	0.99	0.73	0.60	0.59	4.75
Gas extensions - other	1.61	1.37	2.64	3.26	2.88	11.75
Capital overheads	7.34	8.98	8.48	8.10	9.07	41.96
Customer contributions	-0.18	-0.18	-0.18	-0.18	-0.18	-0.90
Government contributions	-0.50	-	-	-	-	-0.50
Total net capital expenditure	70.13	82.85	78.03	68.12	78.60	377.72

Table 8.58 **Further final decision - Envestra (Victoria) capital expenditure 2008 – 2012**
\$ million in July 2006 dollars

<i>Envestra (Victoria)</i>	2008	2009	2010	2011	2012	2008-2012
LP pipe replacement and CBD Planning	13.21	15.09	17.38	19.45	24.90	90.03
LP pipe - ad hoc replacements	1.46	1.49	1.52	1.55	1.58	7.59
Residential connections	17.48	18.97	19.87	20.09	18.75	95.17
Commercial/industrial connections	2.90	2.95	3.57	3.91	3.92	17.26
Augmentations	8.20	21.23	11.84	6.33	12.44	60.04
IT	9.99	5.08	5.85	0.30	0.36	21.58
Residential meter replacements	3.73	4.34	4.22	2.66	2.37	17.33
Commercial/industrial meter replacements	1.16	0.98	0.94	1.00	1.10	5.17
Other	1.92	1.61	1.54	1.42	1.21	7.69
Gas extensions - NGEF	1.84	0.99	0.73	0.60	0.60	4.75
Gas extensions - other	1.61	1.37	2.64	3.26	2.88	11.75
Capital overheads	7.34	8.98	8.52	8.14	9.11	42.09
Customer contributions	-0.18	-0.18	-0.18	-0.18	-0.18	-0.90
Government contributions	-0.50	-	-	-	-	-0.50
Total net capital expenditure	70.18	82.89	78.43	68.53	79.03	379.06

Table 8.59 **Final decision - Envestra (Albury) capital expenditure 2008 – 2012**

\$ million in July 2006 dollars

<i>Envestra (Albury)</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2008-2012</i>
LP pipe replacement	-	-	-	-	-	-
LP pipe - ad hoc replacements	0.01	0.01	0.01	0.01	0.01	0.06
Residential connections	0.42	0.46	0.48	0.49	0.50	2.35
Commercial/industrial connections	0.12	0.12	0.12	0.12	0.13	0.61
Augmentations	-	0.14	0.81	-	-	0.95
IT	0.01	0.03	0.00	0.00	0.00	0.04
Residential meter replacements	0.45	0.24	0.25	0.27	0.33	1.55
Commercial/industrial meter replacements	0.03	0.03	0.03	0.03	0.03	0.15
Other	0.03	0.04	0.03	0.03	0.02	0.15
Gas extensions - NGEF	-	-	-	-	-	-
Gas extensions – other	-	-	-	-	-	-
Capital overheads	0.17	0.15	0.23	0.15	0.16	0.86
Customer contributions	0.00	0.00	0.00	0.00	0.00	0.00
Government contributions	-	-	-	-	-	-
Total net capital expenditure	1.24	1.22	1.97	1.11	1.18	6.72

Table 8.59 **Further final decision - Envestra (Albury) capital expenditure 2008 – 2012**

\$ million in July 2006 dollars

<i>Envestra (Albury)</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>2008-2012</i>
LP pipe replacement	-	-	-	-	-	-
LP pipe - ad hoc replacements	0.01	0.01	0.01	0.01	0.01	0.06
Residential connections	0.42	0.46	0.48	0.49	0.50	2.35
Commercial/industrial connections	0.12	0.12	0.12	0.12	0.13	0.61
Augmentations	-	0.14	0.81	-	-	0.95
IT	0.01	0.03	0.00	0.00	0.00	0.04
Residential meter replacements	0.45	0.24	0.25	0.27	0.33	1.55
Commercial/industrial meter replacements	0.03	0.03	0.03	0.03	0.03	0.16
Other	0.03	0.04	0.03	0.03	0.02	0.15
Gas extensions - NGEP	-	-	-	-	-	-
Gas extensions – other	-	-	-	-	-	-
Capital overheads	0.17	0.15	0.23	0.15	0.16	0.86
Customer contributions	0.00	0.00	0.00	0.00	0.00	0.00
Government contributions	-	-	-	-	-	-
Total net capital expenditure	1.24	1.22	1.97	1.11	1.18	6.73

