1. Payment Terms

1.1 Draft Decision and Reasoning

Envestra's Access Arrangement Terms and Conditions (specifically clause 19) set out a mechanism under which Users are required to pay network charges in advance.

The Draft Decision requires Envestra to revise these Terms and Conditions to provide for payment of network charges in arrears.

The Commission has wrongly formed the view that the requirement for prepayment of network charges is not reasonable.

The Commission has formed this view on the basis that:

(a) the prepayment provision is not required for Envestra to manage credit risk, as this is already addressed by the Access Arrangement's credit policy;

(b) the prepayment clause may act as a barrier to entry to new retailers and is therefore contrary to section 2.24(e) of the Code;

(c) the complexity of administering the prepayment arrangements is inconsistent with the "economically efficient operation" consideration in section 2.24(d) of the Code;

(d) the prepayment provision is not standard practice;

(e) the prepayment provision places a working capital burden on Users which is more appropriately borne by Envestra; and

(f) full retail competition was not in place when the prepayment provision was approved by SAIPAR – therefore despite section 2.46 of the Code, it is now appropriate to require a change to the prepayment provision.

1.2 Envestra's Submission

Envestra submits that the prepayment mechanism is reasonable. The prepayment is protecting a genuine risk – the risk of User default. The quantum of the prepayment is not excessive and is proportionate to the risks Envestra faces.

For the reasons set out below, each of the reasons put forward by the Commission to demonstrate that the prepayment mechanism is not reasonable are unsound and not properly based on fact.

1.3 The Proper Approach

Section 3.6 of the Code provides:

> "*An Access Arrangement must include the terms and conditions on which the Service Provider will supply each Reference Service. The terms and conditions included must, in the Relevant Regulator's opinion, be reasonable*."

Under section 2.46 of the Code, in assessing proposed revisions to an Access Arrangement, the Relevant Regulator must take into account the factors described in section 2.24 and the provisions of the existing Access Arrangement.

If a term is reasonable (as assessed having regard to the factors listed in section 2.24 and the provisions of the existing Access Arrangement) it must be approved by the Relevant Regulator, even if the Relevant Regulator would prefer the term be framed in a different manner.

The choice as to the terms and conditions to be included in an Access Arrangement is for the Service Provider to make – the Regulator's role is not to draft the terms and conditions but to confirm that the terms and conditions as drafted by the Service Provider are reasonable. This is confirmed by the Australian Competition Tribunal's decision in *Application by GasNet Australia (Operations) Pty Ltd*[1]. In particular Envestra notes the following comments by the Tribunal:

> "*It is important to recall that the preparation of a proposed AA together with a proposed AAI, begins with the Service Provider of a Covered Pipeline. It is the obligation of the Service Provider to design a proposed AA with AAI which is consistent with the provisions of the Code ….*
>
> *The proposed AA may include any relevant matter but must include the elements in s3.1 to s3.20: s2.5. The proposed AAI must contain such information as would enable Users and Prospective Users to understand the derivation of elements in the proposed AA and to form an opinion as to compliance of the AA with the provisions of the Code: s26. … The choices available under the Code are for the Service Provider to make, subject only to the limitation that the implementation of the choice must be consistent with the principles contained in s8 of the Code."*

The Draft Decision has failed to follow the correct approach required under the Code insofar as revisions are required to Envestra's payment terms.

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[1] [2003] ACompT 6.

1.4 Operation of the Prepayment Clause

The Draft Decision describes clause 19 of the Access Arrangement Terms and Conditions as requiring a User to make payments for network charges two months in advance.

This is incorrect. In fact, the prepayment held by Envestra is held for a maximum of 42 days but on average much less. If a User is billed on the 4th day of a month, payment is not due until the 18th day of the month. The payment required will be for the balance of that month and for the next month (thus 42 days). Over the course of the next month, Users obtain services from the network and the amount of prepayment reduces. Just prior to the date at which the next payment is due (18th of the following month), the amount of prepayment held by Envestra is 12 days. The amount and timing of the prepayment is such that the prepayment is no greater than necessary to cover the risk of a User defaulting. Indeed, due to the obligations imposed upon Envestra by its distribution licence, the prepayment does not fully cover the risk of User default. If a User was to default on its payment for a particular month (that is the payment due on the 18th of the month), then Envestra would be entitled, under clause 24.2(a) of the Terms and Conditions, to terminate that User's haulage agreement by 7 days notice. The earliest date by which such termination would take effect is the 25th of the month. By the earliest possible date of termination, due to a User's failure to pay charges due, Envestra will hold only 5-6 days prepayment.

Further, under clause 6 of Envestra's distribution licence, Envestra is not entitled to disconnect a customer until it has provided 15 business days notice to the Commission and the retailer for that customer. Consequently, by the time termination of a haulage agreement takes effect and supply to customers may cease, the entire amount of any prepayment will have been exhausted and Envestra will be delivering gas in circumstances where it does not receive payment in respect of such deliveries. Envestra's risk is further exacerbated by the fact that there currently is no "retailer of last resort" scheme in operation in South Australia whereby customers of a failed retailer are transferred to another retailer.[2]

Envestra also notes that it is in the interests of Users generally that Envestra's financial position be appropriately protected by the prepayment mechanism (under section 2.24(f) of the Code the interests of Users and Prospective Users is a factor which the Commission is directed to take into account in assessing an Access Arrangement). While any form of security will impose a cost upon an individual User, it is in the interests of Users collectively to ensure that Envestra is not financially exposed to the failure of an individual User which may jeopardise Envestra's own financial position and expose all remaining Users to the threat they may not receive haulage services.

[2] While provision is made for the establishment of such a scheme in Division 3B of Part 3 of the *Gas Act 1997*, no such scheme has currently been established.

1.5 Response to the Commission's Position

Credit Policy

The Commission has stated that the prepayment provision is unnecessary given the credit policy in the Access Arrangement, which credit policy in the Commission's view provides Envestra "with considerable (and not unreasonable) discretion in relation to managing this risk."

Envestra does not agree with this statement.

The credit policy permits Envestra to refuse to provide services to an entity which does not have an acceptable credit rating (BBB) unless acceptable security is provided. Where a User does have an acceptable credit rating, security is not required. However, the fact that a User has an acceptable credit rating does not mean it may not become insolvent or otherwise default. Even where a User has an acceptable credit rating, Envestra still has a legitimate interest in being protected against a payment default by that User. That legitimate interest is addressed by the prepayment provision of the Terms and Conditions and is not addressed by the credit policy.

Further, the credit policy is not solely designed to protect Envestra against the risk of non-payment of charges. There are other circumstances in which Users must pay amounts to Envestra under the Terms and Conditions – specifically, the indemnity obligations in clause 29.

When Envestra's credit policy and payment terms are viewed together they provide Envestra with a level of protection that is consistent with that applying under other Access Arrangements.

For example, the 2005 Access Arrangement Terms and Conditions for AGL's NSW Distribution Networks[3] require any User (no matter how creditworthy) to, on request, provide AGL with security for the performance of the User's obligations. The Access Arrangement allows AGL to determine the amount of security it requires (having regard to the User's credit rating, payment history and additional factors) and the amount of security is whatever amount AGL determines is proportionate to the charges under the haulage agreement. A similar provision is contained in the recently approved Access Arrangement for the Central Ranges Network and Pipeline.[4]

The Access Arrangements for the Allgas Energy System and the Amadeus Basin to Darwin Pipeline also have broader discretions in relation to the provision of security than the discretions vested in Envestra. The Allgas Access Arrangement allows Allgas to request reasonable security, the type and extent to be reasonably determined by Allgas[5] (as compared to Envestra's credit policy which specifies that acceptable

[3] Clause 10.

[4] Clause 10 Network & Clause 13 Pipeline.

[5] Clause 8.1.

security is a bank guarantee equal to three month's charges). The Access Arrangement for the Amadeus Basin Pipeline refers to a user providing reasonable security[6] – that is, again the quantum of security is determined by the Service Provider and is not subject to any cap (as compared to Envestra's credit policy).[7]

Such service providers have chosen to protect themselves against credit risk by drafting a very broad credit policy which gives those service providers considerable discretion as to the circumstances in which they may require credit support and the quantum of that credit support. Envestra has, as it is entitled to do under the Code, elected to protect itself against credit risk by using a combination of a prepayment provision and a less discretionary credit policy.

Barrier to Entry

The Commission has stated that the prepayment clause may act as a barrier to entry and that, given this, section 2.24(e) of the Code (which directs the Relevant Regulator to have regard to the public interest in competition) suggests the prepayment clause should be disallowed.

There is no evidence that the prepayment is acting as a barrier to entry in the South Australian market or is hindering competitive activity in that market. South Australia's gas market is an extremely competitive one, with the level of customer churn now at 46%.[8]

Further, when regard is had to the other requirements which must be met by a new entrant, it is not plausible to state that the prepayment clause acts as a material barrier to entry.

To participate in the South Australian gas market, a new entrant must:

(a) obtain a retail licence and put in place procedures to comply with that licence;

(b) if retailing to Retail Code Customers, establish systems to comply with that code;

(c) establish systems to comply with the requirements of the Retail Market Rules; and

(d) obtain access to gas supplies.

In respect of (a) to (c), Envestra notes that each Australian State has unique regulatory instruments (in particular its retail market rules). Each time a retailer enters a new

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[6] Section 1.4.

[7] The five access arrangements are attached to this Submission.

[8] Essential Services Commission of South Australia, "Completed Small Customer Electricity & Gas Transfers to Market Contracts" April 2006.

State, it must establish specific systems to comply with the regulatory requirements of that State.

Given the existing substantial hurdles that a new entrant must meet, Envestra does not consider it can legitimately be claimed that the prepayment clause is likely to have any material effect on whether a new entrant enters the South Australian market. If a new entrant is able to establish systems to meet the regulatory requirements detailed in (a) to (c) above, then they will be able to establish systems to deal with, and obtain the working capital to fund, prepayments.

There is no evidence that the requirement to obtain working capital to fund the prepayment has prevented retailers entering the South Australian market. There are now four or five such retailers, operating in a highly competitive market. The prepayment will not act as a barrier to entry to a small scale retailer, because, being small scale, the amount of prepayment they have to fund will also be proportionally small-scale.

Envestra also notes the analysis in the report prepared by Michael Smart of CRA titled "Competition impacts of prepayment", (which report accompanies these submissions), which report further demonstrates that the prepayment does not act as a barrier to entry.

Complexity

Origin Energy has asserted that the prepayment mechanism is complex, which assertion appears to have been accepted by the Commission despite no evidence being provided to support the assertion.

Envestra has been administering prepayment mechanisms since 1997 (the mechanism having operated since Envestra acquired the South Australian and Queensland distribution systems).[9] The mechanism is well-established and invoices are issued predominantly through an automated process.

It takes approximately 2 person hours per month to prepare invoices. The process involves preparation of reports, raising invoices and undertaking the necessary checks. The process used to raise invoices is incremental to Envestra's standard accounting, forecasting and network monitoring (UAFG) process, which processes are automated.

Origin has stated: "*increased gas contestability..will add further inefficiencies and costs to Envestra's billing operations*." This is incorrect. Increases in retail numbers have an immaterial impact on the time required to prepare invoices – the incremental time involved in billing an additional retailer is less than 10 minutes per month.[10]

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[9] See Envestra's letter to the Commission of 28 February 2006, attached to this Submission.

[10] See letter from Origin Energy Asset Management to Envestra dated 5 May 2006 describing the steps involved in preparing invoices under the current regime, which letter is attached to this Submission.

Origin has also asserted: "*advanced payment followed by subsequent monthly adjustment is a complex arrangement involving the risk of errors accompanied by disputes*." This is incorrect. The billing process is largely automated and the risk of errors is low. To Envestra's knowledge no dispute has ever been raised with Envestra in relation to forward estimate billing components.[11] On a monthly basis, a retailer is required to reconcile actual data against forecast data, which again is not a complicated process and is vastly simpler to the daily verification process required to be undertaken by a retailer to comply with the Retail Market Rules.[12]

Given the above, Envestra considers there is no basis for the claim that the prepayment mechanism is complex. Envestra notes that the Commission appears to have accepted assertions by Origin that the prepayment system is complex, despite Origin having put forward no evidence to support its case, and that such assertions appear to have significantly influenced the Commission's decision. The Commission will fall into error if it acts upon unsupported assertions.

Further, even if it were the case that the prepayment system contained complexities (which is denied) that is not a sufficient reason for proposing to abolish that system (given the impact of that abolition on Envestra) without investigations first being made to determine if the information technology and billing systems can be modified to address those complexities. Envestra would investigate (and seek to redress) this matter if retailers would identify to Envestra the complexities with which they are concerned.

Standard Practice

The Commission has stated that "*advance payment is not the standard practice in energy distribution in Australia*."

Whether a provision is standard practice is not the test under the Code – the relevant test is whether a provision is reasonable. Reliance on notions of standard practice is inconsistent with the principle that a Service Provider is free, under the Code, to design the access arrangement they consider appropriate, subject to that access arrangement meeting the requirements of the Code. A Service Provider is not bound to follow "standard practice".

The Commission seeks to justify its reference to standard practice by the following reasoning:

> "*The Commission considers that consistency in this area is a relevant matter in assessing the reasonableness of the proposed Terms and Conditions and under section 2.24 of the Code, as convergence in national practice can aid the development of competition in energy markets. Hence, consistency is a relevant matter in determining what is reasonable, to the extent that the proposed Terms and Conditions are not reasonable*."

[11] See footnote 9.

[12] See Chapter 5 of the Retail Market Rules.

The Commission's reasoning runs contrary to the entire policy underlying the Code. The intent of the Code is to allow service providers to design their own access arrangements, subject to that access arrangement meeting certain general criteria set forth in the Code. The Code is not designed to promote one national practice. There is no indication of this anywhere in the Code. There is no reference to "standard practice" in section 2.24 of the Code. If the Code's intention is that terms and conditions of access arrangements are to be "consistent", then the Code would set out specific parameters that terms must conform to. It does not do so. Consequently promoting a national standard practice is not a factor to which the Commission is entitled to have regard under the Code.

Envestra also notes that the use of prepayment provisions is common in commercial dealings. Examples of the use of such provisions in other utility sectors accompany these submissions. (see the document titled "Prepayments in Utility Sector – Examples" of the supporting documents to this submission). Furthermore, prepayment provisions are a common characteristic of highly competitive markets – for example property, rent, insurance, vehicle hire and plant hire. Given the extensive use of prepayment provisions, Envestra does not consider there is any legitimate basis to claim that such provisions are unusual.

Provision of Working Capital

Origin Energy has stated that the prepayment mechanism inappropriately places a working capital burden on Users. Envestra does not deny that the effect of the prepayment mechanism is that Users must ensure they can fund payment in advance. However, Envestra does not consider there is any basis upon which to claim that the cost of funding this payment is inappropriate. The prepayment mechanism is designed to protect a legitimate commercial interest of Envestra – protection against a User's default. To impose a cost on Users to protect a legitimate commercial interest is not inappropriate.

Furthermore, if Envestra were to raise working capital, it would need to do so by raising equity – not increasing debt. This is because Envestra's covenants with its financiers substantially restrict the purpose for which Envestra can raise debt, ie Envestra can raise debt for capital investment only[13]. The implications of this constraint are that the rate of return used to calculate the working capital allowance would need to be the equity rate of return – not the WACC or cost of debt. The Commission's own advisors, Allens Consulting Group, have proposed a range for the nominal pre-tax cost of equity for Envestra from 10.5% to 14.8%[14].

