

**2005/06 ESCoSA**

**GAS DISTRIBUTION PRICE REVIEW**

**OF**

**THE ENVESTRA ACCESS ARRANGEMENT**

**A response to the**

**ESCoSA Draft Decision**

by

**Energy Consumers Coalition of South Australia**

**April 2006**

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The content and conclusions reached are  
entirely the work of the ECCSA and its consultants.

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## Executive summary

Envestra sought very substantial increases in gas transport tariffs over the next five years, rising by some 40% over the period in nominal terms. In stark contrast, electricity transportation charges in both South Australia<sup>1</sup> and Victoria<sup>2</sup> have been reduced (4% and 10% respectively) whilst gas transportation charges in NSW<sup>3</sup> have been reduced by 12% for industrial users and 5% for household users.

The draft decision of ESCoSA goes some way to providing some balance into the Envestra application, yet despite this there are still a number of aspects that ESCoSA has either failed to address or has allowed too much conservatism in favour of Envestra, resulting in costs to consumers.

These aspects are as follows.

- There are no service standards proposed by Envestra or measures proposed to assess Envestra performance. This is a major oversight in the draft decision. Thus there is no ability to assess whether the opex and capex granted has been prudent or efficient.
- It is obvious that ESCoSA and its consultants have had considerably more information provided for review after the lodging of the access arrangement application than has been made available to Interested Parties. It is therefore extremely difficult for Interested Parties to make informed comment in light of this lack of detailed information. The ECCSA has attempted to interpolate information where possible, but highlights that this has made an ability to respond effectively a much more arduous task than should be necessary.
- ESCoSA had failed to deal appropriately with the issue to redundant capital; ignored the views provided by ECCSA in its submission; and not dealt with the issue as determined by the NSW IPART and the related issue of regulatory consistency.
- ESCoSA has not addressed the very concerning financial structure that Envestra has, and the potential of this to cause consumers either failure of supply or increased costs.
- The approach used by ESCoSA to calculate the new period starting asset base and the depreciation schedule in the next period, has a fundamental flaw which must be addressed. This matter is detailed more fully in section 3.

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<sup>1</sup> ESCOSA Final Decision on ETSA Utilities price cap, 2005

<sup>2</sup> ESCOV Final Decision on Electricity Distribution Price Review 2005

<sup>3</sup> IPART, Revised Access Arrangement for AGL Gas Networks, Report on Further Final Decision. June 2005

- ESCoSA has assessed the WACC as a range and suggested to Envestra that it use the range as the basis for its access arrangement. This would leave Envestra with the right to select the highest end of the range for the WACC. Further the averaging approach used by ESCoSA implies that the equity beta would be 0.9 and the imputation value for gamma would be 0.47; both of these inputs are biased in favour of Envestra.
- Envestra proposed to retain the cost allocation method for demand haulage consumers as used in the last review. The ESCoSA has elected to permit Envestra to use this method again, although ESCoSA has implied that it is not fully supportive of the approach. ESCoSA does require Envestra to provide accurate details of the costing of a stand alone network for demand haulage consumers. Until this information is provided no further assessment can be provided by ECCSA.
- Other matters of concern are addressed in the submission.

## 1. Overview of the Draft Decision

Although ESCoSA has sought to address Envestra's ambit claims for very substantial tariff increases in its Draft Decision, ECCSA remains very concerned that consumers in South Australia will be substantially disadvantaged if the Draft Decision is carried through to the Final Decision.

There are very fundamental concerns with ESCoSA's methodology in a number of technical areas, as it tilts the balance overwhelmingly in favour of Envestra and underpins a systematic upward bias in the rates of return provided to Envestra in this access arrangement period and over time.

Envestra had sought an average initial increase in all **tariffs** by some 8.5% and proposed to dispense with the northwest tariff zone for demand haulage consumers of gas. Envestra advised that elimination of this northwest tariff zone would only affect one company, **although the adverse impact on that company will be significant.**

ECCSA's main concerns with the Draft Decision are summarized here:-

1. ESCoSA does not appear to have given cognizance to Envestra's financial structure and the potential of this to encourage regulatory gaming which may impact on consumers either through failure of supply or increased costs.
2. The approach used by ESCoSA to calculate the new period starting asset base and the depreciation schedule in the next period, is fundamentally flawed which must be addressed in accordance with the National Gas Code. This is detailed more fully in section 3.
3. ESCoSA has assessed the WACC as a range and suggested to Envestra that it use the range as the basis for its access arrangement. This approach is a systematic bias against consumers, and as it would leave Envestra with the right to select the highest end of the range for the WACC. Further, the averaging approach used by ESCoSA implies that the equity beta would be 0.9 and the imputation value for gamma would be 0.47; both of these inputs are also biased in favour of Envestra.
4. Envestra proposed to retain the cost allocation method for demand haulage consumers as used in the last review. The ESCoSA has elected to permit Envestra to use this method again, although ESCoSA has implied that it is not fully supportive of the approach. ESCoSA does require Envestra to provide accurate details of the costing of a stand alone network for demand haulage consumers. Until this information is provided no further assessment can be provided by ECCSA and the ESCoSA must defer any decision on this matter.

Other matters of concern are addressed in the following pages.

## 2. Envestra Financial Structure

In appendix 1, there is an extract of the financial position of Envestra, as published by Commonwealth Securities, with support from AspectHuntley.

This data shows that Envestra has moved its financial structure well into the aggressive range. The costs allowed Envestra by ESCoSA are based on a quite conservative financial structure.

Whilst it is acknowledged that the regulator should base its review upon an agreed notional financial and business structure so that all regulated businesses are not treated differently based on their unique approach to business, there is a point at which a regulator should establish that the regulated business has developed into a business that does not present any potential risk to consumers as a result of financial engineering and corporate activities.

ECCSA would point ESCoSA to the following:

- Envestra has most of its assets in SA, Queensland and Victoria, with minor assets in Albury and near Alice Springs. In \$'06 terms, the RAB of these assets is about \$1,950m<sup>4</sup>. Envestra has valued its "property plant and equipment" at \$1,798m<sup>5</sup>. Envestra debt in \$'06 is \$2,058m<sup>6</sup>. Despite this disparity, Appendix 1 shows that Envestra's equity is \$180m. It would seem that Envestra's book value for its assets (some \$2,238m) is 15% higher than the Envestra asset base as assessed by the regulators.
- A review of the Envestra annual report for 04/05 year shows that Envestra has intangible assets of \$630k, of which \$586k is for the distribution licence. It is these intangible assets that allows Envestra to declare that it has equity in its business. Over one quarter of Envestra's assets are "intangible". It would seem that the returns granted by regulators are more than sufficient to allow regulated businesses (including Envestra) to carry such a high load of "intangible assets". In this regard it should be pointed out that consumers should not be expected to pay a return on assets that are not capable of being used.
- Envestra's long term debt is \$2,058m and its earnings (June 2005) were negative<sup>7</sup>. This implies that it can be exposed to increases in interest rates. A review of the 2005 "quick" ratio (current assets/current liabilities) shows that Envestra's liabilities are greater than assets, although this trend has been the case for the past three years.

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<sup>4</sup> This amount is the escalated RAB value in 2006 of the Envestra assets identified from the QCA, ORG and ESCoSA final decisions, with an adjustment for the 734 km of pipelines in NT and Albury

<sup>5</sup> Envestra AR 04/05

<sup>6</sup> See appendix 1

<sup>7</sup> *ibid*

- Envestra itself is geared at 92% (debt to debt + equity). Yet according to ESCoSA its credit rating is BBB<sup>8</sup>. Based on this credit rating ESCoSA has assumed that the credit rating for a notional regulated company of 60% gearing would only be BBB+. This is hardly an appropriate credit rating for a financially strong entity, even if it is only notional. Other than Alinta which has a significant retail business, every network with a gearing of less than 60% is rated above BBB+ and even some with a gearing above 60% have a better than BBB+ credit rating.
- Envestra has maintained a consistent dividend (cents per share) to its shareholders since 1997, increasing over the years despite negative earnings in the last three years and despite increasing the number of shares on issue.
- Total Envestra capex has averaged \$74.2m per annum over the past 8 years.

	1998	1999	2000	2001	2002	2003	2004	2005
Capex/share <sup>9</sup>	6.0	15.2	21.6	11.5	10.3	10.6	12.4	11.3
Envestra shares (m)	353	353	533	609	705	727	769	769
Capex (\$m)	21.2	54.7	115.1	70.0	72.6	77.1	95.4	86.9
Capex in SA (\$m) <sup>10</sup>				21.3	19.7	20.4	20.4	20.6

Envestra has significant investment programs in its other two major networks as part of its agreements with the Queensland and Victorian regulators, yet it is proposing to invest an average of \$38m<sup>11</sup> in the SA network over the next five years, against a historic average of \$20.5m pa. If this same increased capex approach is to be undertaken in its other networks, Envestra will be increasing its total capex from a five year average of \$64.4m pa to about \$120m pa. This is a significant rise over the last five years and higher than any year in Envestra's history. It also raises the issue as to how Envestra will finance its capital program of notionally \$600m over the next five years, when it has already a high level of debt relative to its RAB.