Table 9.8 **Final decision RAB roll forward 2008 – 2012**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Envestra (Victoria)					
Opening RAB	821.3	863.0	914.3	958.0	989.6
Gross capital expenditure	70.8	83.0	78.2	68.3	78.8
Customer contributions	0.7	0.2	0.2	0.2	0.2
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	28.4	31.5	34.3	36.5	38.2
Closing RAB	863.0	914.3	958.0	989.6	1,030.1
Average RAB	842.1	888.7	936.2	973.8	1,009.9
Envestra (Albury)					
Opening RAB	29.3	29.6	29.7	30.6	30.5
Gross capital expenditure	1.2	1.2	2.0	1.1	1.2
Customer contributions	0.0	0.0	0.0	0.0	0.0
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	1.0	1.1	1.1	1.2	1.2
Closing RAB	29.6	29.7	30.6	30.5	30.4
Average RAB	29.5	29.7	30.2	30.5	30.5
Multinet					
Opening RAB	906.0	904.2	922.9	924.4	920.2
Gross capital expenditure	47.0	67.5	47.8	42.6	41.3
Customer contributions	7.7	5.6	1.5	1.4	1.7
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	41.0	43.3	44.8	45.3	45.8
Closing RAB	904.2	922.9	924.4	920.2	914.0
Average RAB	905.1	913.5	923.6	922.3	917.1
SP AusNet					
Opening RAB	966.5	992.9	1,023.3	1,040.7	1,055.3
Gross capital expenditure	69.0	76.5	65.9	63.1	61.6
Customer contributions	3.1	3.2	3.3	3.3	3.3
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	39.6	42.9	45.1	45.1	46.1
Closing RAB	992.9	1,023.3	1,040.7	1,055.3	1,067.6
Average RAB	979.7	1,008.1	1,032.0	1,048.0	1,061.4

Note: the 2008 opening RAB incorporates the roll-in of NGEP expenditure.

Table 9.8 **Further final decision RAB roll forward 2008 – 2012**
\$ million in July 2006 dollars

	2008	2009	2010	2011	2012
Envestra (Victoria)					
Opening RAB	821.3	863.0	914.4	958.5	990.5
Gross capital expenditure	70.9	83.1	78.6	68.7	79.2
Customer contributions	0.7	0.2	0.2	0.2	0.2
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	28.5	31.5	34.3	36.6	38.2
Closing RAB	863.0	914.4	958.5	990.5	1,031.3
Average RAB	842.1	888.7	936.5	974.5	1,010.9
Envestra (Albury)					
Opening RAB	29.3	29.6	29.7	30.6	30.5
Gross capital expenditure	1.2	1.2	2.0	1.1	1.2
Customer contributions	0.0	0.0	0.0	0.0	0.0
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	1.0	1.1	1.1	1.2	1.2
Closing RAB	29.6	29.7	30.6	30.5	30.5
Average RAB	29.5	29.7	30.2	30.5	30.5
Multinet					
Opening RAB	906.0	904.2	922.9	924.4	920.2
Gross capital expenditure	47.0	67.5	47.8	42.6	41.3
Customer contributions	7.7	5.6	1.5	1.4	1.7
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	41.0	43.3	44.8	45.3	45.8
Closing RAB	904.2	922.9	924.4	920.2	914.0
Average RAB	905.1	913.5	923.6	922.3	917.1
SP AusNet					
Opening RAB	966.5	992.9	1,023.4	1,040.9	1,055.6
Gross capital expenditure	69.1	76.6	66.0	63.2	61.8
Customer contributions	3.1	3.2	3.3	3.3	3.4
Disposals	0.0	0.0	0.0	0.0	0.0
Regulatory depreciation	39.6	42.9	45.1	45.1	46.1
Closing RAB	992.9	1,023.4	1,040.9	1,055.6	1,068.0
Average RAB	979.7	1,008.1	1,032.1	1,048.3	1,061.8

Note: the 2008 opening RAB incorporates the roll-in of NGEP expenditure.