Full Retail Competition

In respect of section 2.46 of the Code, the Commission has stated:

> "*The Commission notes that advance payment was approved as part of the current Access Arrangement and it is required to take this into account under*

[13] See financing document contained in Envestra's confidential submission.

[14] Allens Consulting Group (2006), Envestra's Proposed Revisions to its Access Arrangement, p 41.

section 2.46 of the Code. However, the Commission also notes that when this clause was approved FRC was not in place in the market."

That is, the existence of FRC provides, in the Commission's view, a basis to require Envestra to cease use of the prepayment provision despite section 2.46.

The Commission's argument ignores the fact that:

(a) the entire point of an access arrangement is to provide a mechanism by which multiple retailers can gain access to a network; the consideration of ensuring that retailers could readily gain access to the network would therefore have been as relevant in 2001 as it is in 2006;

(b) as at the time the current Access Arrangement was reviewed by SAIPAR it was known that FRC was intended to commence during the current Access Arrangement Period. The introduction of FRC is specifically noted in the approved Access Arrangement – see section 3.3.6.6.

Full retail competition is not a new matter. It does not provide a basis for overriding the requirement of section 2.46 to have regard to the provisions of the existing Access Arrangement.

The fact that the prepayment provision is included in the current Access Arrangement demonstrates that it was previously assessed by SAIPAR as reasonable. The Commission has not provided any logical justification as to why the provision has ceased to be reasonable.

Envestra's Legitimate Business Interests

In considering Envestra's legitimate business interests, the Commission has not correctly analysed the financial impact upon Envestra of removing the prepayment provision. The effect of the removal of the prepayment provision is to impose a cash flow deficit of around $40 million upon Envestra ("**Cash Flow Deficit**"). Annexure 1 to these submissions sets out the basis for the calculation of this Cash Flow Deficit. This impact upon Envestra has not been considered, nor has the impact upon Envestra's credit rating of requiring Envestra to finance the Cash Flow Deficit. Nor has the impact of forcing Envestra to raise finance to address the removal of the prepayment provision upon Envestra's ability to undertake other projects been considered, including the foreshadowed 5-year capital expenditure program.

The Commission states that in order to protect Envestra's legitimate business interests if payment terms were to change, it will attempt to ensure financial neutrality (p.27 of the Draft Decision). However, the Commission has failed to recognise that to maintain financial neutrality for Envestra a working capital amount must be included in the revenue requirement, based on the full cash flow impact on Envestra. In determining working capital requirements the Commission has only considered the financing cost of operating Envestra's business and not the financial impact of

removal of the prepayment terms. Abolition of the prepayment terms over a one-year period means that Envestra would forgo collection of revenue in the first year of the access arrangement period equal to the Cash Flow Deficit. The impact in financial terms is that Envestra's cashflow in the first year of the access arrangement period would be reduced by about $40m. Taking the Draft Decision revenue requirement of $116m, cash flow in the first year of the access arrangement would be about $76m. This is a 35% shortfall in the revenue requirement calculated by the Commission. To abolish prepayment and maintain financially neutrality, working capital needs to be based on funding the full Cash Flow Deficit and not just on the amount of operating costs required to run the business adjusted by lead and lag days.

Furthermore as discussed above, Envestra's financing arrangements constrain the purpose for which Envestra may raise future debt – specifically Envestra is essentially restricted to raising debt to fund capital expenditure only. Therefore the funds required to address the cash flow deficit would need to be raised via an equity issue at the equity rate of return.

Given the above, Envestra's financial neutrality could only be maintained by paying Envestra a working capital allowance equal to the Cash Flow Deficit calculated at the equity rate of return. That is Envestra would require a working capital allowance of the order of $3.9m[15]. This amount is significantly greater than the $600,000 proposed by the Commission.

The Commission also considers it has minimised the financial impact upon Envestra of removing the prepayment provision by allowing a one-year transition period to move from the prepayment regime to a regime based upon invoicing in arrears. A one-year transition period provides very little assistance to Envestra in managing such a material financial impact. This is because over the one-year period, Envestra would need to absorb the Cash Flow Deficit and continue to meet its existing debt and equity commitments. This is an extremely large deficit to absorb in such a timeframe.

Further extending the transition period, while lessening the financial impact in any given year, does not lessen the overall magnitude of the cash flow impact upon Envestra. Over whatever transition period is allowed, Envestra must still absorb the Cash Flow Deficit.

The Commission has alluded to certain matters which it considers lessen the cash flow impact upon Envestra of the removal of the prepayment provision. Specifically, the fact that no negative working capital allowance has been made for the first year, the positive cash flows set out in Table 12.1 of the Commission's Draft Decision, the Government's FRC Contribution and that the Commission will not require Envestra to repay revenue already collected. For the reasons set out below, none of these factors lessens the cash flow impact upon Envestra.

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[15] Calculated by taking the midpoint of the range of real pre-tax cost of equity proposed by Allens Consulting Group (p41 of the report cited at footnote 14) of 9.65% multiplied by the Cash Flow Deficit of $40m.

(a) No working capital allowance has been provided for the first year - This is a reference to the fact that the Commission is not going to require Envestra to account for the additional amounts it earns due to payments being made in advance not arrears. Any such amount makes a relatively immaterial impact in offsetting the Cash Flow Deficit;

(b) Positive cash flows as set out in Table 12 .1 – Envestra notes that this positive cash flow of some $8m is significantly less than the Cash Flow Deficit. More importantly, Table 12.1 shows that while Envestra may have a positive cash flow effect in the first three years of the access arrangement, this is more than offset by the negative cash flow impact in the latter two years of the access arrangement ($9.5m);

(c) The South Australian Government's payment to Envestra in 2004 of the $54,609,367 FRC contribution - The receipt of such payment does not assist Envestra to manage the impact of the Cash Flow Deficit. $27,991,000 of that payment relates to capital costs already incurred by Envestra as at the time the payment was received. $13,008,000 of the payment relates to operating costs up to 1 July 2006. As to the remaining part of the payment (which relates to operating costs of approximately $5.032 million per year for the period from 1 July 2006 to 30 June 2009) this payment has already been deducted by the Commission from Envestra's revenue requirement (Table 11.3 of the Draft Decision).[16] That is, the payment is of no net benefit to Envestra because it has already been taken into account in determining the revenue Envestra may charge.

    Further, the amount paid by the Government to Envestra was discounted to take into account the fact that Envestra was receiving the payment prior to the incurring of certain of its operating expenditure.[17] There was therefore no working capital benefit to Envestra through receipt of the payment;

(d) The Commission will not require Envestra to repay revenue already collected – As pointed out above, the impact of not requiring revenue to be repaid at 1 July is that revenue in subsequent months will be reduced by the amount of prepayment held by Envestra. That is, the amount of the Cash Flow Deficit has been calculated assuming the existing prepayments are not required to be prepaid.

Allowing Envestra only a one-year transition period, and failing to properly compensate Envestra for the working capital effects of removing the prepayment provision, has a significant financial impact upon Envestra. Envestra submits that if the prepayment provision were to be removed (which Envestra denies the Commission has the power to do), that at least a five-year transition period should be allowed and Envestra must be properly compensated for the working capital consequences.

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[16] See the Commission's June 2004 determination "Envestra Limited FRC Maximum Prices – Price Determination".

[17] See letter from the Commission to the Minister for Energy dated 11 June 2004.

1.6 Beneficiary of Removal of Prepayment Provisions

The principal beneficiary of the removal of the prepayment provision is the dominant South Australian retailer, Origin Energy Retail Limited. If the prepayment provision is removed, Origin will receive a cash flow benefit equal to approximately its market share percentage of the Cash Flow Deficit. Given that Origin currently supplies approximately three quarters of the market with natural gas, this would be equivalent to a $30m cash flow benefit. There is no provision for that cash flow benefit to be returned to the ultimate consumer.

Envestra also notes that, as set out in its previous submission to the Commission dated 28 February 2006, the genesis of the prepayment provision was in the 1997 Haulage Agreement for South Australia and Queensland negotiated between Boral Energy Limited (which entity was subsequently separated from the Boral group to create Origin Energy Retail Limited) and Envestra. The Commission is now reversing an arrangement voluntarily entered into by Origin/Boral and providing the dominant incumbent retailer with a windfall gain.

1.7 Section 2.46 factors

Under section 2.46 of the Code, in assessing revisions to an Access Arrangement, the Relevant Regulator must consider the factors described in section 2.24 and take into account the provisions of the Access Arrangement.

The factors in section 2.24 and 2.46(b) either support retention of the prepayment provision or are ambivalent as to whether it should be retained. No factor supports its removal. The relevant factors are set out in the following table:

Factor	Analysis
Section 2.24(a) – Service Provider's legitimate business interests and investment in the Covered Pipeline.	Supports retention of the prepayment, as the prepayment protects Envestra against the risk of User default and because of the cash flow impact upon Envestra of removing the prepayment.
Section 2.24(b) – firm and binding contractual obligations of the Service Provider or other persons (or both) already using the Covered Pipeline.	Supports retention of the prepayment given the restrictions Envestra's binding financial arrangements place upon it raising the finance necessary to address the prepayment's removal.
Section 2.24(c) – the operational and technical requirements necessary for the safe and reliable operation of the Covered Pipeline.	Not a relevant factor in this context.
Section 2.24(d) – the economically efficient operation of the Covered Pipeline.	For the reasons set out above, the use of the prepayment mechanism does not prejudicially affect the economically efficient operation of the network.

Section 2.24(e) – the public interest, including the public interest in having competition in markets (whether or not in Australia).	The high level of competitive activity in South Australia shows that the prepayment mechanism has no material impact on competition. Therefore this factor neither supports retention of the prepayment nor requires its removal.
Section 2.24(f) – the interests of Users and Prospective Users.	While the requirement to provide the prepayment imposes a cost on an individual User, as explained in section 1.4 above it is in the interests of Users generally that the solvency of Envestra is maintained. Therefore this factor is ambivalent as to whether the prepayment should be retained.
Section 2.46(b) – provisions of the existing Access Arrangement.	Supports the retention of the prepayment provision as it is contained in the existing Access Arrangement.

1.8 Conclusion on the Prepayment Provision

Clause 19 of the Terms and Conditions of the Access Arrangement is reasonable. The clause provides an appropriate measure to protect Envestra against the risk of User default. It is indisputable that Envestra has a legitimate interest in being protected against such default and, under the Code, Envestra is entitled to be so protected in whatever reasonable manner it elects. The quantum and timing of the prepayment is proportionate to the risks Envestra faces.

As set out in section 1.7, the factors in sections 2.24 and 2.46(b) support the retention of the prepayment provision.

Clause 19 of the Terms and Conditions should therefore be retained in its current format as it is a reasonable term.

Further, the prepayment regime could only be replaced by a regime providing for payment in arrears if appropriate provision were made to compensate Envestra for the $40 million cash deficit this will impose. That is, the calculation of Envestra's working capital would need to be amended to include both the operating cost and revenue impact of varying billing terms.

Annexure 1 – Impact of Removal of Prepayment Provision

Modelling of revenue flows at 1 July 2005 demonstrates that implementation of invoicing monthly in arrears results in a shortfall in cash flow for Envestra of around $40m. A simplified analysis setting out the basis for the derivation of this estimate is set out below. For computational ease, it is assumed that monthly revenue is constant at $12m per month. In practice monthly revenue varies depending on weather.[18]

Envestra understands that the Commission's proposal is that a retailer will be billed in respect of gas delivered to a meter only after that meter has been read. Most meters are currently read on a 3 monthly cycle.

(a) Assuming current invoicing arrangements, Envestra would have received at 30 June prepayment for July ($12m). If invoicing terms were to change to monthly in arrears, Envestra would be required to use this amount to offset future bills.

At 30 June, Envestra also holds payments for the months of April, May and June. These amounts were at some point in the past pre-paid. With a three month meter reading cycle, it is assumed that half of these meters have been read implying that if invoicing was changed to monthly in arrears, invoices for 1.5 months of gas consumption over this period would have been issued. The remaining 1.5 months of prepayment would be revenue that has been accrued by Envestra ($18m), in addition to the $12m prepayment for July. If invoicing terms were to change to monthly in arrears, Envestra would be required to use these amounts to offset future bills.

(b) By moving to invoicing in arrears, Envestra would not receive any revenue until August (for the month of July). In contrast, if prepayment was retained, Envestra would receive revenue in July ($12m) being prepayment for August.

(c) Using these assumptions, the total cash flow impact of moving from prepayment to invoicing in arrears would be $12m + $18m + $12m, equal to $42m. (Detailed modelling of the cash flow impacts of moving from prepayment to invoicing in arrears indicated that the Cash Flow Deficit at 1 July 2005 was $40.3m.).

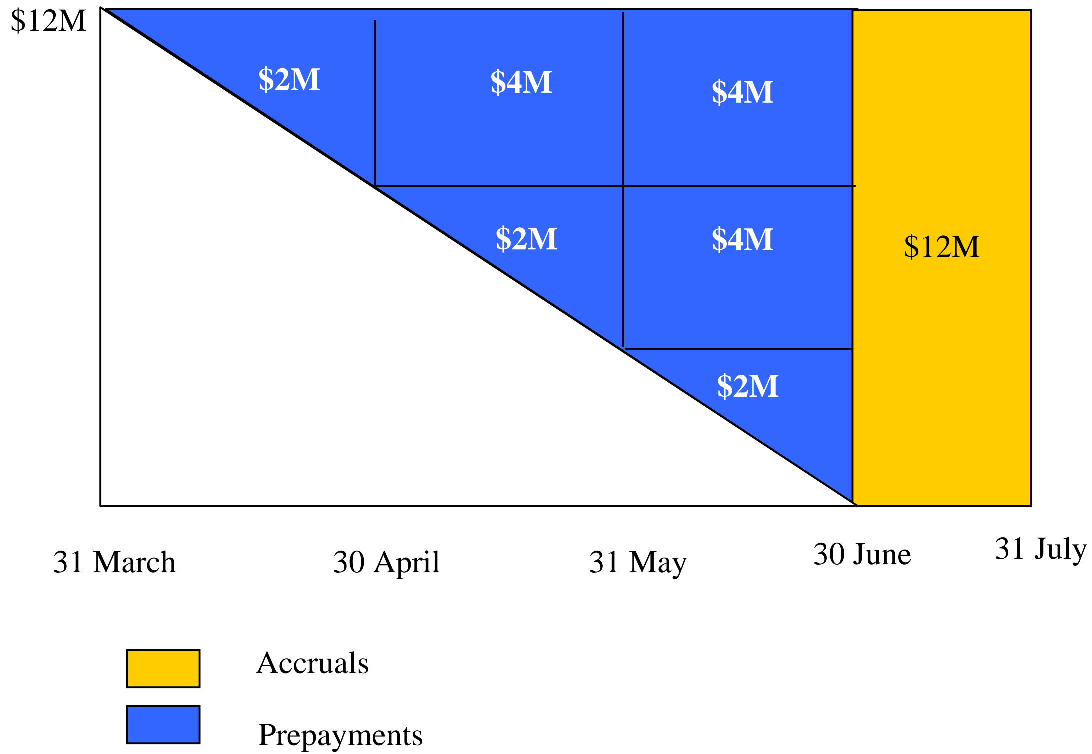
A graphical depiction of this calculation is provided below. At 30 June Envestra would already hold $30m of prepayment obtained by summing the revenue in the shaded portions of the graph below. This revenue reflects that which would have been received by Envestra at 30 June under the existing prepayment arrangement. If payment terms were amended to invoicing monthly in arrears, this amount would be used to offset invoices in the first year of the second access arrangement.