- CommSec has assessed that Envestra has an equity beta of 0.50 compared to a sector average of 0.31 and an average of 1.09 for the ASX All Ordinaries. This equity beta is significantly below that used by ESCoSA in its draft decision.
- Envestra share performance over the past five years is remarkable compared to the Utilities sector and the stock market average ASX 200. The following graph shows the share movement against these two benchmarks. In addition the yellow line shows the Envestra share price

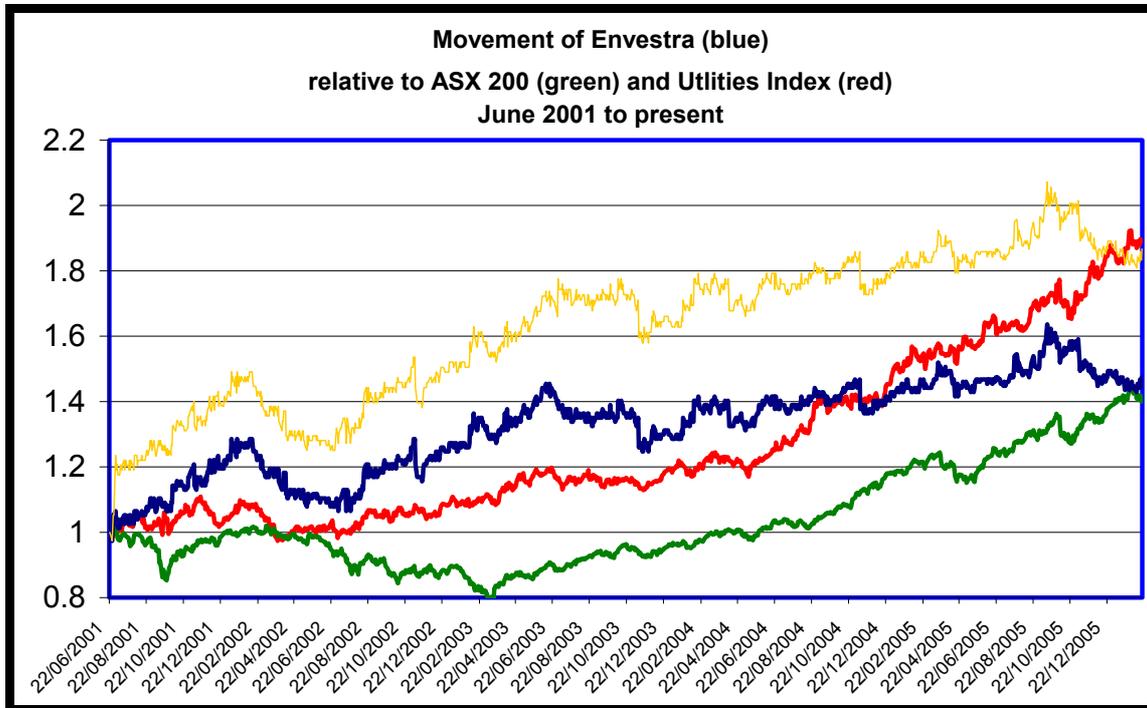
<sup>8</sup> ESCoSA DD table 7.5

<sup>9</sup> See appendix 1

<sup>10</sup> ESCoSA DD table 8.2

<sup>11</sup> Ibid table 9.12

movement adjusted for share issues. Envestra shares (adjusted for share issues) have outperformed these two benchmarks for the bulk of the time of the last five years.



Source of data: Commonwealth Securities

In regard to this chart, the ASX 200 has been recognized to be particularly buoyant in the past 2-3 years as a direct result of the “China resources” boom. In some ways this represents the same impact on other shares as did the “dot com” boom of the late 1990s. Thus, there is an expectation that the resources stocks would have assisted the ASX 200 to outperform more supposedly staid stocks such as those in the Utilities index, replicating the apparent underperformance of these stocks relative to the “dot com” boom. However, this is not observed – in fact the Utilities stocks and, in particular, Envestra outperformed the ASX 200 by a good margin. The resources boom should not have impacted on the Utilities index yet despite it, the Utilities index has significantly outperformed the market average overall, but particularly even during the China boom period. This shows that the companies within the Utilities index are seen as extremely profitable businesses, relative to risk.

A review of the companies comprising the index shows that DUET, Hastings, Alinta, AGL, APT, Envestra, GasNet, SPI AusNet, Spark Infrastructure are all in the index and between them, they comprise over 90% of the index capitalization – supporting the following assessment.

Analyzing the figures provided by Commonwealth Securities (CommSec) shows that the ASX 200 demonstrates that the market risk premium (MRP) for the sector for the past five years is at about the long term average of 6.05%, rising

from an MRP of between 3-4% observed for the past 30 years<sup>12</sup>. CommSec has calculated an equity beta for this sector<sup>13</sup> at 1.08, again about the mean for the long term market average.

In comparison, analyzing the figures provided by CommSec shows that the Utilities index demonstrates an MRP of 11% for the sector for the past five years. This is despite the fact that regulators have been setting an MRP of 6% in all regulatory decisions made during the same period, as well as for the five years before. CommSec has calculated an equity beta for this sector at 0.31, less than one third of the value used in all regulatory decisions up to late 2004. Envestra (adjusted for share issues) significantly outperformed the Utilities index for all but a very short period of the last five years.

The Utilities out performance is the outcome of actions by the regulators of providing an MRP and equity beta well in excess of appropriate amounts which has produced the massive out performance of the Utilities sector. In other words, regulators have been systematically incentivising businesses to invest.

Not only have the inbuilt rewards granted by regulators been excessive, as detailed later, the approach used by regulators in respect to depreciation and revaluing assets has also contributed greatly to the out performance of regulated stocks.

## Conclusions

1. Envestra's financial structure demonstrates some interesting features and may be adversely affected by sustained upward movement in the interest rate cycle. Consumers could be placed at risk by either having to increase contributions or to put up with a risk to the security of gas supply.
2. Despite the concerns discussed in point 1 above, it is the regulators which, in their attempts to be conservative, have provided regulated businesses (and Envestra in particular) with rewards far beyond those earned by businesses in a competitive environment.
3. The rewards being granted by regulators have allowed regulated businesses to carry large amounts (in the case of Envestra some 25% of its assets) of non utilizable assets. Put another way, the WACC awarded to Envestra is overstated by some 25%!
4. This excessive rewarding has allowed the regulated businesses to operate in regimes which businesses in competitive environments are not allowed to operate (effectively by credit ratings agencies), and by doing so may have exposed regulated businesses to additional risk.

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<sup>12</sup> See assessments by Prof R R Officer

<sup>13</sup> See appendix 1 which provides a listing of equity betas and sector and subsector dividend yields for each market sector. This data was sourced from Commonwealth Securities.

This risk will have to be carried by consumers as the regulated businesses are suppliers of essential services.

In ECCSA's view, ESCoSA has major responsibilities under the National Gas Code in not awarding excessive returns and enhancing the transfer of business risks to consumers.

### 3. Asset values and depreciation

ESCoSA has carried out an assessment of the new period starting asset base and the expected change in the asset base during the new period based on the accepted capex. This process is as used by regulators of energy assets.

The ECCSA has two main concerns.

1. The historical capex accepted for roll into the asset base has been blandly accepted as “prudent and efficient”.
2. There is a fundamental flaw in the approach used regarding depreciation, asset revaluation and capex roll in.

#### 1. Prudent capex roll in

The Gas Code (clause 8.16) requires that capex rolled into the asset base must be demonstrably prudent and efficient.

“The amount by which the Capital Base may be increased is the amount of the actual capital cost incurred (*New Facilities Investment*) provided that:

(a) that amount does not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of delivering Services; and

(b) one of the following conditions is satisfied:

- (i) the Anticipated Incremental Revenue generated by the New Facility exceeds the New Facilities Investment; or
- (ii) the Service Provider and/or Users satisfy the Relevant Regulator that the New Facility has system-wide benefits that, in the Relevant Regulator's opinion, justify the approval of a higher Reference Tariff for all Users; or
- (iii) the New Facility is necessary to maintain the safety, integrity or Contracted Capacity of Services.”

In the Draft Decision, ESCoSA makes the observation that its consultant recommended a reduction of some \$2.6m in past capex up to year 04/05 due to it not being seen as “prudent and efficient”. However, ESCoSA then stated that

“... the Commission has decided not to make any adjustment to actual capex spending during the four years to 2004/05, to avoid the regulatory risk that would arise with any *ex post* adjustments.”<sup>14</sup>

ESCoSA is concerned with “regulatory risk” faced by Envestra, but is clearly sanguine about “regulatory risk” faced by consumers. ESCoSA is reminded that it has a task to perform, and it must be undertaken on a fair and equitable basis, in accordance with provisions set out in the National Gas Code.