Table 10.1 **Final decision weighted average cost of capital and input parameters**
Distributors' October proposals and final decision

	<i>Envestra</i>	<i>Multinet</i>	<i>SP AusNet</i> ^a	<i>Commission's range assessment</i>	<i>Final decision</i>
Risk-free rate (real) (R_f)	3.46%	3.98%	3.62%	3.36%	3.26%
Debt premium (R_d)	2.120%	1.412%	1.375%	2.075% – 2.145%	2.145%
Equity premium ($R_m - R_f$)	6.00%	6.00%	6.00%	4.00% to 7.00%	6.00%
Equity beta (β_e)	1.00	1.00	1.00	0.50 to 0.80	0.70
Gearing (debt:assets)	60:40	60:40	60:40	60:40	60:40
Inflation	2.50%	2.50%	2.50%	2.70%	2.70%
Real after-tax 'vanilla' WACC	7.10%	7.20%	6.80%	Application of low parameter values: 5.40%	6.20%
				Application of high parameter values: 6.90%	

^a SP AusNet employed the risk-free rate and the debt margin applied by the Commission in its draft decision. The measurement period for the risk-free rate and debt premium was the twenty trading days to the end of November 2007.

Table 10.1 **Further final decision weighted average cost of capital and input parameters**

Distributors' October proposals and further final decision

	<i>Envestra</i>	<i>Multinet</i>	<i>SP AusNet</i> ^a	<i>Commission's range assessment</i>	<i>Further final decision</i>
Risk-free rate (real) (R_f)	3.46%	3.98%	3.62%	3.36%	3.36%
Debt premium (R_d)	2.120%	1.412%	1.375%	2.075% – 2.145%	2.15%
Equity premium ($R_m - R_f$)	6.00%	6.00%	6.00%	4.00% to 7.00%	6.00%
Equity beta (β_e)	1.00	1.00	1.00	0.50 to 0.80	0.70
Gearing (debt:assets)	60:40	60:40	60:40	60:40	60:40
Inflation	2.50%	2.50%	2.50%	2.70%	2.60%
Real after-tax 'vanilla' WACC	7.10%	7.20%	6.80%	Application of low parameter values: 5.40% Application of high parameter values: 6.90%	6.30%

^a SP AusNet employed the risk-free rate and the debt margin applied by the Commission in its draft decision. The measurement period for the risk-free rate and debt premium was the twenty trading days to the end of November 2007.

Table 10.6 **Weighted average cost of capital and input parameters**
Distributors' October proposals 2008-2012, draft and final decisions

	<i>2007 draft decision</i>	<i>Envestra</i>	<i>Multinet</i>	<i>SP AusNet^a</i>	<i>Commission's range assessment</i>	<i>2008 final decision</i>
	<i>August</i>	<i>October</i>	<i>October</i>	<i>October</i>	<i>February</i>	<i>February</i>
Risk-free rate (real) (R_f)	3.12%	3.46%	3.98%	3.62%	3.26%	3.26%
Debt premium (R_d)	1.375%	2.120%	1.412%	1.375%	2.075% – 2.145%	2.145%
Equity premium ($R_m - R_f$)	6.00%	6.00%	6.00%	6.00%	4.00% to 7.00%	6.00%
Equity beta (β_e)	0.70	1.00	1.00	1.00	0.50 to 0.80	0.70
Imputation credit value (γ)	0.50	0.35	0.35	0.35	0.50	0.50
Gearing (debt:assets)	60:40	60:40	60:40	60:40	60:40	60:40
Inflation	3.00%	2.50%	2.50%	2.50%	2.70%	2.70%
Real after-tax 'vanilla' WACC	5.60%	7.10%	7.20%	6.80%	5.40%– 6.90%	6.20%

^a SP AusNet employed the risk-free rate and the debt margin applied by the Commission in its draft decision.