[18] Internal modelling undertaken by Envestra indicated that in April, May and June 2005, the cash flow from the South Australian Covered Network under the current regime was $11.24m, $11.26m and $10.7m.

In addition, if payment terms were amended to invoicing monthly in arrears, Envestra would forgo receipt of a further $12m in mid July (being prepayment for August).

The total Cash Flow Deficit from altering invoicing terms using these assumptions is the sum of both of these amounts ($42m).

Graphical Depiction of the Amount of Prepayment Held by Envestra at 30 June



2. Initial Capital Base

2.1 Draft Decision and Reasoning

The Draft Decision requires Envestra to amend its revised Access Arrangement to base its proposed revised Reference Tariffs upon a Capital Base at the commencement of the First Access Arrangement Period (1 July 2003) of $796.35 million (in 31 December 2005 dollar terms).

The Commission has wrongly formed the view that this represents the value of the Initial Capital Base set by SAIPAR as at 1 July 2003 by reference to Table 15 of the existing Access Arrangement Information.

Clause 8.9(a) of the Code provides that the Capital Base as at the commencement of the current Access Arrangement Period (that is, to which the Commission's Draft Decision relates) is determined as:

> "*the Capital Base at the start of the immediately preceding Access Arrangement Period",*

adjusted for new facilities investment, depreciation, redundant capital and inflation.

The Commission has concluded that the commencement of the current Access Arrangement Period occurred on 2 May 2003, being 14 days after SAIPAR's Final Approval.

2.2 Envestra's Submission

Envestra agrees that:

(a) the commencement date of the current Access Arrangement was 2 May 2003; and

(b) under clause 8.9(a) of the Code, a determination must be made as to what was the value of the Capital Base as at 2 May 2003 (the start of the first Access Arrangement Period).

However Envestra submits that the Commission has acted upon the wrong principles and contrary to the Code and as a consequence has not derived the correct Initial Capital Base as at 2 May 2003. In summary:-

(a) SAIPAR's Final Decision clearly stated that the Initial Capital Base was to be calculated based on the 30 June 1998 DORC Valuation rolled forward to the commencement of the Access Arrangement and adjusted for redundant capital, actual inflation, actual capital expenditure and depreciation.

(b) The Access Arrangement did not set out the actual figure which results from performing the above calculation. However the relevant calculation, and that

figure, are clear and easily ascertainable. The figure submitted by Envestra as at 1 July 2003 is $810.21 million (a difference of around $14 million compared with the Commission's figure). Its derivation is set out in the Schedule to this section. This is the figure that, under clause 8.9(a) of the Code, must be used as the Initial Capital Base.

(c) The figure used by the Commission is incorrect. That figure is based on a table in the Access Arrangement Information which does not purport to set out the calculation of the Initial Capital Base. That table sets out a roll forward based on forecast information used for the purposes of the calculation of Total Revenue during the first Access Arrangement. The table was never intended to, and does not, provide a basis for calculating the Initial Capital Base.

2.3 Review of Relevant Documents

Section 5.9 of SAIPAR's 21 December 2001 Final Decision states:

> "*The final value for the Initial Capital Base as at the commencement of the Access Arrangement is to be SAIPAR's determined DORC valuation as at 30 June 1998, adjusted to take into account*
>
> *Removal of Redundant Capital*
>
> *Inflation adjustments*
>
> *Capital Expenditure, and*
>
> *Depreciation*
>
> *Rolled through until the access commencement date as determined in the Final Decision.*
>
> *The adjustment for inflation is to utilise the actual CPI (All Groups – Average of 8 state capitals) published by the Australian Bureau of Statistics*."

The unequivocal reading of this section is that the Initial Capital Base was to be calculated by taking the 30 June 1998 DORC valuation and adjusting it for actual inflation (and the other matters referred to).

Under section 8.9(a) of the Code, Envestra and the Commission must calculate the Initial Capital Base as at 2 May 2003 in accordance with SAIPAR's Final Decision.

It is not surprising that the SAIPAR Final Decision or the Access Arrangement Information do not give a monetary value for the Initial Capital Base. At that time, the commencement date for the Access Arrangement was unknown. Further, actual inflation figures were not available (beyond those available at December 2002 when the Access Arrangement Information was submitted). Upon actual data becoming available, section 5.9 of the SAIPAR Final Decision enabled the actual figure to be readily ascertained (as required for calculating the Capital Base at review under clause 3.3.3.2 of the Access Arrangement).

Instead of calculating the Initial Capital Base in accordance with SAIPAR's determination, the Commission wrongly relies on Table 15 of the Access Arrangement Information. However, Table 15 is designed to calculate the roll forward of the Capital Base for the purposes of calculating Total Revenue during the Access Arrangement Period. It did not provide and was not intended to provide information relevant to the calculation of the Initial Capital Base.

The distinction between the calculation of the Initial Capital Base for the purposes of clause 8.9(a) and for the purposes of calculating Total Revenue is clearly drawn in the Access Arrangement. Clauses 3.3.3.1 and 3.3.3.2 of the Access Arrangement provide:

> "*3.3.3.1 Forecasting the Capital Base*
>
> *The Capital Base to be adopted for the purposes of forecasting Total Revenue for an Access Arrangement Period, will be the opening value of the Capital Base, as determined in accordance with clause 3.3.3.2 (with the exception that for the first Access Arrangement period, the opening value of the Capital Base will be the Initial Capital Base), adjusted by (on an annual basis):*
>
> - *forecast New Facilities Investment that is proposed to be added to the Capital Base in accordance with the Extensions/Expansions Policy and section 8 of the Code;*
> - *forecast depreciation calculated in accordance with section 3.3.5 of this Access Arrangement;*
> - *forecast Redundant Capital determined in accordance with section 3.3.4 of this Access Arrangement; and*
> - *a forecast percentage change in the CPI of 2.5%.*
>
> *3.3.3.2 Capital Base at Review*
>
> *The Capital Base, when reviewed, shall be adjusted to reflect the following factors, which will be calculated on an annual basis:*
>
> - *New Facilities Investment that is to be added to the Capital Base in accordance with the Extensions/Expansions Policy and section 8 of the Code;*
> - *depreciation calculated in accordance with section 3.3.5 of this Access Arrangement;*
> - *Redundant Capital determined in accordance with section 3.3.4 of this Access Arrangement; and*
> - *the actual percentage change in the CPI (or if not available, estimates of the CPI).*"

Therefore, a clear distinction is drawn in the Access Arrangement between the use of the Capital Base for the derivation of Total Revenue within an Access Arrangement Period (which calculation is made based on forecast inflation and other factors) and the calculation of the Capital Base between periods (which is done on actual inflation).

SAIPAR's Final Decision also reflected this distinction. Section 5.8.11 of that decision set out a mechanism for determination of asset based forecasts to derive the total revenue requirement. These asset based forecasts where calculated using forecast inflation and averaged asset values. Despite calculating such values based on forecast inflation, SAIPAR also proceeded to set out a different methodology for determining the Initial Capital Base. That is, SAIPAR clearly required in section 5.9 the use of a different methodology to calculate the Initial Capital Base from that used to calculate the capital base value for revenue purposes.

SAIPAR's Further Final Decision of April 2003 did not further address the issue of the Initial Capital Base.

However, in respect of interpretation the Further Final Decision states (at page 7):

> "*If any uncertainty arises during the course of this, or any future Access Arrangement Period as to the interpretation of any provision of the Access Arrangement, SAIPAR will refer to the Final Decision and this Further Final Decision to assist it in resolving the uncertainty.*"

That is, the Final Decision and Further Final Decision are to be read as one document. When so read, it is abundantly clear that section 5.9 of the Final Decision sets out the methodology for calculating the Initial Capital Base.

2.4 Summary of Envestra's position

In summary the Initial Capital Base is required to be calculated in accordance with section 5.9 of the Final Decision. This is because:

(a) this is the express requirement of the Final Decision of SAIPAR;

(b) this approach is consistent with Clause 3.3.3.2 of the approved Access Arrangement, which refers to the Capital Base, at reviews, being determined based on actual inflation; and

(c) any ambiguity or uncertainty about the Initial Capital Base must be resolved by considering the Final Decision and the Further Final Decision as one. Clause 5.9 of the Final Decision expressly deals with the Initial Capital Base and thus resolves the issue;

(d) to derive the Initial Capital Base using forecast, rather than actual, inflation is inconsistent with section 8.1(a) of the Code because it does not provide for Envestra to recover all of its efficient costs. Therefore the figures in Table 15 of the Access Arrangement Information, as opposed to actual figures, which are based on forecast inflation, should not be used;

(e) there is no economic logic to calculating the Initial Capital Base using forecast inflation – doing so inevitably creates a windfall gain or loss either for Users or the Service Provider. Such gain or loss is in no way linked to a party outperforming against expectations, delivering services at the lowest sustainable cost or otherwise meeting any of the objectives of the Code.

2.5 Conclusion on the Initial Capital Base

The draft decision is affected by an error in that it identifies an incorrect Initial Capital Base. The Initial Capital Base as at 1 July 2003 is $810.21 million.

Schedule

Envestra has calculated the value of the Capital Base to apply at the commencement of the next Access Arrangement period (1 July 2006) in a manner consistent with the methodology set out in section 5.9 of SAIPAR's Final Decision.

The relevant calculation of the Capital Base is set out in the table below. Envestra has calculated a value of the Capital Base as at 1 July 2003 of $810.21 million in 31 December 2005 dollar terms, which is $13.86 million higher than the $796.35 million calculated by the Commission.

Envestra Calculation of the Capital Base to 30 June 2006

Year Ending 30 June	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Nominal $million								
Opening Value ($BoY)[a]	617.00	639.41	661.27	709.60	732.49	760.77	784.43	806.09
New Facilities Investment ($MoY)[b]	21.51	23.43	21.35	19.67	20.36	20.39	20.58	27.11
Depreciation ($MoY)	12.27	12.79	13.56	14.73	15.62	16.52	17.17	17.91
Inflation adjustment ($EoY)[c]	13.17	11.21	40.54	17.94	23.54	19.80	18.25	24.54
Closing Value ($EoY)	639.41	661.27	709.60	732.49	760.77	784.43	806.09	839.83
Opening Value $31/12/04	748.53	759.59	772.19	781.16	786.53	791.53	795.47	798.88
Closing Value $31/12/04	759.59	772.19	781.16	786.53	791.53	795.47	798.88	807.87
Average RAB $31/12/04	**754.06**	**765.89**	**776.67**	**783.84**	**789.03**	**793.50**	**797.18**	**803.38**

Real $million ($31/12/05)								
Opening Value ($BoY)[a]	766.19	777.52	790.41	799.59	805.08	810.21	814.24	817.73
New Facilities Investment ($MoY)[b]	26.39	28.38	25.16	21.87	21.98	21.28	21.07	27.11
Depreciation ($MoY)	15.06	15.48	15.98	16.37	16.86	17.25	17.58	17.91
Closing Value ($EoY)	777.52	790.41	799.59	805.08	810.21	814.24	817.73	826.93
Average Value	771.85	783.96	795.00	802.33	807.64	812.22	815.99	822.33
Commission proposed average value ($31/12/05)	**746.38**	**759.80**	**772.12**	**784.24**	**793.68**	**798.70**	**803.11**	**809.28**

a “$BoY” refers to dollar values expressed at beginning of year terms.
b “$MoY” refers to dollar values expressed at middle of year terms.
c “$EoY” refers to dollar values expressed at end of year terms.

Envestra has used the Commission’s financial model to undertake the above calculation of the Capital Base. Envestra has used this model rather than its own in order to accurately incorporate the manner by which the Commission applies inflation in its calculated Capital Base in the Draft Decision.

The main difference between Envestra’s calculation of the Capital Base and that undertaken by the Commission therefore relates to the use of actual parameters prior to 1 July 2003 rather than the forecast parameters used by the Commission. Some of the differences in key parameters are shown in the table below.

Key Parameters Used by Envestra and the Commission in Calculating the Capital Base

Year Ending 30 June	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**
Envestra Key Parameters								
Inflation – Year to March[a]	2.50%	1.28%	2.79%	5.99%	2.94%	3.44%	1.98%	2.36%

New Facilities Investment ($m nominal)	21.51	23.43	21.35	19.67	20.36	20.39	20.58	27.11
Depreciation	12.27	12.79	13.56	14.73	15.62	16.52	17.17	17.91
Commission Key Parameters								
Inflation – Year to March	1.25%	2.02%	2.94%	2.79%	2.50%	3.18%	1.98%	2.36%
New Facilities Investment	22.98	24.53	22.85	26.39	19.89	20.27	20.40	25.29
Depreciation	12.12	12.63	13.39	14.14	14.93	15.76	16.38	17.08

a March inflation is a key inflator used in the Commission's financial model along with September inflation.

Indeed, the methodology used by Envestra to determine the values of the Capital Base is similar to that used by the Commission's advisor. The Commission's advisor, the Allen Consulting Group, in applying a method that it considered was appropriate under the Code, did not use forecast parameters for the period prior to 1 July 2003.[19]

There are also other differences whereby Envestra has corrected what it considers to be errors in the Commission's financial model. In some cases, these errors are mechanical and in other cases are more reflective of Envestra's view of the correct model parameter to apply. Envestra intends setting out such issues of detail in a letter to the Commission.

Envestra has also calculated the Capital Base to apply in each year of the second Access Arrangement period, which is shown in the table below. Envestra's Capital Base at the end of the regulatory period (30 June 2011) is $932.36 million, which is $34.81 million higher than the $897.55 million calculated by the Commission.

Envestra Calculation of the Capital Base to 30 June 2011

Year Ending 30 June	**2007**	**2008**	**2009**	**2010**	**2011**
Nominal $million					
Opening Value ($BoY)[a]	839.83	889.27	939.95	983.07	1,024.42
New Facilities Investment ($MoY) [b]	48.01	52.02	46.00	45.08	46.19
FRC Telemetry ($BoY)	1.66				

[19] As detailed in a report prepared by the Allen Consulting Group dated 16 January 2006, which has not been published by the Commission.