Fortunately, ESCoSA does accept that the forecast capex by Envestra for year 05/06 is sufficiently of concern that the capex roll in will be based on actuals as far as can be made possible, with room for adjustment at the next review.

One major issue that is overlooked is that a significant amount of capex allowed Envestra by SAIPAR was for the reduction of unaccounted for gas (UAFG). Envestra offered to and was required by SAIPAR to reduce UAFG to a level of 1271 TJ by 03/04; using the costing in the ESCoSA DD this level of UAFG would have a value of \$4.21/GJ or a total of \$5.4m per annum. In fact ESCoSA is permitting Envestra to include for 1606 TJ of UAFG gas in the next review which will cost consumers \$6.76m per annum. Thus the capex allowed for reducing UAFG has been demonstrably not used prudently and efficiently, yet ESCoSA has blithely accepted capex as such.

The fact that ESCoSA has allowed Envestra to not only not reduce UAFG as required in the last review, but actually be allowed to increase the amount of the UAFG allowance in the next period makes a mockery of the whole approach to regulatory consequences, yet ESCoSA states that it is not inclined to allow the assessed reduction in past capex which is considered not prudent, to be accepted as to exclude the modest amount might incur regulatory risk due to an *ex post* adjustment.

**ESCoSA has not protected consumer interests at all in this regard and effectively encourages regulated businesses not to comply with previous regulatory requirements which should have been enforced (or at least penalized in some way) and at the same time waives a clear requirement in the Gas Code because of the regulatory risk it leads to. This is a disappointing outcome for SA consumers!**

Notwithstanding the real concerns consumers have with regard to the failure of ESCoSA to follow the requirements of the Gas Code, ECCSA strongly supports the continuation of the practice of requiring Envestra to supply the UAFG rather than this being transferred to retailers to make up. The approach by ESCoSA reflects the very sensible approach that the party with the greatest ability to minimize the risk should be given the responsibility to manage the risk. Envestra has the greatest ability to minimize the risk and should be required to manage it.

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<sup>14</sup> ESCoSA DD at line 2864

## 2. The Roll forward anomaly

Over time the assets used in providing the service are determined to be no longer appropriate for use and the regulator permits the asset to be replaced. In its decision the regulator sets a period for the economic life of the different assets and at the end of this period the asset is deemed to be no longer “used and useful” and is to be replaced by a new asset performing the same service. To accomplish this, capex is granted in the regulatory decision for this to occur. At the same time the asset base is increased by the cost of the capex needed for the replacement and the old asset is assumed to be removed.

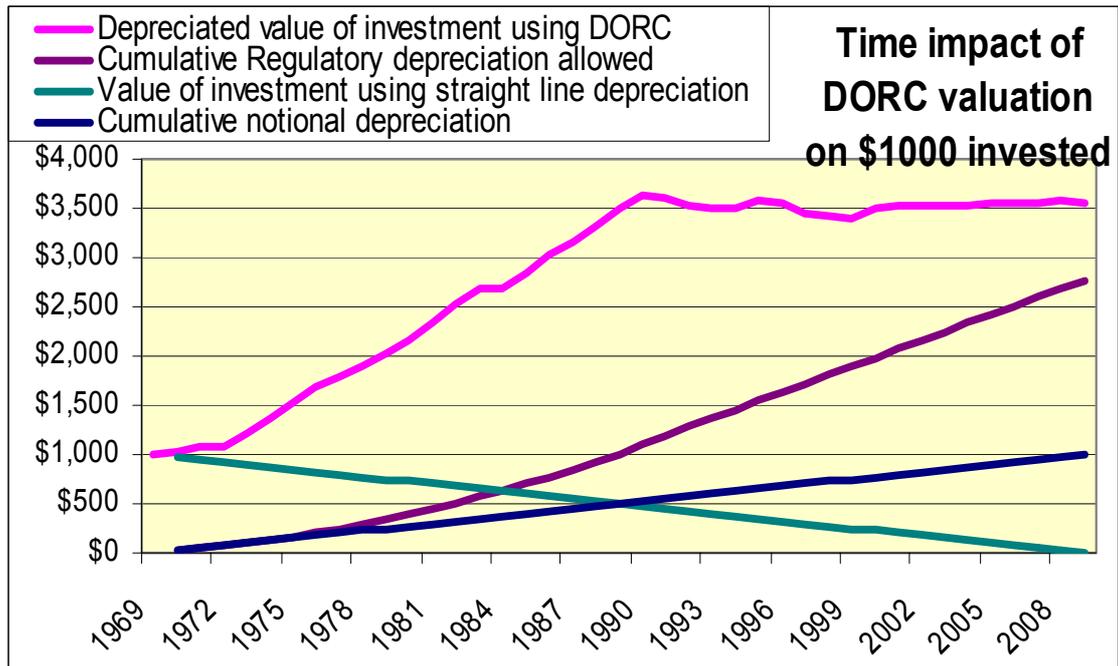
Current regulatory practice is that the regulated asset base is valued at its replacement cost, depreciated towards its economic life and this amount is automatically rolled forward. This is referred to as the depreciated optimized replacement cost (DORC) method of valuation but the regulatory approach is that the asset is seldom if ever optimized and so in reality the approach is more appropriately designated the depreciated replacement cost (DRC)<sup>15</sup> method of valuation.

This process is different to those used by most competitive businesses in that normally the actual cost of an investment is depreciated over time so that at the end of the economic life of the asset, the book value for the asset is zero. This is referred to as the depreciated actual cost (DAC) method for asset valuation

In the following graph it has been assumed that there has been an investment of \$1000 in 1969. This amount has been adjusted annually using the CPI over the past 40 years as published by the Reserve Bank of Australia with the final years (that for the next regulatory period have been extrapolated assuming a CPI for these years of 2.75%, just as a regulator would do. The asset is assumed to have an economic life of 40 years, (this is the average of all assets in a portfolio) although some regulated assets are allocated longer lives than this. All depreciation is assumed to be linear, just as in regulatory decisions.

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<sup>15</sup> The current review of the electricity Rules by AEMC actually codifies this approach by excluding the ex post optimizing of an asset due to regulatory risk concerns.



It would expect that after 40 years, the asset has to be replaced as it is no longer useful and therefore has no value. (ie the green line would apply). The pink line is the depreciated DORC value and shows that after the asset has to be replaced there is a residual value for the asset due for replacement of \$3,566. (ie, even after the asset is replaced there remains a value in asset register of \$3,566 for an asset which has been removed and replaced). At the time of the replacement the new asset is installed using capex of \$9,816 (the initial value of \$1000 escalated for the 40 years).

This shows two extreme anomalies.

- The new asset is replaced and has to be effectively included in the asset register at \$9816 (its cost of replacement) + \$3566 (the residual on the asset register for the removed asset). This means that the new asset has to be included in the asset register at \$13,382 ie a premium of 35%.
- Consumers have paid a total of \$2774 over 40 years to depreciate an asset initially valued at \$1000. ie a premium of 277% and yet the asset remains on the register at a larger value than the amount it was first purchased at even though it is no longer in existence.

This issue goes further.

Assuming the annual real WACC payable under the regulatory decision is the 10 year bond rate plus 3.5%<sup>16</sup> less CPI, and using actual bond rates for the last 36 years and extrapolated the last four years at 5.30% (again as would a regulator do), it means that over the 40 year period consumers would have paid:-

- \$8,264 for the use of the \$1000 asset over the 40 years.
- Total payments of \$11,038 over 40 years including return on investment and regulatory depreciation for the \$1000 investment made.

**This total payment is equivalent to the amount paid on a loan of \$1000 over 40 years at a fixed 27.5% interest rate.**

Even if the current bond rate (5.28%) and CPI (2.75%) were constant at present values for the entire 40 years, the implied real interest rate is still some 40% greater than the regulatory real interest rate of 6%, and the residual value of the “fully depreciated” and “useless” asset would be \$1036, increasing the asset register value for the replacement asset by 43% above the replacement value.

As noted above in section 2, there is a real concern as to the financial viability of Envestra, based on the financial indicators provided by CommSec. What is now apparent is that the depreciation that Envestra is able to provide for in its chart of accounts is not real as the regulatory approach allows Envestra to retain the value of the depreciation within its asset base, and depending on the inflationary trends to accrue even greater amounts of depreciation within the RAB.

As depreciation is a “non-cash” item Envestra is therefore able to utilize its accounting depreciation allowance as a means of providing for its dividend payout without suffering any future consequences because of the approach of regulators.

## **Conclusions**

ESCoSA has provided Envestra with a benefit by being conservative in favour of the regulated business by not following the advice of its consultant in assessing the lack of prudence of some investments. Further ESCoSA has not penalized Envestra because of its failure to reduce UAFG as required by the current regulatory decision and at the same time required consumers to pay for the lack of Envestra’s diligence by allowing Envestra to be reimbursed even higher amounts of UAFG than was permitted in the last review.