Table 10.6 **Weighted average cost of capital and input parameters**
Distributors' October proposals 2008-2012, draft and further final decisions

	<i>2007 draft decision</i>	<i>Envestra</i>	<i>Multinet</i>	<i>SP AusNet^a</i>	<i>Commission's range assessment</i>	<i>2008 further final decision</i>
	<i>August</i>	<i>October</i>	<i>October</i>	<i>October</i>	<i>February</i>	<i>May</i>
Risk-free rate (real) (R_f)	3.12%	3.46%	3.98%	3.62%	3.26%	3.36%
Debt premium (R_d)	1.375%	2.120%	1.412%	1.375%	2.075% – 2.145%	2.145%
Equity premium ($R_m - R_f$)	6.00%	6.00%	6.00%	6.00%	4.00% to 7.00%	6.00%
Equity beta (β_e)	0.70	1.00	1.00	1.00	0.50 to 0.80	0.7
Imputation credit value (γ)	0.50	0.35	0.35	0.35	0.50	0.50
Gearing (debt:assets)	60:40	60:40	60:40	60:40	60:40	60:40
Inflation	3.00%	2.50%	2.50%	2.50%	2.70%	2.60%
Real after-tax 'vanilla' WACC	5.60%	7.10%	7.20%	6.80%	5.40%– 6.90%	6.30%

^a SP AusNet employed the risk-free rate and the debt margin applied by the Commission in its draft decision.

Table 10.8 **Final decision total taxation liability – Envestra (Victoria)**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	3.4	3.6	3.8	4.0	4.2	19.1
Commission gross taxation liability	2.9	2.8	2.7	3.0	3.2	14.6
Value of imputation credits	1.4	1.4	1.4	1.5	1.6	7.3
Building block taxation liability	1.4	1.4	1.4	1.5	1.6	7.3

Table 10.8 **Further final decision total taxation liability – Envestra (Victoria)**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	3.4	3.6	3.8	4.0	4.2	19.1
Commission gross taxation liability	3.2	3.1	3.0	3.3	3.5	16.1
Value of imputation credits	1.6	1.5	1.5	1.7	1.8	8.0
Building block taxation liability	1.6	1.5	1.5	1.7	1.8	8.0

Table 10.9 **Final decision total taxation liability – Envestra (Albury)**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	0.1	0.2	0.2	0.2	0.2	0.8
Commission gross taxation liability	0.1	0.1	0.2	0.2	0.2	0.8
Value of imputation credits	0.1	0.1	0.1	0.1	0.1	0.4
Building block taxation liability	0.1	0.1	0.1	0.1	0.1	0.4

Table 10.9 **Further final decision total taxation liability – Envestra (Albury)**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	0.1	0.2	0.2	0.2	0.2	0.8
Commission gross taxation liability	0.1	0.2	0.2	0.2	0.2	0.8
Value of imputation credits	0.1	0.1	0.1	0.1	0.1	0.4
Building block taxation liability	0.1	0.1	0.1	0.1	0.1	0.4

Table 10.10 **Final decision total taxation liability – Multinet**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	10.2	10.8	10.8	11.4	11.7	55.0
Commission gross taxation liability	9.6	9.2	7.9	8.4	9.0	44.1
Value of imputation credits	4.8	4.6	3.9	4.2	4.5	22.0
Building block taxation liability	4.8	4.6	3.9	4.2	4.5	22.0

Table 10.10 **Further final decision total taxation liability – Multinet**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	10.2	10.8	10.8	11.4	11.7	55.0
Commission gross taxation liability	9.9	9.5	8.2	8.7	9.3	45.6
Value of imputation credits	5.0	4.7	4.1	4.4	4.7	22.8
Building block taxation liability	5.0	4.7	4.1	4.4	4.7	22.8