Depreciation ($MoY)	21.21	23.54	26.22	28.39	29.90
FRC Depreciation ($MoY)	0.38	0.39	0.40	0.12	0.12
Inflation adjustment ($EoY) [c]	21.37	22.58	23.74	24.78	25.81
Closing Value ($EoY)	889.27	939.95	983.07	1,024.42	1,066.41
Opening Value $31/12/04	807.87	834.57	860.61	878.14	892.76
Closing Value $31/12/04	834.57	860.61	878.14	892.76	906.68
Average RAB $31/12/04	**821.2**	**847.6**	**869.4**	**885.5**	**899.72**
Real $million ($31/12/05)					
Opening Value ($BoY)[a]	826.93	854.26	880.92	898.86	913.83
New Facilities Investment ($MoY) [b]	46.69	49.36	42.58	40.71	40.70
FRC Telemetry ($BoY)	1.64				
Depreciation ($MoY)	20.63	22.33	24.27	25.64	26.34
FRC Depreciation ($MoY)	0.37	0.37	0.37	0.10	0.10
Closing Value ($EoY)	854.26	880.92	898.86	913.83	928.08
Average Value	840.60	867.59	889.89	906.34	920.95
Commission proposed average value ($31/12/05)	**825.22**	**848.33**	**866.91**	**880.11**	**891.77**

a “$BoY” refers to dollar values expressed at beginning of year terms.
b “$MoY” refers to dollar values expressed at middle of year terms.
c “$EoY” refers to dollar values expressed at end of year terms.

3. Demand Forecasting

3.1 Draft Decision and Reasoning

To derive Envestra's total revenue requirement it is necessary to make forecasts of demand over the access arrangement period. Envestra has made separate forecasts in respect of:

(a) the domestic haulage market;

(b) the commercial haulage market for small business customers; and

(c) the demand haulage market for large industrial customers.

The Commission does not object to the methodology used by Envestra but has stated that Envestra must amend its revised access arrangement to substitute the demand forecasts of the Commission and its consultant MMA for each of the above market sectors.

The Draft Decision asserts that there are a number of assumptions and inputs by Envestra that the Commission does not consider to be best estimates.

3.2 Envestra's Submission

Envestra's submission comprises this section 3 and the NIEIR reports set out in Annexures 1 and 2 to these submissions.

Domestic Haulage Market and Commercial Haulage Market

In respect of the domestic haulage market and the commercial haulage market it is necessary to forecast demand both in respect of the existing network and also in respect of new townships to be covered by the access arrangement over the period 2006/07 to 2010/2011.

The Commission and Envestra are agreed as to the appropriate forecasts for the new townships. The differences between the Commission and Envestra relate to forecasting demand in respect of the existing network.

In respect of the demand of the existing network, Envestra understands that the principal difference between itself and the Commission is in the approach to weather normalisation. As a result of these differences in view, the Commission's consultant, MMA developed a set of alternative forecasts based on its view of the correct approach for weather normalisation.

However the alternative forecasts presented by MMA are affected by statistical errors and are not a suitable basis for addressing weather normalisation. These errors are outlined in the report prepared for Envestra by National Institute of Economic and Industry Research ("**NIEIR**") which is attached as Annexure 2 to these submissions.

Envestra had previously commissioned NIEIR to produce revised forecasts. These were provided to the Commission in December 2005[20] (and are attached as Annexure 1 to these submissions). These are the forecasts which Envestra relies upon as being the best estimates derived on a reasonable basis. The forecasts incorporate the weather normalisation methodology proposed by NIEIR, which remedies the errors in MMA's forecasts.

Any other issues regarding the assumptions underpinning the September 2005 forecasts provided by Envestra to the Commission, are now overcome and have been addressed by NIEIR in its report dated November 2005 basing its forecasts on those used by the Commission in June 2005 to forecast demand as part of determining the standing contract prices able to be charged by Origin Energy Retail Limited. The NIEIR forecasts have previously been found by the Commission to be consistent with those proposed by Origin Energy to determine standing contract prices, and which were approved by the Commission in its Price Determination as reasonable. The NIEIR forecasts therefore constitute a suitable basis, compliant with the Code, for deriving Envestra's forecasts.

Demand Haulage Market

Envestra has one issue with the Commission's approach to deriving the demand forecast for the demand haulage market. That issue is MMA's conclusion that there will be an increase in demand in the northern zone of 2.5 TJs of MDQ due to expansion of existing plant. MMA will not disclose to Envestra the data upon which it has based its conclusion that there will be such an expansion of plant. Envestra has had no opportunity to assess, or comment on, the appropriateness of the data relied upon by MMA. However, for the reasons set out below in section 3.7, Envestra believes the information relied upon by MMA is incorrect and consequently its demand haulage forecasts are not properly based.

3.3 Legal Test

Under section 8.2(e) of the Code: "*any forecasts required in setting the Reference Tariff* [must] *represent best estimates arrived at on a reasonable basis*."

3.4 New Townships

As noted above, Envestra understands that it and the Commission are in agreement as to the appropriate methodology for forecasting demand for the new townships. Envestra does not propose any modifications to the forecasts agreed between Envestra and the Commission in respect of such new townships.

3.5 Weather Normalisation

The approach proposed by MMA to weather normalisation is not an appropriate substitute for the approach proposed by NIEIR for Envestra. To assist NIEIR prepare

[20] Envestra notes that the daily data on gas flows referred to by NIEIR in the Background section of Attachment 3 of their April 2006 report was provided to the Commission by Envestra on 28 October 2005.

its report and Envestra assess the appropriateness of MMA's approach, Envestra requested access to the data and models used by MMA.[21] After initially refusing to supply any additional data to Envestra, the Commission eventually provided the MMA data on 12 April. However, it refused to provide copies of the MMA models and spreadsheets that were used to calculate the MMA forecasts. NIEIR initially constructed its own billings based HDD index in an attempt to replicate MMA's weather normalisation equations. On receipt of the MMA data, NIEIR was not able to satisfactorily replicate the MMA analysis for the Domestic haulage market.

Envestra notes that the Commission's refusal to provide Envestra with access to the models used by MMA makes it impossible for Envestra to fully understand, analyse and respond to the position put by MMA. Further the Commission's delay in providing the MMA data to Envestra has significantly hindered Envestra's ability to respond to the positions put by MMA.

The NIEIR analysis demonstrates that the MMA approach is incorrect for the following reasons:

(a) the MMA weather normalisation regressions use only 8 observations of annual data. To produce a reliable statistical analysis it is necessary to use a minimum sample size of thirty observations for this type of regression. The MMA weather normalisation approach uses too few observations and therefore it is not possible, as a matter of statistical analysis, to have confidence in the precision of the estimated parameters or coefficients. The MMA weather normalisation equations replicated by NIEIR show that the t-statistics, which measure the level of explanatory power of each regressor, are all insignificant and the regression coefficients have very high standard errors. MMA did not report the t-statistics associated with their weather normalisation regressions – had this information been provided NIEIR expects that the statistical deficiencies of the estimates would have been apparent; and

(b) the explanatory variables in the MMA residential regression are highly multicollinear. As a consequence, while some statistical measures associated with MMA's models, such as the goodness of fit of the data to the regression equation, may appear to be high (ie a high R^2), the regression coefficients themselves are unstable. NIEIR demonstrate this is indeed the fact by examining the impact on regression coefficients from omitting one observation from the sample. Therefore, as concluded above, it is not possible, as a matter of statistical analysis, to have confidence in the precision of the estimated parameters or coefficients.

Consequently the regression estimates in MMA's weather normalisation model do not meet the Code's criteria of providing best estimates produced on a reasonable basis. The erroneous approach adopted by MMA is fully discussed in the NIEIR report set out in Annexure 2 to these submissions. That report replicates the MMA domestic and commercial weather normalisation regressions and identifies the statistical inference issues that the MMA approach raises.

[21] These requests were made on 23 January 2006, 15 February 2006, 23 March 2006, 31 March 2006, 3 April 2006 and 6 April 2006.

Envestra notes that on 22 February 2006 a meeting was held between the Commission, MMA, Envestra and NIEIR – at that meeting Mr Richard Lewis of MMA concurred that MMA's regression estimates could not be considered best linear unbiased estimates due to the reasons advanced by NIEIR. MMA suggested that nonetheless its approach was acceptable. However it is beyond doubt that MMA's approach to weather normalisation produces unreliable parameter estimates that consequently produce inaccurate demand forecasts, and which forecasts do not meet the requirements of being best estimates derived on a reasonable basis. These impacts are highlighted in the report set out in Annexure 2 of these submissions.

Having regard to the issues raised by the Commission in response to Envestra's September 2005 forecasts, Envestra commissioned NIEIR to prepare demand forecasts for the South Australian network. NIEIR's suggested forecasts were provided to the Commission in December 2005 (see Annexure 1 to these submissions).

As set out in Annexure 2 to these submissions, NIEIR has identified three widely used approaches to weather normalisation – a Heating Degree Day Index and two variations of an Effective Degree Day index. An index's appropriateness for weather normalisation can be measured by its goodness of fit[22], as measured by R-squared statistics. The higher the R-squared the higher the explanatory power of the index – the index with the highest R-squared is the most appropriate index for weather normalisation.

The EDD model calibrated to the actual South Australian distribution data, with an R-squared of 0.902 over the 1997-2004 period, is the superior model.[23] This is the weather correction index used by NIEIR in its November 2005 forecasts (set out in Annexure 1) and is the index Envestra submits should be used for weather normalisation.

Unless MMA utilise the EDD model it cannot satisfy the Code's requirements of producing best estimates arrived at on a reasonable basis. Envestra is unable to calculate the required modifications to the MMA forecasts due to the refusal of the Commission to provide to Envestra the models used by MMA to calculate the demand forecasts that have been adopted by the Commission. This is despite repeated requests by Envestra for those models.[24] The refusal to provide the necessary models to Envestra has denied Envestra procedural fairness as:

(a) it makes it impossible for Envestra to fully understand, analyse and respond to the position put by MMA; and

(b) it makes it impossible for Envestra to modify the MMA approach to correct for weather normalisation and therefore makes it impossible for Envestra to fully formulate its submission to the Commission.

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[22] Subject to compliance with the requirements of statistical inference.

[23] And is superior to the HDD index used in Envestra's September 2005 forecasts.

[24] These requests were made on 23 January 2006, 15 February 2006, 23 March 2006, 31 March 2006, 3 April 2006 and 6 April 2006.

3.6 Revised Forecasts

Having considered:

(a) the Commission's comments in respect of Envestra's September 2005 forecasts (in respect of weather normalisation);

(b) the approach set out in NIEIR's November 2005 forecasts (Annexure 1);

(c) the analysis in Annexure 2 comparing the statistical properties of MMA and NIEIR weather normalisation models; and

(d) the refusal of the Commission to provide the model used by MMA to generate their forecasts,

Envestra submits that its demand forecasts should be based upon NIEIR's November 2005 forecasts. Those forecasts incorporate the EDD methodology noted above. The NIEIR forecasts are based on those provided by NIEIR to the Commission as part of the Origin Energy Gas Standing Contract Price Review (updated to take into account changes in macroeconomic outlook since the Origin forecasts were prepared in March 2005). The Commission determined that the NIEIR forecasts were consistent with the Origin Energy demand forecasts which were adopted by the Commission to make its June 2005 standing price determination in respect of Origin Energy.[25] The Origin Energy forecasts have previously been assessed by the Commission as reasonable[26] and therefore meet the test set out in clause 8.2(e) of the Access Code. Envestra notes that the Commission has previously accepted this position in its August 2005 Guidance Paper.[27] There the Commission stated:

> "*When assessing whether Envestra's forecasts represent 'best estimates arrived at on a reasonable basis' (in accordance with section 8.2(e) of the Code), the Commission therefore indicated that it expected to give considerable weight to the extent of consistency between retail and distribution forecasts.*
>
> *The Commission's final guidance is that:*
> - *when assessing such forecasts proposed for the second Access Arrangement period, the Commission will take into account the retail forecasts that it endorsed as part of its Origin Energy Gas Standing Contract decision, with a view to ensuring appropriate consistency between retail and distribution forecasts.*"

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[25] ESCOSA, *Gas Standing Contract Price Path, Final Inquiry Report and Final Price Determination,* June 2005, p A-25-A-26.

[26] See page A-25.

[27] ESCOSA, *2006 Review of Envestra's Gas Distribution Access Arrangement, Guidance Paper, August 2005*, p 67-68.

In the period between March 2005 and November 2005 there has been no change in factors affecting demand which would render the March 2005 forecasts unreliable.

3.7 Demand Market

The Commission has concluded, based upon advice from its consultant MMA, that there will be an increase in demand in the northern zone of 2.5 TJs of MDQ (scheduled to occur from 1 July 2007). This is allegedly due to expansion of existing plant. MMA has stated it has obtained this information through issuing surveys to customers. Envestra has received no information that corroborates the MMA survey results

The Commission has refused to provide to Envestra the information upon which MMA has based its conclusion that there will be an increase in northern zone demand. This is on the basis that the customer survey data is confidential.[28]

Envestra has no knowledge of any proposed expansion of existing plant in the Northern Zone. It notes that a 2.5 TJ expansion is significant – it equates to at least a 500 TJ per annum increase in consumption. Envestra would also expect that if a consumer were expanding then generally the increment to MDQ would be less than the existing MDQ – there are currently only two consumers in the northern zone who consume over 2.5 TJ of MDQ and none of them have informed Envestra of any intention to expand. Further, Envestra would have been advised of an expansion of the magnitude quoted by MMA by now to ensure that facilities will be in place to supply the increased load. No advice has been received to date.

There is a glass bottle manufacturer located north of Adelaide, which is a large gas consumer, that has indicated it proposes to expand its plant. However, this consumer is not supplied from the covered Network (but rather is supplied from the Moomba-Adelaide Pipeline) and therefore it is incorrect to include its consumption in Envestra's forecasts.

Envestra relies on the matters set out above to show that the expansion suggested by MMA is not proceeding.

The Commission's refusal to provide to Envestra the information upon which it has based its conclusion that there will be an increase in the northern zone demand denies Envestra procedural fairness. Without this information it is impossible for Envestra to respond on this issue. Envestra has no ability to assess how reliable is the information provided to the Commission, how likely is the proposed plant expansion and, if there is such an expansion, what will be its impact upon demand.

3.8 Conclusion

In respect of the domestic haulage market, the following demand forecasts should be used:

[28] E-mails from [ ] of 27 March 2006 and 13 April 2006 (attached as Annexure 3).

	DOMESTIC - EXISTING NETWORK			
Year	Demand (TJ)	Disconnections	Gross Connections	Customer No's
2006/07	7,973	1,655	8,195	361,360
2007/08	7,970	1,655	8,201	367,906
2008/09	7,909	1,655	7,732	373,983
2009/10	7,881	1,655	8,468	380,796
2010/11	7,876	1,655	8,661	387,802

Note: the disconnection forecasts are consistent with the MMA forecasts

	DOMESTIC NEW TOWNSHIPS	
Year	Demand (TJ)	Customer No's
2006/07	0	0
2007/08	3	165
2008/09	8	291
2009/10	14	507
2010/11	20	694

In respect of the commercial haulage market, the following demand forecasts should be used:

	I&C < 10 TJ - SOUTH AUSTRALIA (COVERED)			
Year	Demand (TJ)	Disconnections	Gross Connections	Customer No's
2006/07	2,932	199	181	8,602
2007/08	2,958	199	144	8,547
2008/09	2,949	199	114	8,462
2009/10	2,938	199	109	8,372
2010/11	2,971	199	182	8,355

Note: the disconnection forecasts are consistent with the MMA forecasts

	I&C < 10 TJ NEW TOWNSHIPS	
Year	Demand (TJ)	Customer No's
2006/07	0	0
2007/08	3	12
2008/09	9	20
2009/10	28	45
2010/11	33	51

In respect of the demand haulage market, the following demand forecasts should be used. These are the forecasts proposed by the Commission, modified to remove the 2.5 TJ increase in MDQ in the northern zone.[29]

Forecasts of Demand: Large Industrial Users	**2006/07**	**2007/08**	**2008/09**	**2009/10**	**2010/11**
Maximum Daily Quantity (TJ)					
Adelaide	65.2	65.2	65.3	65.5	65.7
Peterborough	0.1	0.1	0.1	0.1	0.1
Port Pirie	3.6	3.6	3.6	3.6	3.6
Riverland/Murray Bridge	0.8	0.8	0.8	0.8	0.8
South East	0.9	0.9	1.0	1.0	1.1
Whyalla	0.1	0.1	0.1	0.1	0.1
New Townships	-	0.1	0.5	0.8	1.0
TOTAL MDQ - TJ	70.6	70.7	71.3	71.8	72.1
Number of Users by Region					
Adelaide	138	138	138	138	138
Peterborough	1	1	1	1	1
Port Pirie	2	2	2	2	2
Riverland/Murray Bridge	2	2	2	2	2
South East	5	5	5	5	5
Whyalla	1	1	1	1	1
New Townships	-	1	5	8	10
TOTAL - USERS	149	150	154	157	159

[29] Note due to rounding differences there are small differences between the column totals and the sum of the individual figures in each row of a column.