There is no doubt that the approach used to carryout the regulatory valuation and depreciation of the regulated assets provides a windfall benefit to regulated businesses and provides the evidence as to why the Utilities sector has so clearly out performed the market average. It also explains why regulated

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<sup>16</sup> This is the average of the mark up mark up used by ESCoSA in the Envestra DD

businesses are able successfully trade with a balance sheet and P&L which would otherwise suggest that trading was close to financial limits.

**It is essential that ESCoSA address the outcomes of the anomaly in regulatory practice when assessing the roll forward of asset values and depreciation. Failure to do so will result in consumers being severely disadvantaged into the future, allowing regulated businesses a windfall profit not available to businesses operating in a competitive environment.**

#### 4. Weighted Average Cost of Capital

ESCoSA has determined that Envestra is able to set its WACC in the range of 5.66% to 6.66%. ESCoSA later states that it requires Envestra to utilize a WACC of 6.16%; this is the midpoint of its assessed range. This approach compares to Envestra seeking a WACC of 7.3% being within the range of 6.7% and 9.99%, which it considers are the upper and lower bounds.

There are a number of concerns regarding the development of certain elements used to develop the ESCoSA outcome.

##### Equity Beta

ESCoSA asserts that the equity beta should be 0.8 and 1.0. It then implies that this is an acceptable range and later, effectively states that equity beta should be 0.9.

ESCoSA persists with the view that equity betas for gas utilities observed to be in the 0.0-0.3 range are impacted by the “dot com” bubble that applied in the late 1990s. What ESCoSA fails to address is that despite the “dot com” bubble now being over for more than five years, the equity betas for gas utilities in Australia are still below 0.5<sup>17</sup>, even for Envestra. At the same time the equity beta calculated for the ASX 200 is noted as 1.09, implying that the equity beta for regulated utilities is significantly below unity.

It is accepted that equity betas do change with time, but what does not change so much is the relativities between all of them. The outcome of incorrectly assigning the appropriate equity beta to an asset type is that the resultant WACC is distorted.

ESCoSA notes that

“Accordingly, in the Commission’s view, considering the empirical evidence, together with the desirability of maintaining stability in regulatory decisions over time and consistency in regulatory decisions across companies, different minds, acting reasonably would derive an equity beta that lies between 0.8 and 1.0 at a gearing of 60 percent debt.”<sup>18</sup>

The interesting point made here is that ESCoSA bases its view that Envestra should get an equity beta of 0.9 based on notional gearing of 60% debt. CommSec<sup>19</sup> notes that Envestra at a gearing of 92% debt has an equity beta of 0.5, yet the sector with a gearing of 43% debt has an equity beta of 0.31. It

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<sup>17</sup> See appendix 3 which shows the current equity beta (as calculated by AspectHuntley for CommSec) for the Utilities index as 0.31 Note also appendix 1 which shows Envestra equity beta being 0.5.

<sup>18</sup> ESCoSA DD at line 2130

<sup>19</sup> See appendix 1

would be expected that a bigger discount should apply where the gearing is significantly lower.

Overall, ESCoSA has taken a conservative view on what the equity beta should be for this asset class.

ESCoSA places its belief in an equity beta for Envestra of 0.9 on regulatory precedent. That a number of regulators have already used 0.9 in decisions shows that there is downward pressure on this CAPM setting. ESCoSA proposed and equity beta of 0.8 on ETSA Utilities and was supported by a number of sources. It was only because of “regulatory precedent” that ESCoSA reverted to 0.9 for ETSA Utilities. Now that regulatory precedent permits a move in equity beta to 0.8 (as there have been a number of regulators who have used 0.9) there is no reason for ESCoSA to continue this move towards a more representative figure, as demonstrated by ESCoSA’s own work carried out for the ETSA decision (and that of QCA and IPART) and the outworkings of many others.

Maintenance of equity beta at 0.9 will continue to perpetuate the out performance of the Utilities sector compared to companies operating in a competitive environment, to the continuing detriment of consumers.

### **Market risk premium**

This matter is in part addressed in section 2 above, where it is identified that the Utilities sector has outperformed the market average by nearly two times, and that the Utilities MRP is over 11% for the past five years.

ESCoSA has maintained the view that MRP should be retained at 6.0 despite the assessments of SACES and Capital Research as it accepts unequivocally the views of Gray and Officer that these studies are flawed<sup>20</sup>. ESCoSA makes no attempt to establish whether this is correct. In this ESCoSA has accepted the views of academics selected by Envestra for their views over independent studies carried out in order to assess the MRP. ESCoSA suggests that MRP might range between 5.0 and 6.0<sup>21</sup> (and considers that 6.0 lies at the top of the range), yet does not include this range in its calculation of acceptable WACCs.

As noted under the section above on equity beta the very fact that the Utilities index has so significantly outperformed the market index is supportive of the fact that regulators are consistently taking a conservative on all inputs to CAPM.

ECCSA considers that allowing Envestra to use an MRP of 6.0 when ESCoSA states this is a conservative value will permit Envestra to continue its current out performance in the market.

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<sup>20</sup> ESCoSA DD at line 2150

<sup>21</sup> Ibid line 2186

## Debt margin

Envestra currently enjoys a credit rating of BBB<sup>22</sup>, despite it having a gearing of 92% debt, and other concerning financial indicators. Yet ESCoSA has assumed that if Envestra reduced its gearing to 60% debt, then it would only increase its credit rating by one point. This is ludicrous.

The same table which includes the Envestra credit rating shows that lower gearing results in a higher credit rating, and the lowest credit rating included in the table is BBB – the same as that enjoyed by Envestra now. Other privately owned utilities have credit ratings as high as A+ (SPI PowerNet), AA- (CitiPower and A- (ETSA Utilities and Powercor). There is little doubt that a higher credit rating than BBB+ is appropriate for the notional gas distributor.

This decision is another example of conservative assessments by ESCoSA.

## Imputation credits

ESCOSA assesses the imputation credits in the range of 0.35 and 0.60. In its later calculation, ESCoSA sets gamma at 0.47, being the mid point of the range. Without any discussion, ESCoSA accepts the Envestra suggestion that the ESCoSA lower bound is the same as the Envestra upper bound. There is no discussion why the ESCoSA upper bound is stated as 0.6.

At least the ESCoSA final decision on ETSA had significant support for the decision of gamma being 0.50, and based on the studies quoted in the it is seen that gamma of 0.50 is a conservative figure.

## General view

The Gas code requires the regulator to set an outcome which achieves the objective of

“... replicating the outcome of a competitive market.”<sup>23</sup>

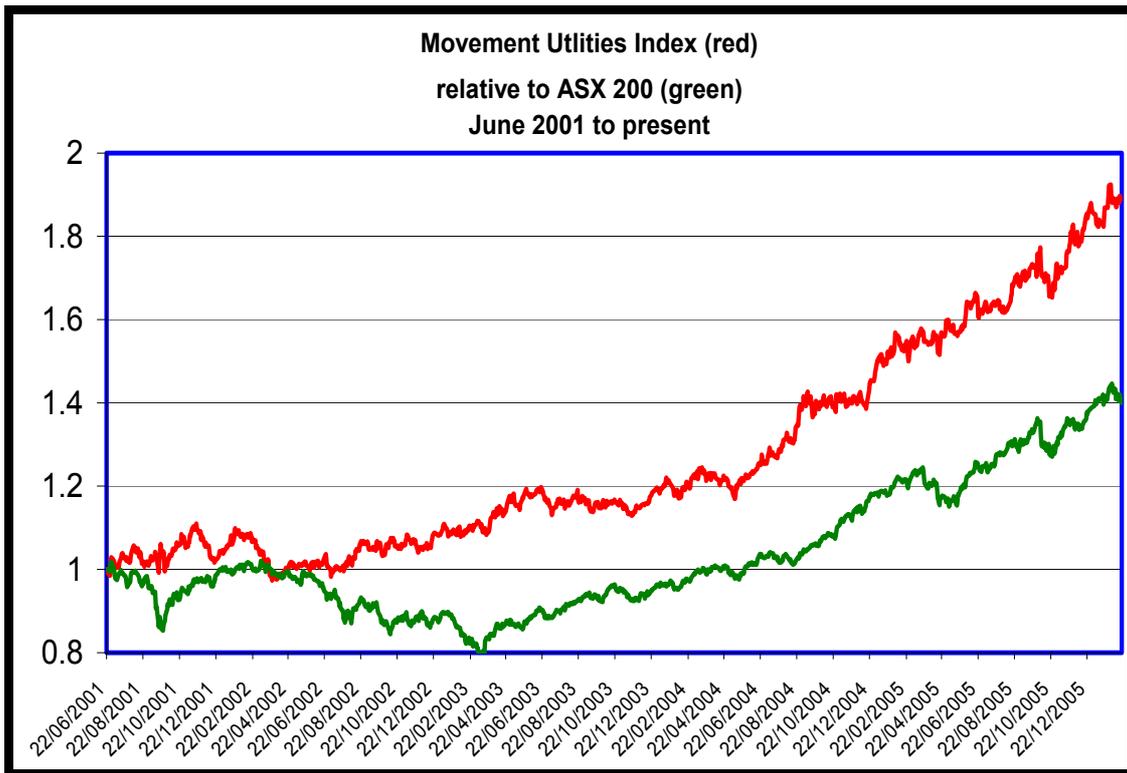
ESCOSA makes no attempt to benchmark the outcome of the WACC calculation at all.