Table 10.11 **Final decision total taxation liability – SP AusNet**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	4.6	4.8	5.2	5.3	5.7	25.6
Commission gross taxation liability	5.3	5.8	6.2	6.2	6.6	30.2
Value of imputation credits	2.6	2.9	3.1	3.1	3.3	15.1
Building block taxation liability	2.6	2.9	3.1	3.1	3.3	15.1

Table 10.11 **Further final decision total taxation liability – SP AusNet**
\$ million in July 2006 dollars

	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>	<i>Total</i>
Proposed taxation liability	4.6	4.8	5.2	5.3	5.7	25.6
Commission gross taxation liability	5.6	6.2	6.6	6.6	7.0	31.9
Value of imputation credits	2.8	3.1	3.3	3.3	3.5	15.9
Building block taxation liability	2.8	3.1	3.3	3.3	3.5	15.9

Table 11.6 **Final decision – average usage for existing residential customers 2007-2012 (GJ)**

<i>Distributor/zone</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Envestra - Central	52.47	52.38	52.12	51.86	51.69	51.52
Envestra - Northern	49.05	48.97	48.72	48.48	48.32	48.16
Envestra - Murray Valley	34.80	34.74	34.56	34.39	34.28	34.16
Envestra Albury	46.05	46.05	45.90	45.75	45.60	45.45
Multinet	61.33	61.22	60.91	60.61	60.41	60.21
SP AusNet - Central	54.95	54.86	54.58	54.31	54.13	53.95
SP AusNet - Western	51.92	51.83	51.57	51.31	51.14	50.97

Table 11.6 **Further final decision – average usage for existing residential customers 2007-2012 (GJ)**

<i>Distributor/zone</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Envestra - Central	52.47	52.38	52.12	51.86	51.69	51.52
Envestra - Northern	49.05	48.97	48.72	48.48	48.32	48.16
Envestra - Murray Valley	34.80	34.74	34.56	34.39	34.28	34.16
Envestra Albury	46.05	46.05	45.90	45.75	45.60	45.45
Multinet	61.33	61.22	60.91	60.61	60.41	60.21
SP AusNet - Central	53.75	53.66	53.39	53.12	52.95	52.77
SP AusNet - Western	50.62	50.54	50.29	50.03	49.87	49.70

Table 11.12 **Final decision – tariff V usage (TJ) 2007-2012**

<i>Distributor</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Residential						
Envestra (Victoria)	25,390	25,955	26,456	26,999	27,588	28,108
Envestra (Albury)	822	840	857	874	891	906
Multinet	38,770	39,016	39,172	39,381	39,614	39,756
SP AusNet	27,592	28,092	28,542	29,000	29,497	29,944
Non-residential						
Envestra (Victoria)	8,328	8,526	8,680	8,803	8,961	9,135
Envestra (Albury)	288	294	299	304	310	316
Multinet	6,267	5,359	5,368	5,383	5,436	5,487
SP AusNet	5,582	5,755	5,912	6,050	6,198	6,346

Table 11.12 **Further final decision – tariff V usage (TJ) 2007-2012**

<i>Distributor</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Residential						
Envestra (Victoria)	25,390	25,955	26,456	26,999	27,588	28,108
Envestra (Albury)	822	840	857	874	891	906
Multinet	38,770	39,016	39,172	39,381	39,614	39,756
SP AusNet	26,984	27,484	27,937	28,399	28,898	29,346
Non-residential						
Envestra (Victoria)	8,328	8,526	8,680	8,803	8,961	9,135
Envestra (Albury)	288	294	299	304	310	316
Multinet	6,267	5,359	5,368	5,383	5,436	5,487
SP AusNet	5,582	5,755	5,912	6,050	6,198	6,346

Table 13.5 **Final decision – capital expenditure ECM amounts 2003 – 2007**

\$ million in July 2006 dollars

	<i>Total carryover</i>
Envestra (Victoria)	3.6
Envestra (Albury)	-0.3
Multinet	13.8
SP AusNet	-1.5