4. Rate of Return

4.1 Draft Decision and Reasoning

The Draft Decision requires Envestra to modify its Access Arrangement and Access Arrangement Information to reflect the WACC parameters specified by the Commission on page 83 of that Draft Decision.

The Commission's parameters are set out below and compared with those proposed by Envestra in its September submission:

	ESCOSA Draft Decision (March 2006)		Envestra Revised Access Arrangement (September 2005)	
PARAMETER VALUE	High	Low	High	Low
Risk Free Rate (Real)	2.43%	2.43%	n/p	n/p
Risk Free Rate	5.28%	5.28%	6.25%	5.43%
Debt Premium	1.42%	1.42%	1.48%	1.38%
Market Risk Premium	6.00%	5.00%	7.00%	6.00%
Equity Beta	1.00	0.80	1.10	1.00
Gamma (γ)	0.35	0.60	-	0.35
Tax Rate	30%	30%	30%	30%
Forecast Inflation	2.78%	2.78%	2.50%	3.00%
Real Pre-Tax WACC	6.66%	5.66%	9.99%	6.70%

On the basis of its parameters the Commission has determined that Envestra's real pre-tax WACC is 6.16% as compared to the 7.3% proposed by Envestra.

The differences between the WACC derived by the Commission and that derived by Envestra reflect differences between the Commission and Envestra in respect of the determination of the following parameters:

(a) Market Risk Premium;

(b) Equity Beta; and

(c) Value of Imputation Credits (gamma).

4.2 Envestra's Submission

Envestra considers that the Commission's analysis of the market risk premium, equity beta and gamma is in error. The errors in that analysis are explained below and in the report prepared for Envestra by Professor Stephen Gray of the Strategic Finance

Group, which report is attached to these submissions ("**SFG Report**"). The effect of these errors is to bias the calculated rate of return down from its true value. The low rate of return proposed by the Commission will be insufficient to attract necessary funds to invest in the network. This will adversely impact on Envestra's legitimate business interests and will be detrimental to both existing and potential customers on the network.

4.3 The Proper Approach

The principles for establishing the Rate of Return are set out in sections 8.30 and 8.31 of the Code, which sections are quoted on page 63 of the Commission's Draft Decision.

The application of these sections was subject to consideration by the Australian Competition Tribunal in *GasNet (Australia) Operations Pty Ltd*[30]. Extracts from that decision relevant to the construction of sections 8.30 and 8.31 are set out in Chapter 7 of the Commission's Draft Decision.

4.4 Market Risk Premium

The Commission has concluded that the reasonable range for the market risk premium is in the order of 5.0 to 6.0 per cent. It has reached this conclusion on the basis that the historical averages are not a reasonable *ex ante* estimator of the market risk premium and on the basis of a forward-looking analysis using the Dividend Growth Model ('DGM').

Envestra also notes that the Commission has placed substantial reliance on the fact that the value of 6 percent "is almost unanimously used" by all Australian regulators. However regulatory precedent is not the test under the Code – the test is whether the parameters for the Capital Asset Pricing Model have been calculated in accordance with sections 8.30 and 8.31.

For the reasons more fully explained in the SFG Report, the Commission's analysis (in particular its reliance on the DGM), is incorrect. The DGM analysis, which supports a lower value for the market risk premium, suffers from a methodological flaw in that it requires solving one equation where two variables are unknown. Such flaw compromises the reliability of any estimate of the market risk premium derived using DGM analysis.

The Commission's dismissal of reliance upon historical market risk premiums as a factor relevant to determining future market risk premiums is also in error. Investors (people) form expectations about the future returns based on a number of factors, of which past experience would certainly be a factor[31]. Indeed Envestra notes such reasoning has been accepted by the ACCC which has stated:

> *"While the concept of the WACC and its application for determining regulated revenues is unambiguously forward looking, estimates of the future cost of*

[30] [2003] AComp T 6.

[31] This is often described in the literature as Adaption Expectations.

> *equity are not readily available. Practical applications of the CAPM, therefore, rely on the analysis of historic returns to equity to estimate the MRP.....any movement in the MRP can only be accurately determined by accessing changes in the market over an extended period of time."*[32]

As set out in the SFG Report, historical MRP's vary according to the length and period over which the data are observed. Over the period 1885-2004 the MRP averaged 7.17 percent per annum and over the 1975-2004 period the average MRP was 7.7 percent per annum.

In determining the potential range for the market risk premium, it is necessary to have regard to such historical averages. For the reasons set out in the SFG Report, an historical average of 7% should be used as a valid data point.

On the basis of the above reasoning, as more fully detailed in the SFG report, Envestra proposes that the range for the market risk premium is 5 to 7%.

4.5 Equity Beta

Envestra originally proposed to the Commission a range for equity beta of between 1.0 to 1.1 at a gearing of 60 per cent debt. The Commission has instead determined that the range for equity beta is 0.8 to 1.0 and has used this range to calculate Envestra's WACC. The Commissions reasoning is flawed both as a matter of technical/economic analysis and also because it misapplies the provisions of the Code.

The technical errors in the Commission's analysis are set out in the SFG Report. That report also sets out the evidence that Envestra's equity beta is at least one.

The Commission's own consultant, ACG, has concluded that "*a reasonable person could adopt a range of between 0.80 and 1.1 for Envestra*."[33] But ACG then went on to advise that "the use of an equity beta of about 1.0 is appropriate for Envestra".[34] However, while the Commission has included significant extracts from the ACG report in Appendix 1 of the Draft Decision, noticeably it has not included in the Draft Decision the conclusions of ACG's analysis.

Envestra notes ACG's conclusion in its report to the Queensland Competition Authority in relation to Queensland gas distributors, which report stated:

> "ACG's 'best' estimate of the equity beta for the Queensland gas DNSPs is 1.0, based on a review of Australian and US evidence on equity betas. This is a subjective view, and is in line with the equity beta provided by most regulators to other energy distribution assets in Australia. The level of Australian data available on gas distribution betas is relatively poor, but is

[32] ACCC, Queensland Transmission Network Revenue Cap: Decision 2002 – 2006/07, November 2001, pp 13-19.
[33] The Allen Consulting Group, *Envestra's Proposed Revisions to its Access Arrangement*, 16 January 2006 p 73.
[34] The Allen Consulting Group, *Envestra's Proposed Revisions to its Access Arrangement*, 16 January 2006 p 73.

> showing a rising trend. Our judgement is that a reasonable person could examine the same data and conclude that the beta was anywhere between 0.90 and 1.10.*"*[35]

This view is consistent with the decision of the Essential Services Commission, Victoria in relation to electricity distributors where an equity beta of 1.0 was applied.[36]

In reaching its conclusion that the range for equity beta for Envestra is 0.8 to 1.0, the Commission has misapplied the Code. The Commission has stated that it has reached this conclusion "*considering the empirical evidence, together with the desirability of maintaining stability in regulatory decisions over time and consistency in regulatory decisions across companies*."

Consistency in regulatory decisions over time and across companies may be desirable, but cannot override those factors which the Commission is entitled to have regard under sections 8.30 or 8.31 or under section 8.1 of the Code. Under section 8.30 and 8.31 the Commission is to apply the CAPM in accordance with its well accepted financial application. The Commission must give effect to the analysis resulting from the application of that model rather than derive values for the purposes of ensuring regulatory consistency.

The Commission has stated that it notes the following comments from the Energy Consumers Coalition of South Australia:

> "*Envestra should set an equity beta which replicates the local market of like industries, international benchmarks for like industries and the recent decisions of other Australian regulators when setting equity beta. By using an equity beta of 1.0-1.1, Envestra is significantly overstating its risk profile.*
>
> *Envestra should use an equity beta of no more than 0.9 (to comply with the regulatory precedent as has done the ESCoSA after assessing the appeal by ETSA Utilities) and probably no more than 0.7-0.8 when assessing the local and international benchmarks (as did ESCoSA when setting an equity beta of 0.8 in its Final Decision on ETSA Utilities and recommended by the SA Treasurer in his response to the ETSA appeal.*"

What indeed the Commission derives from the above statement by ECCSA is unclear since the statement is no more than an assertion unsupported by evidence or by any reasoning which is relevant to the legal tests applying under the Code. ECCSA appears to reason that, because a value for beta of 0.9 was set for ETSA Utilities and a value of less than 1.0 is supported by the SA Treasurer, these values should be adopted by the Commission. This is not the test under the Code.

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[35] The Allen Consulting Group, *Cost of capital for Queensland gas distribution*, December 2005, p 3

[36] Electricity Distribution Price Review 2006-2010, October 2005 Essential Services Commission, Victoria.

For the reasons set out above, the Commission's determination of a value for beta of between 0.8 and 1.0 is affected both by errors of economic analysis and errors in respect of the application of the relevant provisions of the Code.

The correct value for equity beta is in a range of 0.9 to 1.1 and this is the value Envestra submits must be used to determine Envestra's WACC.

4.6 Value of Imputation Credits

Envestra proposed to the Commission a value for gamma of between 0.35 and zero. Based on the recommendation of its consultant, ACG, the Commission has determined a value for gamma of between 0.35 and 0.60.

As set out in the SFG Report, there are significant econometric problems with the ACG analysis, and that of the Commission. The value of gamma is most appropriately, for the reasons set out in the SFG Report, set at zero.

Envestra therefore submits that the value of gamma should be set at the low end of the zero to 0.35 range.

4.7 Other Parameters

Envestra accepts:

(a) the Commission's approach to determination of the risk free rate;

(b) the debt margin of 1.42 percent set by the Commission;

(c) the debt to assets and corporate tax rate set by the Commission; and

(d) the Commission's approach to determination of inflation.

4.8 Summary of Envestra's position

For the reasons set out above, it is Envestra's position that:

(a) the risk free rate is 5.28%;

(b) the value for the market risk premium lies in the range of 5 to 7%;

(c) the value of Envestra's equity beta is 0.9 to 1.1; and

(d) the value for gamma is 0 to 0.35.

4.9 Determination of WACC

The WACC proposed parameters have been summarised in the table below. The regulated rate of return should, for the reasons set out in the SFG Report, be selected from within an economically reasonable range that incorporates estimation uncertainty and considers the consequences of under-investment. As demonstrated in

the SFG Report, failure to reflect the asymmetric risk faced by Envestra would result in Envestra recovering less than its required rate of return. This would violate the requirement in section 8.1(a) of the Code that a Reference Tariff should provide "*the Service Provider with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service*."

An economically reasonable range (indeed a full probability distribution) can be established using standard Monte Carlo simulation. This technique has been endorsed by the Australian Competition and Consumer Commission (ACCC)[37], Independent Pricing and Regulatory Tribunal (IPART)[38], the Queensland Competition Authority (QCA)[39], the New Zealand Commerce Commission[40] and the ERA[41]. The justification for employment of the technique is further outlined in the SFG Report.

WACC Parameters	***Plausible Range for Parameter Values***
Nominal Risk Free Rate	5.28%
Forecast Inflation	2.78%
Debt Risk Margin	1.38% to 1.48%
Cost of Debt	6.96% to 7.06%
Market Risk Premium	5% to 7%
Equity Beta	0.9 – 1.1
Value of Imputation Credits	0.35 - 0
Real Pre-Tax WACC	6.0% to 8.5%

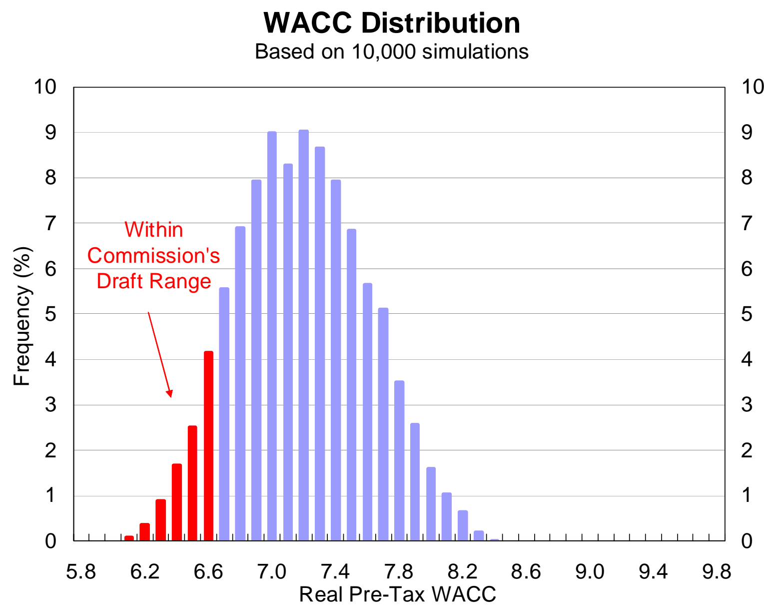
[37] ACCC (2005). *Assessment of Telstra's ULLS and LSS monthly charge undertakings: Draft decision.*

[38] IPART (2005). *Gas Networks Access Arrangements.*

[39] QCA (2005). *QR's 2005 Draft Access Undertaking: Decision,* *http://www.qca.org.au/rail/2005-draft-undertaking/final-decision.php*.

[40] New Zealand Commerce Commission (2004). *Gas Control Inquiry: Final Report.*

[41] ERA (2005) *Goldfields Gas Pipeline Access Arrangements.*



The analysis indicates a range for real pre-tax WACC for the Network of between 5.97 percent and 8.54 percent. The mean of the distribution (50th percentile) is 7.17 percent and the value at the 75th percentile is 7.47 percent.

Given the widely acknowledged negative affects of under-investment caused by artificially low regulated rates of return, Envestra has elected to use a point estimate of 7.3 percent as the rate of return for determining revenue. This estimate falls within the 50th and 75th percentile of plausible range of estimates of WACC identified above and is considered to mitigate the risks associated with the regulated rate of return.

> *"Any decisions in this area* [cost of capital] *can give rise to revenues that are overstated or understated, and the latter is the more serious error because it gives rise to the problem of underinvestment."* [42]

Envestra submits that a 7.3 percent return is calculated in accordance with the relevant provisions of the Code and is consistent with the prevailing conditions for funds in the South Australian energy market, and the risk involved in delivering the Reference Service.