In the ECCSA response to the Envestra application it provided some analysis which demonstrated that the returns achieved by regulated businesses exceeded those of businesses in a competitive environment by looking at the EBIT/assets between the two asset classes. This view is still held and is exemplified by the following graph which tracks the share price performance of the utilities index against the market benchmark over five years.

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<sup>22</sup> ESCoSA DD table 7.5

<sup>23</sup> Gas Code clause 8.1(b)



Source of data: Commonwealth Securities

The Utilities index has out performed the ASX benchmark both in absolute terms and in aggregate terms over the five year period.

When this share outperformance is assessed along with the dividend returns (see appendix 3) for the various asset classes (dividend for Utilities is 5.2% and ASX All Ordinaries is 4.3), it is clear that the contention offered in the ECCSA submission is substantiated – that the regulated utilities are achieving significantly better results than the ASX benchmark.

This clear presentation of outperformance by regulated utilities cannot be denied. It only requires the regulators to accept that the utilities are being over compensated for the risks they take. That ESCoSA has not attempted to benchmark financial performance as part of its assessment is a failure by the regulator to ensure there is equity between the monopoly provider and the consumer.

Such benchmarking of the calculated WACC to actual outcomes observed in the market place would demonstrate that there is or is not consistency between the awarded WACC and the market ESCoSA is meant to replicate by its regulation.

## **5. Gas demand forecasts**

In its submission to the Envestra access arrangement application, ECCSA raised serious concerns at the sustainability of the Envestra gas demand forecasts. As the access arrangement is based on a price cap approach, the setting of accurate and sustainable gas demand forecasts is essential.

In the view of ECCSA the forecasts prepared by Envestra appeared to significantly understate the likely growth in gas demand. This would be in favour of Envestra, because if the growth exceeded forecast, Envestra would be able to increase its revenue. Additionally by biasing growth forecasts between different categories and tariffs, Envestra is able again to use its knowledge to increase revenue by tariff manipulation.

It is pleasing that ESCoSA shared concerns about the Envestra forecasts and engaged MMA to carry out an independent review of gas demand forecasts. The results confirm the view of ECCSA that Envestra had indeed understated the expected growth in gas demand over the next five years.

The detail to which MMA has carried out its review is significantly greater than that provided by Envestra in its AAI. The approach used by MMA is robust and the outcomes of gas demand forecasts are supported.

ECCSA has a residual concern that the approach used by Envestra has the potential to deter new gas users and to encourage existing gas users from using the Envestra network. If the outcomes for gas distribution gas transport indicate a significant increase in tariff costs (whether due to revenue allowances being too high or demand forecasts being too low) there is already an identified trend in demand haulage customers to find alternative solutions – by moving, by reducing demand, closing down or by by-passing. Any of these outcomes will reduce the amount of gas traversing the Envestra network and this will increase the costs to all remaining consumers. The ultimate outcome of allowing Envestra to increase its tariffs beyond reasonable levels will be the transfer of consumers to other forms of heating, and further increases in costs to those few consumers continuing to take gas.

Envestra has sought a large allowance for it to encourage consumers to connect to gas, yet if this marketing is accompanied by increased tariffs due to consumers leaving the network or reducing usage, then this marketing will be to no effect.

It is an observable feature of competitive markets, that where costs are reduced, the demand increases. The approach by Envestra to understate demand in order to increase profits and yet request an increase costs to counter the inevitable decline in demand if costs rise, must be seen in a context of a business playing the regulatory system and attempting to “game” the regulator.

## 6. OPEX and CAPEX

### Outcomes

One of the most important issues that must be clearly stated is the outcomes expected from the granting of opex and capex. SAIPAR did determine that UAFG had to be reduced and awarded the opex and capex requested by Envestra to achieve this outcome. Unfortunately Envestra did not achieve this one defined outcome for standard of service, yet ESCoSA has not provided for any penalty on Envestra for non-achievement of this service standard. .

In its application Envestra provides via its consultant that Envestra has adequately performed the gas transport services required within its current allowances. Within the current cost structure, Envestra advises that it provides a high quality distribution service<sup>24</sup>, with:

- less than 15 complaints referred to Envestra by the Ombudsman in 2004/05 where there were issues with quality of service. Furthermore, the issues were generally of a minor nature (dirt left behind after a job, damaged storm water pipe, etc) and in many cases the customer had not first made contact with Envestra to rectify the issue; and
- a very low number of gas outages – network operations resulted in only 5 incidents of unplanned loss of gas supply to consumers in 2004/05. The rapid response to network problems that is required for safety reasons also ensures that impacts on consumers are minimized.
- Further it advises that it reports to the Regulator on service quality in relation to gas outages and promptness of customer connections on a quarterly basis, and other parameters (including customer complaints) on an annual basis to the Regulator and to the Office of the Technical Regulator and that it assists the Office of the Technical Regulator to conduct a thorough technical audit of Envestra's operations annually. Those audits confirm that the Network is operated and managed safely, appropriately and in accordance with relevant standards and good industry practice.

This is the sum total of the measures used to assess Envestra performance.

There are no service standards proposed by Envestra or measures proposed to assess Envestra performance. This is a major oversight in the draft decision. Thus there is no ability to assess whether the opex and capex granted is appropriate and will achieve any measurable outcomes.

The ECCSA advised ESCoSA that capital investment should lead in part to a reduction in opex. ESCoSA accepts this principle but is unable to quantify the benefit, and so does not accept a reduction of opex as a result of capex. This is

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<sup>24</sup> Envestra AA page 7

an aspect of conservatism that has been effectively ignored, yet has a significant impact on total costs.

## Opex

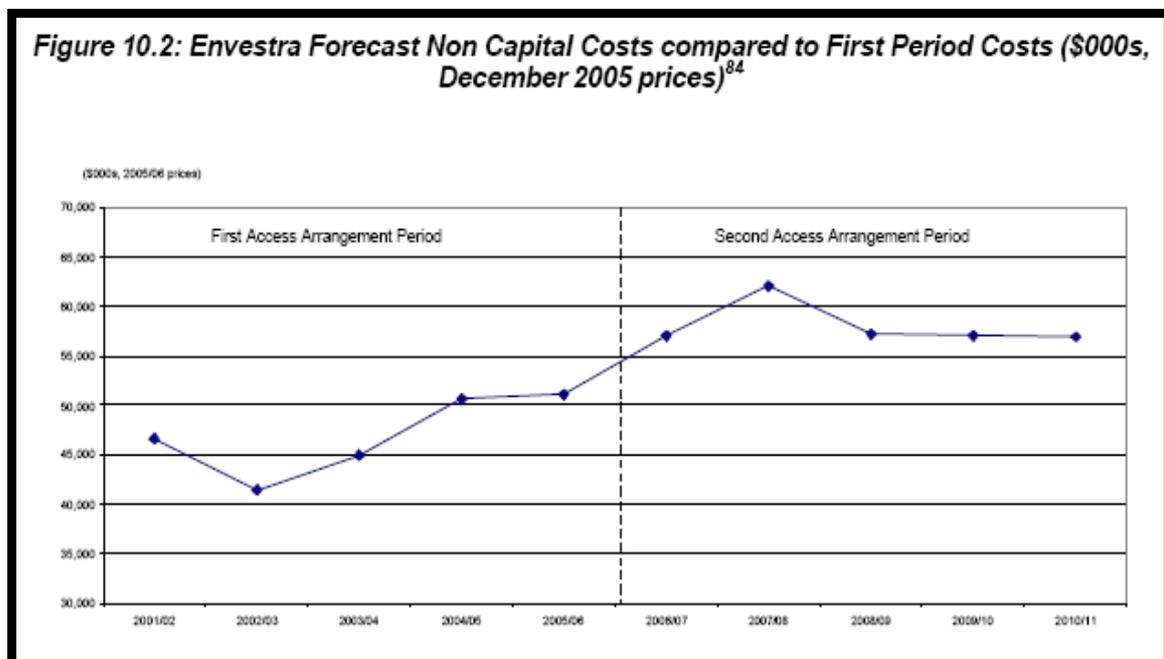
The Gas Code (clause 8.37) requires the regulator to ensure

“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.”