Table 13.5 **Final decision – capital expenditure ECM amounts 2003 – 2007**

\$ million in July 2006 dollars

	<i>Total carryover</i>
Envestra (Victoria)	3.7
Envestra (Albury)	-0.3
Multinet	14.1
SP AusNet	-1.5

Table 13.6 **Final decision Multinet and SP AusNet adjustments to reported operating expenditure**

\$ million in July 2006 dollars

<i>Distributor</i>	<i>2004</i>	<i>2005</i>
Multinet		
Reduction to OSA Fee	3.374	1.270
Reduction to EPG Fee	4.732	4.670
Total Multinet adjustments	8.106	5.941
[Confidential information deleted]	■	■

Table 13.6 **Further final decision Multinet and SP AusNet adjustments to reported operating expenditure**

\$ million in July 2006 dollars

<i>Distributor</i>	<i>2004</i>	<i>2005</i>
Multinet		
Reduction to OSA Fee	0.00	0.00
Reduction to EPG Fee	4.841	4.779
Reduction to direct costs	-0.093	-0.091
Total Multinet adjustments	4.748	4.688
[Confidential information deleted]	■	■

Table 13.7 **Final decision - adjustments to reported operating expenditure for ECM purposes**
\$ million in July 2006 dollars

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Envestra (Victoria)	0.0	0.0	0.0	0.0
Envestra (Albury)	0.0	0.0	0.0	0.4
Multinet	0.0	8.1	5.9	6.8
SP AusNet	0.0	0.2	0.5	1.0

Table 13.7 **Further final decision - adjustments to reported operating expenditure for ECM purposes**
\$ million in July 2006 dollars

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Envestra (Victoria)	0.0	0.0	0.0	0.0
Envestra (Albury)	0.0	0.0	0.0	0.4
Multinet	0.0	4.7	4.7	5.3
SP AusNet	0.0	0.2	0.5	1.0

Table 13.9 **Final decision – adjusted reported operating expenditure for ECM purposes 2003 – 2006**
\$ million in July 2006 dollars

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Envestra (Victoria)	41.9	40.6	34.4	35.2
Envestra (Albury)	1.2	1.2	1.0	1.2
Multinet	45.1	32.7	34.4	32.9
SP AusNet	52.3	47.9	38.4	35.1

Table 13.9 **Further final decision – adjusted reported operating expenditure for ECM purposes 2003 – 2006**
\$ million in July 2006 dollars

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Envestra (Victoria)	41.9	40.6	34.4	35.2
Envestra (Albury)	1.2	1.2	1.0	1.2
Multinet	45.1	36.0	35.6	34.4
SP AusNet	52.3	47.9	38.4	35.1

Table 13.10 **Final decision - operating expenditure ECM amounts**
\$ million in July 2006 dollars

	<i>Total carryover</i>
Envestra (Victoria)	14.6
Envestra (Albury)	-0.3
Multinet	21.4
SP AusNet	40.6

Table 13.10 **Further final decision - operating expenditure ECM amounts**
\$ million in July 2006 dollars

	<i>Total carryover</i>
Envestra (Victoria)	14.6
Envestra (Albury)	-0.3
Multinet	20.2
SP AusNet	40.6

Table 13.11 **Final decision ECM amounts for second regulatory period**
\$ million in July 2006 dollars

<i>Distributor</i>	<i>Operating cost carryover</i>	<i>Capital cost carryover</i>	<i>Total carryover</i>
Envestra (Victoria)	14.6	3.6	18.2
Envestra (Albury)	-0.3	-0.3	-0.6
Multinet	21.4	13.8	35.3
SP AusNet	40.6	-1.5	39.1

Table 13.11 **Further final decision ECM amounts for second regulatory period**
\$ million in July 2006 dollars

<i>Distributor</i>	<i>Operating cost carryover</i>	<i>Capital cost carryover</i>	<i>Total carryover</i>
Envestra (Victoria)	14.6	3.7	18.3
Envestra (Albury)	-0.3	-0.3	-0.6
Multinet	20.2	14.1	34.2
SP AusNet	40.6	-1.5	39.0