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[42] Lally, M, *The Cost of Capital for Regulated Entities Report prepared for the Queensland Competition Authority*, 26 February 2004, p 8.

5. Network Management Fee

5.1 Draft Decision and Reasoning

The operation and maintenance of Envestra's distribution network is undertaken by Origin Energy Asset Management Limited ("**OEAM**") pursuant to an operation and maintenance agreement between OEAM and Envestra ("**O&M Agreement**").

Pursuant to that O&M Agreement, OEAM is paid the direct costs incurred by it as well as a network management fee of 3% of network revenue ("**Network Management Fee**").

The Commission has determined that, in deriving Envestra's Reference Tariffs, the Network Management Fee is to be excluded from Envestra's non-capital costs. The Commission has stated (page 153 of the Draft Decision) that:

> "*To the extent that the 3 percent management fee represents a profit margin, the Commission's view is that the inclusion of the fee will not reflect the "lowest sustainable cost" for providing the Reference Service, particularly since the contract between OEAM and Envestra has not ever been market tested, and is not at arms length. Even if the 'lowest sustainable cost" is the cost incurred by OEAM, unless it can be shown that the 3 percent management fee reflects a true cost (to OEAM) of providing the service, such as overhead costs, the management fee relates to a margin over and above the 'lowest sustainable cost" of delivering the service"*
>
> *"The question as to whether the costs incurred by OEAM are lower than the costs that would be incurred by Envestra if it were to conduct its operations in-house is not the principal concern to the Commission. Rather, the Commission is concerned that a profit margin in addition to the costs incurred by OEAM may be inconsistent with the Code requirement for Non Capital Costs to represent the "lowest sustainable cost" of providing Reference Services.*"

5.2 Envestra's Submission

The Network Management Fee is a legitimate cost paid by Envestra to OEAM in return for the provision of services by OEAM to Envestra. The Network Management Fee is paid in consideration of the receipt of services provided to OEAM by the Origin Energy group, such as management time and advice on corporate and technical matters and a return on assets used to provide certain services to OEAM (see section 5.8)

In applying the Code to determine the Network Management Fee is irrecoverable, the Commission has erred in:

(a) its construction of section 8.37 of the Code in that the Commission has sought to determine the lowest sustainable costs of OEAM providing Reference Services. The Commission has not determined the lowest sustainable cost of

the Service Provider – Envestra – of providing such services. The Commission has ignored the fact that Envestra achieves its lowest sustainable cost by engaging the services of OEAM rather than seeking to operate its network in-house; and

(b) failing to take account of sections 2.46 and 2.24. Both such sections support the recovery of the Network Management Fee as a non-capital cost.

The Commission has failed to recognise that the Network Management Fee is a necessary cost paid by Envestra to ensure that it operates and manages its network in an efficient and prudent manner and at the lowest sustainable cost available to Envestra. The Commission has not taken account of the fact that Envestra ensures it achieves the lowest sustainable cost of managing its network by employment of the services of a contractor. Benchmarking by Worley Parsons of Envestra's total costs, including the Network Management Fee against other distribution companies demonstrates that Envestra's Non-Capital Costs are at the low end of an acceptable range. This conclusion is supported by a separate report undertaken by Benchmark Economics, which report is included with these submissions. The alternative open to Envestra is to manage its network in-house and incur substantially higher costs (as demonstrated in the report prepared for Envestra by PricewaterhouseCoopers).

The Commission has wrongly considered that Envestra and OEAM are related parties. This in turn has caused the Commission to raise concerns about non arms length transactions and lack of market testing. These issues are irrelevant. There is no "transfer pricing" issue involved. The costs of OEAM are recorded, accounted for and transparent. The Network Management Fee is the economic cost paid for the performance of the operation and management role by OEAM and is a necessary part of the total consideration paid for those services.

The total fee paid under the O&M Agreement includes the same basic components as all other fees paid by Envestra to third-party service providers except that it has been presented in a more detailed way for greater transparency. For example, if a cleaning company was engaged, its fee would include its direct costs as well as the cost of its overheads, management time, advice on cleaning, suggestions on improvements and so on.

5.3 The Proper Approach

Section 8.37 of the Code provides:

> "*A Reference Tariff may provide for the recovery of all Non Capital Costs (or forecast Non Capital Costs, as relevant), except for any such costs that would not be incurred by a prudent Service Provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service*."

The Commission has misinterpreted the test in this clause. The Commission has determined that because OEAM could provide operating services to Envestra without receiving the Network Management Fee that such fee does not form part of the lowest sustainable cost of providing the Reference Service.

In reaching this conclusion, the Commission has not taken into account the fact that Envestra not OEAM is the relevant Service Provider. That is, the Commission has sought to determine the lowest sustainable cost of a contractor providing the Reference Service. However that is not the test under section 8.37. The test is what is the lowest sustainable cost of a Service Provider providing the Reference Service. In Envestra's case, this lowest sustainable cost is achieved by engaging a contractor and paying the requisite costs necessary to engage such contractor.

In applying section 8.37 an assessment must be made as to whether the Service Provider has acted efficiently, prudently, in accordance with accepted and good industry practice and with the intent of achieving the lowest sustainable cost in delivering services. In Envestra's case, it minimizes the costs of operation and maintenance of its network by engaging a contractor rather than seeking to operate its network in-house (as demonstrated by the PWC report). The prudent and efficient course is therefore for Envestra to outsource the management of its network.

It is unrealistic to expect that OEAM would have entered into the O&M Agreement without the payment of the Network Management Fee. Without the payment of that fee, the only payments OEAM would receive under the contract are reimbursement of its direct costs and expenses and no consideration for management time and the other matters considered in section 5.8 following. No contractor would contract under such circumstances.

Having established that the most cost-effective and sustainable manner in which to operate the network is to engage a contractor, Envestra must, acting efficiently, prudently and consistently with accepted and good industry practice, pay the appropriate cost to engage a contractor who can ensure that services are provided on a long-run sustainable basis.

The application of the Commission's decision leads to perverse results. For example, is the effect of that decision that Envestra should cease to engage a contractor but rather operate its network in-house so as to ensure that all Envestra's costs meet the criteria in section 8.37 (as those criteria have been interpreted by the Commission). The consequence of such a step would be that Envestra would incur substantially higher costs, due to the loss of the economies of scale and specialization associated with contracting out. In addition, if Envestra was to restructure its business to bring the functions currently performed by OEAM in-house, there would be significant transition costs; for example, costs of establishing internal systems, paying out redundancies, recruiting new staff and a potential loss of expertise associated with the restructuring.

The fallacy in the Commission's decision can be tested by putting the converse position: if Envestra did conduct its operations in-house would the Commission then proceed to deny Envestra the additional costs incurred by Envestra through doing so on the basis that Envestra could more cheaply manage its network through engaging the services of a contractor? That is, does the Commission's decision force Envestra into a position where it must incur a cost - the cost of engagement of a contractor – but deny Envestra the ability to recover that cost? Such a result is clearly not contemplated by the Code.

Further, the Commission's interpretation of section 8.37 (and consequent decision based on that interpretation) is inconsistent with section 8.1 of the Code.

(a) Section 8.1(a) provides that a Reference Tariff Policy should be designed to provide the Service Provider with an opportunity to earn a stream of revenue that recovers the efficient cost of delivering the Reference Service. The Commission's decision does not do this, because it denies Envestra the ability to recover an essential cost of retention of a contractor.

(b) Section 8.1(b) provides that a Reference Tariff Policy is to replicate the outcome of a competitive market. Even in a workably competitive market, persons do not provide services solely in return for reimbursement of their direct costs.

(c) Section 8.1(c) provides that a Reference Tariff Policy must ensure the safe and reliable operation of the Pipeline – the Commission's decision is inconsistent with this because it denies Envestra a legitimate cost of engaging a contractor to reliably operate the network.

(d) Section 8.1(d) provides that the Reference Tariff Policy should not distort investment decisions in Pipelines. The Commission's decision would be an incentive for Envestra to terminate the services of OEAM (since the legitimate costs of providing those services cannot be recovered) and instead conduct its operations in-house, despite the fact that this is more expensive and will increase levels of Non-Capital Costs and Capital Costs. Such an incentive is not consistent with rationale decision-making in relation to the management of pipelines.

(e) Section 8.1(e) provides that the Reference Tariff Policy should achieve efficiency in the level and structure of Reference Tariffs. For the reasons explained in paragraph (d) above, the Commission's decision will not promote efficiency in Envestra's costing practices.

(f) Section 8.1(f) provides that the Reference Tariff Policy should provide an incentive to the Service Provider to reduce costs. The Commission's decision conflicts with such an incentive given it encourages Envestra to adopt a more costly approach to management of its network.

5.4 Sections 2.46 and 2.24

Under section 2.46 of the Code, in assessing proposed revisions to an Access Arrangement, the Relevant Regulator must take into account the provisions of the Access Arrangement.

Under the current Access Arrangement, the Network Management Fee is reflected in Envestra's non-capital costs. Therefore, the fee has previously been assessed as consistent with the requirements of section 8.37 of the Code.

The Commission's draft decision gives no recognition to this fact nor does it provide any reasoning to support why a fee which has previously been regarded as meeting the criteria in section 8.37 has suddenly ceased to do so.

Section 2.24(a) of the Code requires the Relevant Regulator to take into account the Service Provider's legitimate business interests. However there is nothing in the Commission's draft decision to suggest that it has taken account of the fact that it is placing Envestra in a position where it will be required to incur a cost (that is, payment of the Network Management Fee and which cost reduces the overall cost of operating the network) which it can no longer recover through its Reference Tariffs.

Section 2.24(b) of the Code requires the Relevant Regulator to take into account firm and binding obligations of the Service Provider. Again there is no evidence the Commission has taken this factor into account – that is, the fact that Envestra is party to a contract with OEAM requiring Envestra to pay the Network Management Fee.

Indeed, to the contrary, the impact of excluding the Network Management Fee as proposed by the Commission is that Envestra will be unable to recover costs that it is contractually obliged to pay. This means that the return Envestra would be able to earn by implementing the operating plans approved by the Commission will be less than the rate of return approved by the Commission. This is inconsistent with section 8.30 and 8.31 of the Code. Envestra would therefore not, as required by section 8.1(a) of the Code, recover a stream of revenue that recovers the efficient costs of delivering the Reference Service.

5.5 Structure of the Network Management Fee and the O&M Agreement[43]

The structure of the Network Management Fee is consistent with the requirements of efficiency, prudency and good industry practice. Under the O&M Agreement, OEAM is reimbursed the costs incurred by it (subject to Envestra's approval) in providing services and then paid the Network Management Fee. Without the Network Management Fee OEAM would not receive appropriate consideration for its services, given it would receive no more than reimbursement for its direct costs.

The Network Management Fee is linked to network revenue so as to encourage OEAM to increase utilization of the distribution network (which will in turn have the positive impact of promoting the development of the gas market) [44] This is a far more efficient mechanism than, for example, expressing the fee as a percent of total expenditure or otherwise linking it to such expenditure. Doing so might provide an incentive to OEAM to increase expenditure, which would be contrary to sections 8.1(e) and 8.1(f) of the Code.

Envestra notes two important aspects that underpin the integrity of the O&M Agreement and reflect a prudent commercial outcome. The first relates to the

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[43] Envestra notes that a copy of the O&M Agreement was provided to the Commission for its review, on a confidential basis, on 8 December 2005.

[44] This incentive is reinforced by a clause in the contract that places a direct obligation on OEAM to undertake activities that are designed to promote the growth in the volume of gas hauled through any network through increased utilisation and expansion of Envestra's networks.

incentive mechanisms that are built into the O&M Agreement terms and conditions. The second relates to the strict contract management provisions directly incorporated into those terms and conditions.

There are two incentive arrangements included in the O&M Agreement. The first allows OEAM to retain for one year a third of any reduction in the average cost of a new customer connection (measured as a cost per customer connection) relative to the previous year. The second mechanism allows OEAM to retain for one year a third of any reduction in the average controllable cost (measured as controllable cost per GJ) in any year relative to costs incurred in the previous year.

Such incentive arrangements play an important role in providing OEAM with an incentive to continually seek out better ways of providing services, which are ultimately passed through by Envestra to consumers. This was not addressed by the Commission in its review of whether historic costs incurred by Envestra could be considered to be efficient.

The second aspect of the contract relates to Envestra's contract management rights. In particular, under the O&M Agreement, Envestra stipulates the financial parameters that OEAM is required to achieve in any year. OEAM is then required to prepare, for Envestra's approval, a budget setting out forecast expenditure over that year that is consistent with the financial parameters set by Envestra. That is, strict controls are placed on the actual costs OEAM can incur and claim reimbursement for.

There are limits placed on the extent to which OEAM can exceed budget expenditure prior to gaining Envestra approval, unless, for example, an emergency situation arises. Envestra also has discretion over whether it provides full compensation of the costs incurred by OEAM. In some cases, Envestra has not agreed to fully reimburse OEAM for the costs it has claimed under the contract.

The O&M Agreement also requires that OEAM provide audit assurance to Envestra stating that the costs incurred are materially correct. Envestra has the discretion of whether it requires any additional information from OEAM to ensure compliance with the contract terms and conditions. Envestra also prepares an annual performance report highlighting, for example, areas where Envestra believes contract compliance has not been achieved and where Envestra is dissatisfied with OEAM's operating performance.

The strict contract management provisions and incentive arrangements are consistent with a contract entered into by a prudent Service Provider acting efficiently and consistently with delivering the lowest sustainable costs to consumers, a view that is supported through various benchmarking studies into Envestra's costs.

5.6 Market Testing the O&M Agreement

The Commission has stated that the O&M Agreement has not been market tested and is not arm's length. Envestra's primary submission is that these issues are irrelevant as OEAM is not a related party to Envestra and there is transparency about the direct costs incurred.

The O&M Agreement was negotiated between Envestra and OEAM at the time of Envestra's formation in 1997. Envestra decided to outsource the operation and management of the network through direct negotiation with OEAM as there were no other suitable parties that could have provided the required services to Envestra (indeed, Envestra is not aware of a similar contract existing at the time). The use of OEAM as a contractor was consistent with notions of efficiency, prudency and good industry practice. This has been confirmed by the dominant trend within the energy and infrastructure industries in recent years to outsource operation and maintenance activities to service companies.

The contract was negotiated at arm's length, with each party represented by separate negotiating teams reporting to two separate boards. Envestra's negotiating team was represented by Mallesons Stephen Jaques law firm and OEAM's negotiating team was represented by Clayton Utz law firm.

The O&M Agreement was entered into in connection with the issue by Envestra Limited of a prospectus to raise investment of $350 million. The terms of the O&M Agreement (which are summarised in that prospectus) therefore needed to satisfy the investment market that the contract provided an effective basis for Envestra to manage and administer the distribution network. The Commission's analysis takes no account of this matter.

There is no basis for the Commission's claim that Envestra and OEAM do not stand in an arm's length relationship. Envestra has no financial interest in OEAM and therefore no incentive to inflate the Network Management Fee (or any other cost for that matter) to a level that is greater than that expected to recover efficient and prudent economic costs. The Envestra Board would not be acting in the best interests of its shareholders if it agreed to a Network Management Fee greater than necessary to engage OEAM's services. Envestra also notes that its Board includes representatives of its largest shareholder, CKI Holdings. CKI has no relationship with OEAM and no incentive to see OEAM paid any more than necessary to retain its services.