### Overview of opex

ESCoSA has appeared to recognize the concerns raised by ECCSA in its earlier submission. That ESCoSA has employed ECG to review in detail the Envestra opex claim is supported and subject to the following comments, the ECCSA supports the conclusions on the opex allowances reached by ECG and ESCoSA.

ESCoSA raises concerns about the power of the incentive mechanism to drive Envestra to the lowest sustainable cost as required by the Gas Code. ESCoSA provides the following figure in the draft decision



This shows that Envestra opex was low in the early part of the current period, rising to a higher figure close to the end of the current period and then increasing again in the next period.

This approach is typical of all access arrangement applications, and reflects the view that the incentive mechanisms do not work as the regulated business would prefer to keep all savings to itself, than share them with consumers. To achieve this regulated business underspends in the early part of the regulatory period, and catches up in the later years, indicating that the early gains are not sustainable and setting the indications for a need of increasing opex for the next period. The Envestra outcome conforms to this approach, and shows that “gaming” the regulator provides more profitability to the business than sharing with consumers.

The figures 10.3 and 10.4 in the draft decision highlight that Envestra opex is at the top of the range in both benchmarks. Envestra attributes this to its unique geographical topography and relatively low gas demand. This is a gross distortion as the AGL Network in Sydney has similar demand with probably a greater number of demand haulage customers over a larger area of supply, bounded to the east by the sea and the west by the mountains. Despite these drawbacks the opex for AGL in both measures is significantly less than the Envestra claimed opex. The Alinta WA charges are also significantly lower than both AGLN and Envestra even though Alinta has a lower demand and covers a similar area with similar bounds. Benchmarking shows that Envestra does not have such unique network features as is alleged, and neither is its geographical topography unique.

In this instance benchmarking provides a strong indicator that Envestra has claimed well in excess of its needs for the “lowest sustainable costs” for operating its network.

Based on this benchmarking it would seem that ESCoSA and its consultant have been quite conservative in assessing the opex needs for Envestra, and as a result may well have over provided for Envestra opex.

ECG offers the view that Envestra costs for 04/05 is the benchmark for assessing future opex.

“ECG has recommended that Envestra’s forecast operating and maintenance costs, other than leak repair costs, be accepted as Code compliant on the basis that they are in line with costs incurred during 2004/05.”<sup>25</sup>

This statement is outrageous! That there were incurred costs in one particular year becomes the basis for another five years of opex allowances is an absurd position to be permitted, especially when this was the highest actual costing year for the current period. ESCoSA must not use one year as the basis - it must use a cost representative for the whole of the current period, just as it uses the whole for the current period costs as the basis for any incentive mechanism.

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<sup>25</sup> ESCoSA DD line 4325

By using just one year as the basis for future opex, ESCoSA is following the flawed approach of using the particular to develop the general, whereas statistics requires the general to be used to develop the particular. The ESCoSA approach is statistically flawed and must be adjusted. As Envestra will have seen that this approach has been used elsewhere, there is every incentive for Envestra to defer opex (as it has appeared to do) to inflate the last full year opex in order to maximize the next period opex.

Based on the draft decision, Envestra has successfully achieved its goal. The historic average for the past four years and forecast fifth year (see figure 10.2 in ESCoSA DD) shows that the average opex for the period was \$46m pa, compared to the starting point used by ECG of \$50m. Thus the fundamental starting point for assessing future opex is some 10% above the current period average and is therefore inflated.

### **Envestra opex and OEAM**

Envestra employs OEAM to operate its system. This is a hangover from the floating of Envestra by Origin and there is no demonstration that this arrangement is in fact a competitive arrangement. What can be assessed is whether the direct costs incurred by OEAM are reasonable, as only actual direct costs should be included in the opex allowance.

Under the building block approach, the profit to a regulated business comes from the return on the assets used, rather than from any profit built into the capex and opex allowances. This is in accord with the view that regulated businesses are very capital intensive and therefore the profit arises more from the investment in assets than from businesses which are more transaction based (such as banks).

Envestra proposed that the OEAM management fee should be included in the allowable opex. This is incorrect. The management fee in a cost reimbursable contract is essentially the profit element of the contract. If Envestra had its own direct labour force, then all that the regulator would accept in the opex would be the cost of the direct labour and labour management, without any profit. The regulator would allow that the return on the assets includes for the profit element as implied by the inclusion of the market risk premium in the WACC. Market risk premium is the sum of the premium added by investors to a share price to reflect value of the share to the investor plus the dividend (profit) earned by the share. Thus profit is included in the WACC.

It is acceptable that a regulated business has the right to subcontract aspects of its business to other parties, but the value of regulatory opex must not include the profits associated with the carrying out this work – if it was then there would be a “double dipping” of profits by the regulated business. This means that if Envestra wants to give OEAM a profit for its work then this profit component

must be not taken as an operating expense, but as a share of the profit Envestra earns out of the WACC.

Thus the 3% management fee for OEAM is not an element of the opex, but a part of the WACC. Envestra must therefore pay any management fee from the return it gets on its assets and not as an element of the opex.

### **Network development costs**

ESCoSA points to the fact that some 75% of these costs are related to marketing by Envestra, and even adds that the amount used is high compared to other gas distribution networks. In the ETSA review, ESCoSA identified that ETSA provided significant funding under the same heading as sponsorships.

The amount for network development costs has been stated by ECG as being prudent and efficient **purely because SAIPAR said it was.**

“Based on the above Stage Two discussion [most of which is deleted as it is confidential] and the expenditure falling within the SAIPAR approved current level identified in Stage One, ECG recommends the proposed Market Development expenditure as prudent and efficient.”<sup>26</sup>

As noted earlier under demand forecasts, Envestra has caused loss of gas demand as a result of its high costs and pricing policies. Yet ESCoSA is proposing to allow Envestra over \$5m to market the use of gas. Envestra used even more than this for marketing in the current period, yet succeeded in delivering an overall loss of gas demand during the current period.

10% of the total budget (network marketing) has been accepted as a legitimate expense yet there is no detail provided as to what it is for or what outcomes are to be achieved. There is no quantification as to whether this “investment” will make a positive return (such as would be measured under a regulatory test approach) or is money wasted. Comparative costs are provided in the ECG report to ESCoSA (table 8-36) and this shows that the Envestra allowance is twice what it is provided for its Queensland business and five times what it has for its Victorian business, yet the same conditions apply to hiving off from Boral of Envestra (SA) as they do to Envestra (Qld) and Envestra (Vic). Therefore there should be no difference between the three businesses. In this regard it is noted that Envestra (SA) is of a similar size in volume terms as is Envestra (Vic) and so a similar marketing budget should apply.

It would be better that the money spent on marketing be dedicated to reducing costs in order to retain existing customers, rather than increasing costs in order to see this trend continue.

Further if ESCoSA is of the view that the marketing process will return its costs to the consumers paying for the gas distribution service, then the details must

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<sup>26</sup> Page 152 ECG report to ESCoSA

be provided so that consumers can see what they are being required to pay for and allow consumers to judge whether their money is being spent wisely and achieving defined outcomes.

**ESCoSA must reduce the network marketing costs to a similar value as Envestra (Vic) receives giving a reduction of \$4m pa.**

### **The opex adjustments**

ESCoSA has determined that certain adjustments are required to the Envestra forecast of opex.

- **Wage inflation.** Envestra has been allowed a net greater wage inflation than other DNSPs have been granted. Why? Envestra will be seeking labour from the same pool of skilled workers as all other DNSPs.
- **Labour productivity** has been assessed at the lower end of the range, following the overall conservative approach used by ESCoSA.
- The **site remediation allowances** for the gas production sites are rightfully excluded.
- That opex should reduce as a result of capex is conceded by ESCoSA yet due to the difficulty in quantifying this ESCoSA has taken the conservative view that this result must be excluded from the opex allowance
- The reduction in A&G is supported (**reduced insurance claim and additional IT**)
- The allowance for an **ageing workforce** is in part addressed by the wages inflation and should not be double counted. Further there is already allowance in the current opex for ageing workforce, so there is potential for this item to be counted three times.
- **Corporate governance** review is a cost that all businesses are required to comply with. Why should Envestra be entitled to claim this uniquely? ECCSA agrees with ESCoSA that the other RG&S claims are unfounded.
- **DBYD** is already included in the opex base amount and should not be added again. In the same vein, **terrorism allowances** have now been included for many years (post NY twin towers) and is therefore already in the opex base. What is being achieved for the risk management of \$450k per annum?
- Envestra has claimed **miscellaneous cost increases** for subcontractor costs, increasing materials costs, OEAM depot relocation cost and additional GIS licence. It is queried why an additional allowance is permitted for subcontractor and materials cost as these are covered under the CPI and wage inflation increases. That OEAM wants to relocate its depot is its business and should not be a cost to consumers unless there is a balancing g saving. In this case there is no saving offered so the cost should be refused. The additional costs for GIS licenses are not demonstrated.