Table F.16 **Final decision - adjustments to 2003-2007 reported operating expenditure for ECM purposes**
\$ million in July 2006 dollars

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Envestra (Victoria)	0.0	0.0	0.0	0.0
Envestra (Albury)	0.0	0.0	0.0	0.4
Multinet	0.0	8.1	5.9	6.8
SP AusNet	0.0	0.2	0.5	1.0

Table F.16 **Further final decision - adjustments to 2003-2007 reported operating expenditure for ECM purposes**
\$ million in July 2006 dollars

	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>
Envestra (Victoria)	0.0	0.0	0.0	0.0
Envestra (Albury)	0.0	0.0	0.0	0.4
Multinet	0.0	4.7	4.7	5.3
SP AusNet	0.0	0.2	0.5	1.0

Table F.19 **Final decision - domestic customer connections in the third regulatory period to be used for adjustment purposes**
Cost per connection (July 2006 dollars)

	<i>2008</i>		<i>2009</i>		<i>2010</i>		<i>2011</i>		<i>2012</i>	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	13,247	1,452	14,084	1,482	14,459	1,512	14,334	1,542	13,122	1,572
Envestra (Albury)	370	1,256	393	1,281	404	1,307	404	1,333	404	1,360
Multinet	8,229	1,222	8,652	1,246	8,845	1,271	9,116	1,296	8,573	1,322
SP AusNet	13,299	1,609	14,082	1,641	14,301	1,674	13,943	1,708	12,773	1,743

Table F.19 **Further final decision - domestic customer connections in the third regulatory period to be used for adjustment purposes**
Cost per connection (July 2006 dollars)

	<i>2008</i>		<i>2009</i>		<i>2010</i>		<i>2011</i>		<i>2012</i>	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	13,247	1,452	14,084	1,482	14,459	1,512	14,334	1,542	13,122	1,572
Envestra (Albury)	370	1,256	393	1,281	404	1,307	404	1,333	404	1,360
Multinet	8,229	1,222	8,652	1,246	8,845	1,271	9,116	1,296	8,573	1,322
SP AusNet	13,299	1,610	14,082	1,643	14,301	1,677	13,943	1,712	12,773	1,748

Table F.20 **Final decision - commercial & industrial customer connections in the third regulatory period to be used for adjustment purposes**
Cost per connection (July 2006 dollars)

	2008		2009		2010		2011		2012	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	707	4,523	704	4,610	816	4,815	869	4,955	854	5,043
Envestra (Albury)	41	3,256	40	3,213	41	3,268	41	3,334	41	3,401
Multinet	417	3,556	431	3,626	437	3,698	437	3,771	419	3,846
SP AusNet	345	12,201	367	12,448	387	12,699	432	12,956	445	13,217

Table F.20 **Further final decision - commercial & industrial customer connections in the third regulatory period to be used for adjustment purposes**
Cost per connection (July 2006 dollars)

	2008		2009		2010		2011		2012	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	707	4,523	704	4,610	816	4,815	869	4,955	854	5,043
Envestra (Albury)	41	3,256	40	3,213	41	3,268	41	3,334	41	3,401
Multinet	417	3,556	431	3,626	437	3,698	437	3,771	419	3,846
SP AusNet	345	12,213	367	12,466	387	12,724	432	12,987	445	13,256

Table F.21 **Final decision - domestic meter replacement in the third regulatory period to be used for adjustment purposes**
 Cost per meter replacement (July 2006 dollars)

	2008		2009		2010		2011		2012	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	32,604	126	37,145	128	35,453	131	21,920	134	19,140	136
Envestra (Albury)	3,930	126	2,081	128	2,133	131	2,254	134	2,638	136
Multinet	13,055	121	9,691	123	8,168	126	8,081	128	8,081	131
SP AusNet	55,529	117	38,727	110	23,484	114	37,381	123	22,843	116

Table F.21 **Further final decision - domestic meter replacement in the third regulatory period to be used for adjustment purposes**
 Cost per meter replacement (July 2006 dollars)