The Commission appears to have taken the view that the O&M Agreement is not an arm's length contract because OEAM and Envestra are related parties. The Commission has presumably formed this view on the basis that OEAM is a subsidiary of the Origin group, which group also owns shares in Envestra. However Envestra and OEAM are not related parties as that term is used in any relevant economic or legal analysis. Origin owns only 17.5% of Envestra Limited. Envestra's largest shareholder is the CKI group not the Origin group. There is no legitimate basis for the Commission to treat Envestra and the Origin group as related parties. The fact that Origin has presented some of the most vigorous submissions in response to Envestra's proposed access arrangement demonstrates that the Origin group and Envestra stand at arm's length and that Origin has no interest in preserving the financial position of Envestra.

Envestra also notes the following comments at pages 147 to 148 of the Commission's Draft Decision:

"*The existence of operating and maintenance agreements and contracts between a Service Provider and a related party has the potential to distort incentives to make efficiency gains in the costs of service provision. The basis for the distortion of incentives is the potential capability of efficiency gains in provision of services to be captured by the related party that provides the operation and maintenance service, and not passed through to forecasts of costs for the Service Provider and to customers of the service.*

In this way the full value of the efficiency gains is able to be retained by the related party and/or the Service Provider rather than being passed through, in some part, to customers of the services. While this arrangement may produce a high incentive for efficiency gains to be achieved, there may be little or no benefit to the customers of the services.

While there is the possibility that efficiency gains may have been achieved in the operation and maintenance of Envestra's distribution system, the reductions in costs arising from these efficiency gains may not be evident in records of actual costs for the current Access Arrangement Period and, as such, the records of actual costs may not necessarily provide an indication of efficient costs that may be used in the development or assessment of cost forecasts."

There are two major inaccuracies in these statements. First Envestra and OEAM are not related parties. Second, the statement assumes that Envestra has some incentive to permit OEAM to retain efficiency gains. Envestra has no such incentive. For the reasons noted above, Envestra has no incentive to inflate the fees paid to OEAM – there is no evidence that the O&M Agreement is used as a form of transfer pricing between Envestra and OEAM nor does Envestra, given the constitution of its board and shareholders, have any incentive to engage in such transfer pricing. The O&M Agreement provides for reimbursement of OEAM's actual costs – therefore efficiency gains are passed through to Envestra. Such pass-through of efficiency gains is reinforced by the contract management procedures and incentive arrangements which form part of the O&M Agreement. Envestra does not understand the basis upon which the Commission can claim that reductions in costs are not reflected in Envestra's actual costs. They are inevitably reflected in such costs, given the structure of the O&M Agreement.

Further Envestra notes that an assessment of costs over the current regulatory period shows a 15% reduction in non-capital costs.[45] This efficiency gain, which is largely attributable to the incentive arrangements and contract management provisions embedded in the O&M Agreement, have been passed through to customers by Envestra. That is, efficiencies achieved by OEAM are being passed through to the ultimate customer.

In respect of market-testing the quantum of the Network Management Fee, expert advice provided to Envestra from Worley Parsons is to the effect that margins charged by contractors typically lie between 7 per cent and 15 per cent of expenditure. The

[45] The operating costs per customer excludes costs associated with unaccounted for gas and full retail contestability.

Network Management Fee, which is equivalent to around 7 per cent of non-capital costs and 4 per cent of total costs, is at the low end of this range. The Network Management Fee is a legitimate economic cost of retaining a contractor and is in line with other margins necessary to retain contractors.

5.7 Envestra's Total Costs (including the Network Management Fee)

It is incorrect to view, as the Commission appears to have done, the Network Management Fee in isolation and deem it a profit component. This is because it is invalid to decouple direct costs incurred by OEAM from the Network Management Fee. Envestra cannot achieve the direct costs incurred by OEAM without payment of the Network Management Fee.

The Network Management Fee is a necessary cost of engaging a contractor, whose purchasing power and the economies of scale and scope it can achieve provide a means for Envestra to achieve considerably lower costs than would otherwise be the case. Envestra reimburses OEAM for direct costs incurred in providing services. These direct costs incorporate the benefit of greater purchasing power of Origin Energy through economies of scale and the benefits of greater economies of scope relative to Envestra. Origin Energy has estimated that its purchasing power is likely to result in a reduction in unit prices of at least [confidential][46]. Assuming a total spend of around $[confidential] per year, this would result in annual cost savings to Envestra of $[confidential]. The Commission's analysis takes no account of the fact that Envestra could not access these cost savings if it did not engage OEAM and pay it the Network Management Fee.

Worley Parsons undertook comprehensive benchmarking of Envestra's Non-Capital Costs against costs of other gas distribution companies in Australia. Worley Parsons conclude that "Envestra's SA Opex KPIs are indicative of efficient performance relative to industry peers, taking into consideration the more challenging characteristics of the Envestra SA network".[47] Worley Parsons found Envestra's capital costs to be below a reasonable range and non-capital costs within the range, inclusive of the Network Management Fee. Overall, Worley Parsons concluded that Envestra's costs are reasonable and are consistent with those of an efficient operator.

Furthermore the Worley Parson's conclusion is consistent with the position reached by the Victorian Essential Services Commission (ESC) in the 2002 review of Envestra's Victorian gas access arrangement (section 3.3.4 of Final Decision). The ESC concluded that, despite its inclination to delve further into the nature of the contractual arrangement, the issue did not warrant further investigation since "an important consideration is whether the total costs to a service provider of meeting the costs incurred by a contractor and also paying a revenue-based fee, were less than the total costs that would have been incurred in any event". The ESC noted that "Envestra's reported actual costs for 2001, after adjustments made in this section of the Final Decision, compare favourably with the benchmarks used to establish the existing reference tariffs. It should also be noted that the Commission considered that these initial benchmarks were at the low end of the reasonable range."

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[46] See letter from OEAM to Envestra dated 5 May 2006.

[47] Worley Parsons, "Review of Gas Access Arrangement for South Australia", p 45.

ESC went on to conclude, "initial benchmarks suggests that the outcomes are not inconsistent with the expenditure that would have been prudently incurred by an efficient service provider". Envestra believes that this conclusion supports the view that the contractual arrangement is delivering the relevant fundamental requirement of the Code - efficient costs.

The Commission's own benchmarking of Envestra's costs has determined that such costs are at the high end of the feasible range. Envestra has engaged Worley Parsons to review the Commission's analysis as set out in the Draft Decision. Worley Parsons concluded that the benchmarking undertaken by the Commission was in error because:

(a) the Commission's analysis included network marketing costs, which costs vary across gas distributors (these costs are very significant, ranging from $1m to $13m); and

(b) there has been no attempt by the Commission to account for differences in the local operating environment (factors such as customer density, network size, percentage of cast iron mains).

Worley Parson's conclusion is confirmed in a separate review of the Commission's analysis undertaken for Envestra by Benchmark Economics. This report demonstrates that data used in the benchmarking study undertaken by the Commission has not been appropriately normalized for the characteristics of the network, nor is the comparison of operating costs across networks on a like for like basis, due to the inclusion of marketing costs.

Benchmark Economics undertook a separate benchmarking study correcting for these deficiencies and demonstrated that non-capital costs for Envestra in 2004 including the Network Management Fee were at the low end of the feasible range. Using a network cost model, Benchmark Economics determined that the efficient Non Capital Costs for Envestra SA in 2004 were $31M with the efficient range varying from $27m to $34m. Envestra's actual expenditure in that year of $26,990,000 was $4M below Benchmark Economics point estimate of efficient costs. Benchmark Economics concluded that there was potential for Envestra to even increase its costs without moving beyond the efficient cost range.

Finally the Commission's own consultants (ECG) have found that Envestra's Non-Capital Costs are generally "prudent and efficient" and consistent with section 8.37. ECG's conclusions were arrived at after detailed examination of the considerable amount of information that was supplied to the Commission:

> *"ECG preferred approach is to review the costs at a sufficient detailed level to be able to ensure that the costs are prudent and efficient in accordance with the Code. At this detailed level, ECG has either benchmarked the cost with*

> *other service providers or has used its industry experience to assess whether the costs are prudent and efficient"*[48]

While ECG has used a "variance against trends" approach in a number of areas, ECG supplemented this with examination of base costs. For example, significant resources were expended by Envestra in supplying information to ECG on Network Development and IT operating costs. Information supplied to ECG extended to the scope of work associated with the cost of maintaining the corrosion protection system for Envestra's network – items of insignificant value in the context of overall expenditure. We therefore do not believe that the Commission can legitimately take the view that there is little confidence in the efficiency of Envestra's base costs.

The Commission in its Draft Decision (p. 152) played down the relevance of the ECG and Worley Parson's reports in terms of providing a justification for the Network Management Fee.

However, ECG was aware of the existence, form and magnitude of the Network Management Fee incorporated into Envestra's forecast non-capital costs. To this end, the ECG in its final report (p. 121) noted:

> "*It is not apparent where Envestra has allocated the cost for both the management fees and the incentive payment. However, ECG believes that it is reasonable to expect that the management fees and the incentive payments would have been allocated to either the capital and/or the non capital expenditure. As such, ECG is of the view that these fees do not have to be separately reviewed.*"

The ECG analysis was therefore underpinned by assessing the total costs submitted by Envestra, inclusive of the Network Management Fee, and whether these costs complied with the Code (as required by its terms of reference).

Envestra therefore believes that the ECG analysis is highly relevant as it puts forward its views on expenditure levels that are required to comply with the Code. The ECG was aware of the existence of the fee in 2004/05 expenditure and its magnitude, but did not consider it relevant to remove this amount prior to undertaking its review. Rather the fee was incorporated into its overall assessment of Code compliance costs.

The ECG findings, together with the findings of Worley Parsons and Benchmark Economics, provide strong support that the Network Management Fee represents a legitimate business cost, and that the direct costs cannot be deemed to be efficient without including the Network Management Fee. To the extent that this was not the case, then it could be reasonably expected that the various benchmarking studies would have demonstrated that Envestra costs were outside of the acceptable range. This is clearly not the case.

Given the above, Envestra considers it inappropriate that the Commission apply what appears to be a different framework to that used by ECG to further reduce forecast

[48] ECG, "Envestra Ltd – Capital and Operating Expenditure Review", p 19.

non-capital costs by the amount of the Network Management Fee over the amount considered by ECG to be compliant with the Code. This was justified on the basis of the Commission's focus on deriving the "lowest sustainable cost". In contrast, the ECG state in its report (p. 16):

> *Lowest sustainable cost as meaning an optimum balance of capital and non capital expenditure that maintains the safety and integrity of the assets throughout their economic lives.*

The Commission has focused on the lowest sustainable cost as being the lowest amount of expenditure required to provide a service and has not adopted the prudent and efficient framework used by ECG. The result has been the application of inconsistent concepts in determining forecast non-capital costs. Indeed the Commission's framework has most likely removed some part of the Network Management Fee twice – once through the ECG review and secondly through the Commission's removal of 100% of this Fee.

In summary, the experts engaged by Envestra have concluded that Envestra's non-capital costs are efficient and prudent. The Commission's own consultant, ECG, has also reached this conclusion in relation to the majority of Envestra's costs. That is, Envestra's Non-Capital Costs, which include the Network Management Fee of 3% of revenue, are consistent with industry norms. There is no evidence that the Network Management Fee is inflating costs above those that would be incurred by a prudent and efficient operator acting in accordance with good industry practice to achieve the lowest sustainable cost of delivering services.

5.8 Costs Recovered by the Network Management Fee

The Network Management Fee provides for the full recovery of the economic cost to OEAM of meeting its obligations under the O&M Agreement. It is not a profit margin. The Network Management Fee relates to services provided to OEAM by other areas of the Origin Energy group, and hence are not reflected in the direct costs incurred by OEAM of operating and maintaining the gas distribution network.

There are a broad range of services that are included in the Network Management Fee. These services include Origin Energy management time and advice on technical and corporate matters, the provision of IT infrastructure, working capital and corporate governance costs.

With regard to the first category of services, the OEAM group receives input from Origin Energy senior management (including its Board) on a range of corporate matters. This includes commercial advice on issues such as business development to corporate advice on complex taxation, legal, insurance and technical matters.

The advice also relates to general business functions, such as providing strategic direction on matters such as IT strategy. This reflects direct benefits received by OEAM through being part of the Origin Energy group, requiring OEAM to directly employ fewer staff to fulfill its obligations under the O&M Agreement.

The second category of services relates to a range of corporate services provided by Origin Energy Services, which includes the following functions:

- Finance –management accounting, accounting policy and the preparation of statutory reports;
- Human Resources – payroll, the development and management of human resource, health, safety and environmental policy and staff training in such policy;
- Procurement – purchasing of major infrastructure, contract negotiation and facilities management; and
- IT services – provision of IT infrastructure and user support.

Significant investments in IT infrastructure are required by Origin Energy to provide the above services to OEAM and ultimately Envestra.[49] The direct charge for these services under the O&M Agreement includes a depreciation component but not a rate of return on the assets used to provide the services, which is recovered through the Network Management Fee.[50]

The third category of costs relates to the recovery of working capital, which is not charged directly by OEAM to Envestra. The working capital component is similar in nature to that provided by the Commission to Envestra in its Draft Decision, but relates to the activities of OEAM rather than Envestra.

OEAM also benefits from the corporate governance systems that are utilised within the Origin Energy group to coordinate internal audit, risk assurance and ongoing process risk management activities. These costs are not directly passed through by OEAM to Envestra, but are recovered through the Network Management Fee.

The above services reflect the key activities that are necessary for OEAM to meet its obligations under the O&M Agreement. These services are provided by other areas of the Origin Energy group and are not part of OEAM’s direct costs to Envestra. Recovery of these costs occurs through the Network Management Fee.

The O&M Agreement also requires OEAM to indemnify Envestra against any third party claims arising from OEAM's breach or negligence and also any regulatory charges and fines imposed upon Envestra due to such breach or negligence. In addition, if OEAM failed to comply with its obligations under the O&M Agreement it would be liable to Envestra for breach of contract. The cost of managing the risk associated with this indemnity and potential contractual liability is a further legitimate cost of OEAM which is only recovered through the Network Management Fee.

It would be difficult to accurately encompass the number and magnitude of all such services that are recovered through the Network Management Fee. This is partly

[49] The major IT infrastructure assets relate to the Ariba procurement system, Oracle financial system and general IT infrastructure used by Origin Energy Services.

[50] All other costs associated with the provision of these services by Origin Energy are part of OEAM’s direct charges to Envestra under the O&M Agreement.

because such services are derived from OEAM being part of a large vertically integrated company.

In addition, the magnitude of the value of the services derived by Envestra from the contract differs from year to year as the business responds to changes in its operating environment. This includes changing requirements over time for discrete additions to IT infrastructure to strategic legal and taxation advice required by OEAM in response to changes in circumstances (such as the introduction of the GST on 1 July 2000).

The Network Management Fee provides for the recovery of the full economic costs of providing the above mentioned services over the longer term

5.9 Stand Alone Cost

The fact that Envestra's non-capital costs would be greater if it elected to operate and manage its network in house, rather than through the services of OEAM, is demonstrated by the report prepared by PricewaterhouseCoopers ("**PWC**").