- As noted in section 3, ECCSA agrees that UAFG must be a cost to Envestra. To allocate this cost to retailers is a retrograde step, as Envestra is best placed to manage the risk and so ameliorate to costs to consumers.
- The allowance included for **UAFG** is not supported. As noted above in section 3, the amount of UAFG was to have been reduced during the current period and SAIPAR included for costs for this to occur. That UAFG has grown despite the requirement that it be reduced is an indictment on Envestra performance and should be penalized. In fact ESCoSA proposes no penalty for not complying with a SAIPAR requirement and allows an increase in opex for a greater amount of UAFG claimed by Envestra. As a maximum ESCoSA should only allow Envestra to recover the costs of UAFG up to the forecast it made to SAIPAR if it was permitted the opex and capex claimed necessary for this task. As SAIPAR granted these funds for this purpose, Envestra should be only entitled to be reimbursed for the UAFG it was meant to have reduced this element to under the current AA. The forecast UAFG stated by Envestra by 03/04 was 1,271 TJ<sup>27</sup>. On this basis the allowance for UAFG would be \$5.4m per annum. This approach to UAFG would provide Envestra with an incentive to remedy the problem, and provide a strong argument for ensuring matters addressed in regulatory decisions are treated correctly, rather than ignored.

### Conclusions on opex

Overall ESCoSA has taken a very conservative approach to opex. It has used an inflated base, allowed a number of dubious claims for “changed circumstances” and allowed Envestra to escape from its commitment to address UAFG.

The network marketing budget must be reduced to a similar value as is received by Envestra (Vic), giving a reduction of \$4m pa.

<sup>27</sup> See Envestra AAI rev jul99, page 8

“As set out in section 4.2.5 of this document, Envestra’s forecast New Facilities Investment includes a program of mains replacement (including an accelerated mains replacement program (or AMRP) in addition to the normal program of replacement in certain parts of the Network) during the Access Arrangement Period. This, together with an appropriate level of leak repairs (as provided for in the Non-Capital Costs forecast set out in section 4.2.4 of this Access Arrangement Information), forms the main part of Envestra’s SUG management/reduction program. Based on this program, Envestra has determined forecasts of SUG in the Network for each year of the Access Arrangement Period. The forecasts are set out in Table 1 below.

Forecast SUG (TJ)	98/99	99/00	00/01	01/02	02/03	03/04
	1,599	1,498	1,377	1,287	1,271	1,271

Table 1: Forecast SUG for the Network for 1998/99 – 2003/04 (TJ)

There has been no assessment of the cumulative impact of this conservatism, but allowing for the 10% premium on the start base, 2% premium allowed on UAFG, 2% (total for ageing workforce, wage growth and productivity) and 1% (total for marketing and terrorism) ESCoSA has added a 15% premium for conservativeness.

Further, the ECCSA notes that ESCoSA accepts its argument that capital investment should lead to a reduction in opex, but due to the difficulty in quantifying this ESCoSA has not included for this undoubted impact. Thus the 15% conservatism noted above must be even higher when this qualitative view is taken into consideration.

## Capex

### Overview of capex

The draft decision shows a 23% reduction in capex from that claimed by Envestra. Envestra identified its capex in 21 categories and in 12 categories the Envestra requests have been virtually accepted. In another seven categories Envestra has had minor adjustments made and in only two has ESCoSA made a significant change to the requested capex.

Thus Envestra has been effectively granted its request or near its request in all categories identified except two areas.

ECCSA is not in a position to be able to assess the prudence and efficiency of the proposed capex program as there is no information provided by Envestra or ESCoSA as to the assessments made by Envestra to demonstrate this essential element of a capex program. **It is therefore strongly suggested that ESCoSA require Envestra to prepare a document similar to the Regulatory Test used by electricity regulators so that Envestra can demonstrate the prudence and efficiency of its capex programs.**

Preparation of such a document will achieve two outcomes – Envestra will be able to satisfy its management that the capital works proposed meets the requirements of the Gas Code and therefore an ex post review will not result in discounts or redundancy and it provides the regulator with documentary evidence that the prudence and efficiency of the capex has been addressed.

### The capex program changes

The major changes are

1. Stay in business – mains renewal (\$11.4m reduction)
2. Material changes – security of supply (\$30.5m reduction)

Major changes comprise some 17% of the total requested capex by Envestra.

Minor changes identified are

- |                     |                    |
|---------------------|--------------------|
| 3. Stay in business | (\$3.1m reduction) |
| a. Regulators       |                    |
| b. Non-FRC IT       |                    |
| c. other            |                    |
| 4. Growth           | (\$7.7m reduction) |
| a. Improve supply   |                    |
| b. General mains    |                    |
| c. Meters           |                    |
| d. services         |                    |
| 5. Material changes | (\$1.9m reduction) |
| a. IT               |                    |

Minor changes comprise some 5% of the total requested capex by Envestra.

In its application Envestra proposed a capex program that is nearly 2.5 times the size of its current capex program. Even with the reductions in capex proposed in the draft decision the capex program accepted by ESCoSA is still twice the current capex program. This raises real concerns about the ability of Envestra to be able to properly manage such a rapid escalation of its capex program and still ensure that costs are contained, timing achieved and quality retained.

The ECCSA members have all undertaken capital works and know from first hand experience the difficulties in introducing a major expansion of their capital works programs. They do not see that Envestra will be better able to manage a major expansion of its capital works program better than any other business.

On this basis ECCSA has residual concerns that the large expansion of the Envestra capital works program must be accompanied by a clear statement and program as how Envestra proposes to manage the increased program.

**Stay in business – mains renewal (\$11.4m reduction)**

This reduction is totally related to the costs that Envestra based its estimate of costs. Envestra proposed a 30% increase in costs above current costs for this new work. Envestra advises that its program is to reduce UAFG yet this was what was required in the current period.

It states that the higher costs are due to replacement in the CBD yet the program of works proposed by Envestra does not support this contention, and indeed the asset management program developed by Envestra does not even include for CBD mains renewal

It is quite apparent that Envestra has not assessed its costs appropriately and the ESCoSA view is supported.

**Material changes – security of supply (\$30.5m reduction)**

The bulk of this reduction is due to the exclusion of the Eastern Ring main and the Southern Loop extension. This is combined with some rescheduling of other

capital works, associated with concerns that the proposed capex program is still twice the size of the current capex program.

As noted above ECCSA recommends that Envestra be required to develop a Regulatory Test approach to its capex. ECCSA does not have sufficient information to assess whether the Eastern Ring Main and Southern Loop programs are required. What ECCSA is aware of however is that with the loss of significant demand haulage customers in Southern Zone combined with the forecasts of falling haulage demand in central zone, whether there is sufficient justification for the proposed works. If the trends continue there may not be sufficient substantiation for the proposed works at all.

With these concerns ECCSA agrees with ESCoSA that this reduction in network security is best left to a more detailed review combined with a Regulatory Test approach to demonstrate prudence and efficiency. The suggestion of ESCoSA to allow a re-opener in the future provides a sensible solution to the dilemma of whether this work is indeed required in the current climate.

The ECCSA notes that ESCoSA has allowed for the other “security of supply” projects. In particular ECCSA supports the interconnection of Envestra network with SEAGas. We have been advised that this interconnection is to be a normally closed un-metered connection. If this is true then we would recommend that the connection be constructed with metering and other controls so that it can be used as a normal supply gas for consumption. One of the benefits of SEAGas was that it would provide a competitive alternative to gas supply from MAPS, and it was on this basis that NCC recommended that coverage be revoked on MAPS. If SEAGas cannot be used to compete with MAPS, then the NCC recommendation is structured on a flawed premise.

We are aware that Origin Energy has control of the three “city gate” connections between MAPS and Envestra, and that it uses these controls to minimize competition as a gas retailer. The augmentation of the SEAGas interconnection with Envestra must be constructed so that it is readily able to provide consumers with an alternative supply of gas, so increase competition and reduce the dominance Origin has in the gas retail market.

As there is a strong relationship between Origin and Envestra, it is quite possible that Envestra has not sought capital funds in its application to augment its network which would lead to greater competition for Origin Energy in the gas market. ESCoSA should seek from Envestra advice as to whether there are augmentations to its network that would lead to the increase in competition between retailers and reduce Origin’s gas market dominance. If such augmentations would result in increased competition (and so pass a regulatory test) ESCoSA has the obligation to examine this issue in more detail as part of this regulatory review.

### **Minor adjustments to the capex claim**

ESCoSA and its consultant ECG have had access to information not made available to Interested Parties in relation to the Envestra capex program. A review of the reasons and explanations provided in the draft decision appears to be a well reasoned and logical adjustment to the capex claim, and therefore has ECCSA support.