	2008		2009		2010		2011		2012	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	32,604	126	37,145	128	35,453	131	21,920	134	19,140	136
Envestra (Albury)	3,930	126	2,081	128	2,133	131	2,254	134	2,638	136
Multinet	13,055	121	9,691	123	8,168	126	8,081	128	8,081	131
SP AusNet	55,529	117	38,727	110	23,484	115	37,381	123	22,843	116

Table F.22 **Final decision - commercial & industrial meter replacement in the third regulatory period to be used for adjustment purposes**

Cost per meter replacement (July 2006 dollars)

	<i>2008</i>		<i>2009</i>		<i>2010</i>		<i>2011</i>		<i>2012</i>	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	1,356	904	1,126	922	1,054	941	1,105	960	1,188	979
Envestra (Albury)	35	904	35	922	35	941	35	960	35	979
Multinet	476	1,178	477	1,201	504	1,225	552	1,249	562	1,274
SP AusNet	611	2,018	708	1,635	720	1,771	1,120	2,059	1,219	1,707

Table F.22 **Further final decision - commercial & industrial meter replacement in the third regulatory period to be used for adjustment purposes**

Cost per meter replacement (July 2006 dollars)

	<i>2008</i>		<i>2009</i>		<i>2010</i>		<i>2011</i>		<i>2012</i>	
	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost	Qty	Cost
Envestra (Victoria)	1,356	939	1,126	958	1,054	977	1,105	997	1,188	1017
Envestra (Albury)	35	939	35	958	35	977	35	997	35	1017
Multinet	476	1,178	477	1,201	504	1,225	552	1,249	562	1,274
SP AusNet	611	2,020	708	1,637	720	1,774	1,120	2,064	1,219	1,712

Table I.1 **Final Decision – Tariff V residential usage by distributor/zone (TJ)**

<i>Distributor/Zone</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Envestra (Victoria)						
Central	22,222	22,662	23,055	23,462	23,908	24,300
North	2,954	3,027	3,091	3,194	3,309	3,415
Murray Valley	163	173	184	195	208	220
Bairnsdale ^a	50	93	126	149	164	173
Total	25,390	25,955	26,456	26,999	27,588	28,108
Envestra (Albury)	822	840	857	874	891	906
Multinet						
Multinet-main zone	38,664	38,849	38,926	39,012	39,163	39,290
Yarra Valley	106	158	183	190	190	190
South Gippsland	0	9	64	179	261	276
Total	38,770	39,016	39,172	39,381	39,614	39,756
SP AusNet						
Central	21,640	21,993	22,306	22,633	22,999	23,332
West	5,908	6,005	6,092	6,181	6,281	6,369
Adjoining Central	0	3	10	17	23	27
Adjoining West	44	91	135	169	194	215
Total	27,592	28,092	28,542	29,000	29,497	29,944

^a all Bairnsdale use is assumed to be residential

Table I.1 **Further final decision – Tariff V residential usage by distributor/zone (TJ)**

<i>Distributor/Zone</i>	<i>2007</i>	<i>2008</i>	<i>2009</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Envestra (Victoria)						
Central	22,222	22,662	23,055	23,462	23,908	24,300
North	2,954	3,027	3,091	3,194	3,309	3,415
Murray Valley	163	173	184	195	208	220
Bairnsdale ^a	50	93	126	149	164	173
Total	25,390	25,955	26,456	26,999	27,588	28,108
Envestra (Albury)	822	840	857	874	891	906
Multinet						
Multinet-main zone	38,664	38,849	38,926	39,012	39,163	39,290
Yarra Valley	106	158	183	190	190	190
South Gippsland	0	9	64	179	261	276
Total	38,770	39,016	39,172	39,381	39,614	39,756
SP AusNet						
Central	21,176	21,529	21,844	22,174	22,542	22,876
West	5,764	5,861	5,948	6,039	6,139	6,227
Adjoining Central	0	3	10	17	23	27
Adjoining West	44	91	135	169	194	215
Total	26,984	27,484	27,937	28,399	28,898	29,346

^a all Bairnsdale use is assumed to be residential