To operate the distribution network itself, Envestra would need to dramatically increase the size of its workforce, and would require a much larger capability in terms of its IT systems, finance, human resources and procurement functions. PWC have sought to estimate the costs of an efficient entity to provide these four services on a stand alone basis relative to the cost of receiving these services from OEAM, inclusive of the Network Management Fee.[51]

PWC found that the cost of an efficient stand alone business to provide the four services would be $4.5 million higher over the regulatory period relative to OEAM's costs (inclusive of the Network Management Fee). That is, Envestra (and ultimately consumers) are better off by almost $1 million annually through Envestra's decision to engage OEAM as its external supplier. PWC noted that its assessment did not include other benefits from engaging OEAM, such as economies of scale and scope.

The PWC review therefore suggests that Envestra's decision to enter into an operating contract with OEAM results in significantly lower costs to Envestra and consumers. The report clearly demonstrates that in engaging OEAM, Envestra has acted as a prudent and efficient Service Provider, seeking to achieve lowest sustainable costs.

5.10 Inconsistencies in Approach

In its 2005 review of ETSA Utilities' distribution tariffs, the Commission reviewed whether ETSA Utilities' operating and maintenance expenditure was prudent and efficient (that is, the legal test applied by the Commission in its analysis was whether ETSA Utilities' costs were prudent and efficient). This included the assessment of costs relating to several significant activities that are externally sourced by ETSA Utilities, such as:

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[51] In doing so, PWC utilised the building block approach to pricing, which was applied in a manner that is consistent with common regulatory practice. This involved determining efficient operating and capital expenditure requirements of the stand alone business.

- vegetation management – external contract relating to the costs of inspection and clearance of vegetation from the overhead lines;
- meter reading costs – external contract relating to reading and uploading information from all type 5 and type 6 electricity meters; and
- call centre costs – external contract relating to the provision of generic call centre services, such as customer feedback and fault reporting.

The draft electricity price determination, which provided a more detailed discussion of expenditure allowances relative to the final decision, set out the Commission's reasons for accepting the costs relating to the above contracts. The Commission generally accepted the costs put forward by ETSA Utilities in relation to these external contracts, aside from some reductions recommended by its advisor that were due primarily to differing views on unit cost assumptions.

Importantly, the Commission in all cases did not seek to determine the nature of any margin incorporated into these contracts nor did it seek to remove any such margin. It is also not evident that the Commission (or its advisor, PBA) sought to directly review the external contracts. Furthermore, the Commission did not state that it did not seek to remove any margin because the contracts were competitively tendered.

Rather, the acceptance of the contract costs was largely based on advice from the Commission's advisor, who provided various justifications for accepting the outcome of external contracts (aside from the changes alluded to earlier). The justifications included that activities were provided at or near best practice, strict contract management by ETSA Utilities' managers and the inclusion of incentive arrangements. For example, in relation to meter reading costs, the draft decision (p. 117) states:

> *While not reviewing the contract directly, discussions between PBA and ETSA Utilities have led PBA to the view that the meter reading contract entered into by ETSA Utilities and the associated incentive arrangements and contract management and supervision are at or near industry best practice. It supports ETSA Utilities' expenditure forecasts, with the only adjustment being made to reflect PBA's recommended escalation factors.*

The Commission accepted this view from PBA regarding ETSA Utilities' meter reading contract.

ETSA Utilities' call centre services are provided by a related third party that is wholly owned by the same owner as ETSA Utilities. The contract is based on a service level agreement between the two parties, which does not appear to have been market tested, negotiated at arms length nor reviewed by the Commission despite the nature of the contract. Rather, the costs (as recommended by its advisor) were based on favourable benchmarking outcomes undertaken by ETSA Utilities.

Furthermore, the Commission accepted the costs relating to the installation of an outage management system in the previous regulatory period on the basis that the tender process followed by ETSA Utilities yielded a competitive outcome. Again, there was no attempt to identify and remove any margin associated with this contract,

but a rate of return was provided to ETSA Utilities on top of the full capital costs of the project.

This same approach was also taken by the Commission in accepting Envestra's costs associated with the introduction of full retail competition in this current regulatory period. In this case, the Commission did not seek to identify or remove any margin that was embodied in those services that were sourced externally by Envestra, which related primarily to the provision of IT systems.

Envestra is therefore perplexed as to why, in assessing Envestra's proposed non-capital costs for the next regulatory period, the Commission has opted to take a different approach to that used in the past. As outlined above, Envestra's contract with OEAM incorporates all elements previously cited by the Commission as reasons for accepting costs as efficient, including:

- incentive arrangements aimed at driving unit costs down;
- strict contract management provisions; and
- favourable benchmarking outcomes.

Envestra notes that on page 158 of the Draft Decision the Commission has recommended that Envestra should consider employing outsourcing as a means to address the ageing workforce issues faced by Envestra. Envestra queries whether, if that approach were adopted, the Commission would allow Envestra the full economic cost recovery of doing so.

5.11 Conclusion on Network Management Fee

The Network Management Fee meets the criteria in section 8.37 of the Code. As demonstrated by the PWC report, engagement of OEAM significantly reduces Envestra's costs and therefore such engagement of OEAM is consistent with Envestra acting efficiently, prudently, in accordance with good and accepted industry practice and in a manner consistent with seeking to achieve the lowest sustainable cost of operating the network.

As demonstrated by the Worley Parsons and ECG reports, Envestra's non-capital costs compare favourably with those of other distributors - an integral part of achieving such favourable costs is the engagement of OEAM.

The quantum of the Network Management Fee is at the lower end of the scale of margins generally paid to contractors.

It is not correct to state that the O&M Agreement between OEAM and Envestra is not an arm's length contract. Envestra has no financial interest in OEAM. They are not related parties. Further the incentive arrangements and strict contract management provisions embodied in the O&M Agreement are entirely consistent with an arm's length contract made by a prudent Service Provider acting efficiently to ensure that the lowest sustainable costs are achieved.

In summary, there is no evidence that the Network Management Fee is not an efficient and prudent cost, consistent with achieving the lowest sustainable cost of

providing Reference Services. To exclude the Network Management Fee, as the Commission has done, is an error of law both in that:

(a) the decision to exclude the Network Management Fee is based on an incorrect construction of section 8.37;

(b) there is no evidence to support the position that the Network Management Fee is not consistent with achieving the lowest sustainable costs of providing the Reference Services. To the contrary, all of the evidence supports the reasonableness of Envestra's non-capital costs; and

(c) The Network Management Fee is part of the consideration paid for the services provided by OEM.

6. Site Remediation

6.1. Draft Decision and Reasoning

Envestra proposed in its revised Access Arrangement that Non-Capital Costs benchmarks should include:

(a) the cost of ongoing monitoring of Osborne, Mount Gambier, Port Pirie and Brompton sites which are contaminated due to the past processes of manufacturing town gas; and

(b) a one-off cost to remediate Osborne.

The Commission has determined that none of these costs should be allowed on the grounds that:

(a) the sites at Mount Gambier, Port Pirie and Brompton are not owned by Envestra;

(b) any potential contamination liabilities would have been taken into account when Boral took over SAGASCO in 1993; and

(c) the costs of monitoring and remediation do not meet the Code definition of Non Capital Costs.

6.2. Envestra Submission

Envestra submits that its claim for these costs does meet the definition of Non Capital Costs under the Code. The fact that the sites are owned by OEAM is irrelevant as all of them contribute to the delivery of References Services by Envestra. No allowance is now sought for Mount Gambier as that site is no longer being used in the delivery of Reference Services. The remaining sites are used by OEAM in respect of the operation and management of Envestra's distribution network.

6.3. The Proper Approach

Sections 8.36 and 8.37 of the Code provide for the recovery of Non-Capital Costs involved in the delivery of Reference Services. Section 10.8 of the Code defines a Reference Service as being a particular type of Service, which itself is defined as:

"(a) a service provided by means of a Covered Pipeline (or when used in section 1 a service provided by means of a Pipeline), including (without limitation):

(i) haulage services…; and

(ii) the right to interconnect with the Covered Pipeline, and

(b) services ancillary to the provision of such services, but does not include the production, sale or purchasing of Natural Gas."

The Commission wrongly considers that the remediation and monitoring costs are costs of, or related to, gas production.

The environmental management costs of monitoring, investigating and remediating historically contaminated gasworks sites are not costs of, or related to, natural gas production. The gasworks produced what was commonly referred to as "town gas" by carbonising coal and providing this gas to its customers through the pipelines that Envestra now uses for distribution of natural gas. Prior to the conversion to natural gas around 1969-70, SAGASCO had been a gas manufacturer and distributor. Without access to natural gas, SAGASCO was required to manufacture gas to enable it to provide distribution services. Following the conversion to natural gas, SAGASCO became simply a distributor of natural gas. All current customers who receive natural gas through pipelines are beneficiaries of the original town gas distribution network.

The monitoring, investigating and remediation costs arise from the production of town gas, not natural gas. Therefore the exclusion of natural gas production costs from Non-Capital Costs is not relevant. The correct construction of the exclusion is that it only applies to current costs associated with current acts of producing, selling or purchasing gas (natural or otherwise) and not to "legacy costs" relating to the production of town gas. The Commission is plainly wrong in its interpretation of the Code.

6.4 SAIPAR's Approval

The Commission has stated that in its decision in 2001 "SAIPAR specifically excluded Osborne costs". This is incorrect.

In its Final Decision in December 2001, SAIPAR acknowledged the importance to the environment and the wider community that appropriate monitoring of contaminated sites be undertaken. SAIPAR stated that the function of monitoring can then be considered a legitimate operational function of a prudent service provider. SAIPAR provided that all sites then used by Envestra, for the purpose associated with distribution of gas, should be allowed to the extent of 100% of submitted forecast expenditure.

Whilst costs for monitoring of Osborne were initially excluded in the Final Decision (at p.16), SAIPAR subsequently included these costs in the Final Approval in April 2003. SAIPAR's Final Approval states (at p.15) as follows:

“Contaminated Sites (Monitoring Allowance)

> *In relation to the Final Decision determination for Monitoring Expenditure of Contaminated Sites, Envestra requested SAIPAR to consider further information regarding the Osborne site. After this was considered SAIPAR formed the view that the Osborne site satisfied the Final Decision criteria for inclusion. An appropriate allowance for the monitoring of costs of the Osborne site have been incorporated in the Non-Capital Costs Allowance in the Access Arrangement Information (refer to table below)."*

Thus SAIPAR’s determination for monitoring expenditure of contaminated sites made in April 2003 did, in fact, include an allowance for the monitoring of costs of the Osborne site as follows:

Osborne Site Monitoring Allowance (‘000)

2001/02	**2002/03**	**2003/04**	**2004/05**	**2005/06**
$35	$36	$37	$38	$39

Other sites, in addition to Osborne, that were included in SAIPAR’s Final Approval were Brompton, Mount Gambier and Port Pirie.

6.5 Ownership of the Sites and the extent any liabilities would have been taken into account by Boral in 1993

When Boral acquired SAGASCO in 1993, no laws were in force in South Australia requiring the investigation, monitoring and remediation of historically contaminated sites. It is, therefore, most unlikely that an acquisition in 1993 would have considered the risk that there would be retrospective laws enacted relating to contaminated site investigation, monitoring and remediation some 13 years later. At the time of the acquisition, there were no national standards for protection of the environment that would have informed a purchaser of the potential risk that such sites would require clean up to high standards decades later. Therefore, we dispute the Commission’s assertion that potential site contamination liabilities would have been factored into the acquisition at the time.

[confidential]

Since the submission of the Access Arrangement Information in September 2005, Envestra advises that the Mount Gambier site has been sold. Envestra no longer seeks an allowance for non-capital environmental management costs, in respect of that site. The Port Pirie and Brompton sites continue to be used for delivery of References Services by OEAM as the managers and operators of Envestra's distribution network. As a prudent service provider, and in accordance with good industry practice, Envestra seeks recovery of environmental management costs for these sites.

6.6 Osborne Site

The Osborne site is owned by Land Management Corporation and leased to OEAM, not Origin Energy, until 2053. SAGASCO was the previous lessee of the site.

As with the other sites, Envestra is obliged to pay for the use of the site in connection with the delivery of natural gas. As a prudent service provider and in accordance with good industry practice, Envestra seeks to recover the non-capital environmental management costs in respect of this site.

[confidential]

6.7 The Commission's proposal is a significant departure from the existing approved Access Arrangement

The Commission should reconsider its decision to remove environmental management costs because it is unreasonable. Not only is this decision a departure from the current Access Arrangement, it disregards the reasoned approach to environmental management taken by SAIPAR.

According to SAIPAR's Final Decision in December 2001 (at p.108):

> *"SAIPAR is of the view that there is an importance to the Users of the Envestra system, the environment and the wider community, that appropriate monitoring of contaminated sites be undertaken. The function of monitoring can then be considered a legitimate operational function of a prudent service provider, and as such, SAIPAR has reconsidered the Draft Decision position."*

This was a sound decision having regard to modern day concerns with effectively dealing with historical site contamination, and apportioning equitably the cost of monitoring amongst those who have benefited from the network over the years.

Envestra's business plans incorporated the premise of the SAIPAR decision going forward. The Commission's assertion that SAIPAR's premise is now "untenable" is unexplained and inexplicable.

The interpretation of the Code should not be changed from one Access Arrangement period to another (without any change in the terms of the Code itself). To do so will cause significant business uncertainty.

6.8 Summary

The Code requires environmental management costs to be considered. These costs are sought by Envestra reasonably and prudently and as such they should be recoverable as Non-Capital Costs for the following reasons:-

(a) Firstly if gas distribution were an unregulated competitive market, all distributors would have to pass their environmental management costs (including investigation, monitoring and remediation costs) onto their customers. The costs set out in the submission by Envestra relating to Brompton, Osborne and Port Pirie have all been determined by ECG to be reasonable and prudent. These costs can be justified as reasonable and prudent expenditure by Envestra.

(b) Secondly, section 2.24 of the Code requires the regulator to take into account the public interest when assessing a proposed Access Arrangement. Clearly, in this day and age, it is in the public interest to monitor and remediate, if required, these sites.

(c) Thirdly, section 8.30 of the Code provides that 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. If the Environment Protection Authority were to direct Envestra to incur monitoring, investigation and/or remediation costs, Envestra would be required to comply with such lawful directions and incur the costs lawfully imposed on its business. The fact that the costs related to historical activities, and not current activities, does not change their character as a potential current business expense. This is a risk properly associated with delivering the Reference Service.

[confidential]

6.9 Inclusion of a Trigger Mechanism for unanticipated remediation events

In the Draft Decision (at page 194) the Commission has indicated that it will approve a pass-through type trigger event adjustment mechanism if the event is unanticipated at the time the Access Arrangement is approved and beyond Envestra's control and not as a result of Envestra's actions.

In these circumstances, and as an alternative to a Non-Capital allowance, Envestra submits that a lawful statutory direction from the Environment Protection Authority would be an impost subject to the pass-through "Trigger Event Adjustment Mechanism". Costs incurred pursuant to an order by the Environment Protection Authority may be contingent, of an unknown amount, and incurred at an indeterminate time and, therefore, consistent with the Commission's reasoning in its Draft Decision. Such costs would result from a change of law.

[confidential]