ECCSA notes that there is reasonable agreement between ECG and Envestra regarding the augmentation to serve the new townships. ECCSA supports augmentation of the network for this purpose, but raises one point of caution. As suggested above ECCSA recommends that a formal regulatory test approach be undertaken on such augmentations to demonstrate that the increased demand will support the increased revenue required to carry out the augmentation. In Victoria it was noted that an RT approach could not support the augmentation and as a result the government supplied the balancing funds to make the augmentation comply with the Gas Code. It is suggested that if augmentations do not meet gas Code requirements that ESCoSA support an approach to government to provide the balancing funds, rather than cause a cross subsidy between consumers.

### **Working capital**

ESCoSA has provided Envestra with \$600k of working capital. This was calculated from an expense lag of 73 days and an expense lead of 26 days. A review of Envestra financial statements shows that the current assets and current liabilities (the provider of operating working capital) are well balanced; implying Envestra uses funds held for payments to manage its working capital already.

However, much of Envestra's need for working capital is for payments to OEAM UAFG and other subcontractors. Work for Envestra is carried out over a month and then invoiced; implying an average of 15 days for work completed and carried out. Envestra then pays at the end of the following month for the work completed; resulting in a payment 45 days after the work is carried out. This means that the lead (days) is 45 not 26 as used by ESCoSA (see line 3815). Further ESCoSA notes that payments are due an average of 45 days after the service is provided and there is an average of 10 days between meter read and invoicing. This is a period of 55 days not 73 as included in the draft decision.

Thus the difference between lead and lag days is only 10 days, as indicated by Envestra financial information. On this basis the working capital for operating expenses would be  $10/365 \times \text{annual opex}$  or \$136.9k for working capital.

ESCoSA does not consider there is a need for working capital for capital works as the structure for incorporation of capex into the RAB essentially provides this working capital. ECCSA agrees with this approach

## Conclusion for capex

1. The adjustment should be made for the ex post review of past capex, and the amount suggested by ECG deleted from the RAB
2. Envestra should be required to develop a Regulatory Test approach to capex for demonstrating compliance with the prudence and efficiency requirements of the Gas Code
3. The changes to capex by ESCoSA in the draft decision are supported
4. The amount included for working capital is incorrect and should be reduced to \$137K.

## Redundancy

Envestra has observed that a number of demand haulage customers have either closed operations or moved from Southern zone. There is a reduction of demand haulage demand in central zone. With these reductions it would be expected that there would be redundant assets. ESCoSA has accepted that there are no redundant assets, but the argument provided by Envestra to prevent there being redundant assets highlights that it is the large consumers that effectively underwrite the building of the assets.

“Envestra has advised the Commission that reductions in gas loads in a network do not necessarily imply that the gas mains involved become redundant or partially redundant. Distribution mains are sized so that they cater for a multitude of current loads and generic growth. The cessation of one load does not make a gas main redundant, unless that gas main serves only one customer and there is no prospect of replacement customers.

In the case of the southern gas zone, Envestra has also advised that if the oil refinery and engine plant did not exist and the Western Ring Main and the central trunk main were to be designed today, they would still be designed at their current size.”<sup>28</sup>

This comment demonstrates the point ECCSA makes in the following section that it is inappropriate for demand haulage tariffs to be estimated on a standalone basis without there being some element of sharing between large and small users.

If the supply of 6.5 PJ/a is no longer being transported in the Southern Zone, yet there would be no change in the design of the gas supply system, then the cost to provide that service to the specific large consumer would be zero ie the marginal cost to provide 10% of the demand is zero.

Envestra is attempting to approach two different scenarios with totally conflicting arguments.

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<sup>28</sup> ESCoSA DD line 3165

## **7. Cost allocation between classes of consumers**

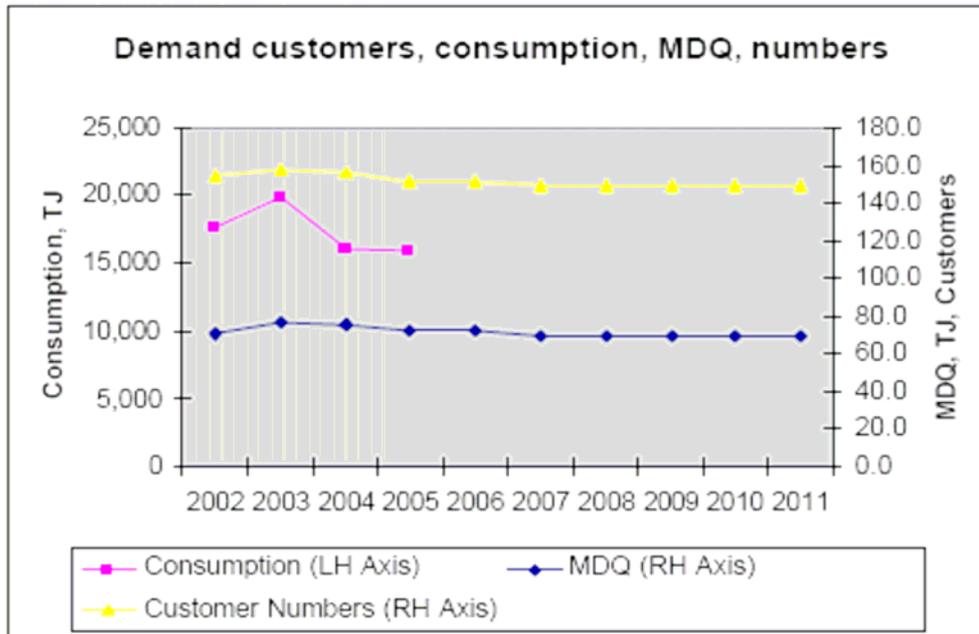
The Draft Decision does not provide clear direction to Envestra on the allocation of costs between consumers, other than to require Envestra not to allocate more than the stand alone costs to any class of consumer, nor any less than the avoided costs to a class of consumer.

The approach used by Envestra in the last decision was that large consumers would bear the costs of a stand alone network in its entirety, effectively allowing all other consumers to pay only the marginal costs to augment the network from the basic structure. However the usage of gas between residential, commercial and demand is such that demand haulage exceeds the combined volume of gas used by residential and commercial customers by a factor of 2.5 times. As much of the residential and commercial usage of gas is weather dependent (MMA report states this is the case), then there is a need to establish and MDQ for the residential and commercial markets if comparisons with the demand haulage are to be made.

The principle of a “stand-alone” network implies that Envestra is pricing the demand haulage at the outer bound of matching bypass costing for the service. If Envestra is correct in its price setting then the obvious outcome would be that demand haulage consumers are neutral as to whether to use the Envestra network or to build their own. If consumers decided to build their own this would result in an inefficient economic outcome for the Envestra network as there would be an unnecessary duplication of assets.

Using data from the MMA report as to the proportion of gas usage that is “base load” and assuming the balance is used over the three cold months, this results in values for the haulage demand MDQ and the combined residential/commercial MDQ being of equivalent sizes, at about 25 PJ. The load factor for demand haulage services is about 65% of MDQ (in 2003 the load factor was closer to 80%, before the loss of Mobil Port Stanvac and others) and the demand of the residential/commercial haulage services is less than 40% of MDQ.

Figure 2.6 Historical, trend and Envestra forecast MDQ and customer numbers and historical consumption for the Demand market



Source: MMA advice to ESCoSA on demand forecasts

The Envestra network was predicated on the demand of large consumers – without these large consumers the Envestra network is likely to have been marginal just to provide for the residential and commercial usage – as it is the large consumers that underwrite the backbone of the Envestra network. Thus the exclusion of the demand haulage services from the benefits of any network sharing is inappropriate as the two main usage classifications are of similar size.

In simplistic terms a pipeline carrying 50 PJ/a of gas might be sized at 350mm diameter, yet a pipeline sized to carry 25 PJ/a would be sized at 250mm diameter. The cost differential to install the 350mm pipeline is not twice the cost of that to carry half the capacity; it is more of the order of 10-15% increase in the cost to double the carrying capacity. Thus by ESCoSA permitting Envestra to cost the haulage demand customers on the basis of a stand alone network is a severe penalty and greatly distorts the reality of the benefits of sharing the usage of an asset.

Rather than accept the Envestra proposition that demand haulage users should be levied the costs of an entire stand alone network, ESCoSA should require Envestra to develop tariffs which follow the approaches used in other jurisdictions where the network is seen as an entire system and all share in the benefits.

ESCoSA does indicate in the draft decision that it does not accept the Envestra approach as it provides no substantiation of the ultimate outcomes, yet ESCoSA still accepts the principle of a cost allocation that demonstrably disadvantages

demand haulage customers by being at the highest end of what is seen as the outer limits of acceptability.

It would seem that ESCoSA may have reached this conclusion on the basis that the network would appear to be dominated by the demand haulage volume of gas being transported. In fact the lie to this assumption is quite obvious when the true capacity of the network (in terms of MDQ) is assessed for residential and commercial use. That the capacity of the network used by these consumers is on an equivalent magnitude to that used by demand haulage consumers has not been contemplated at all.

The ECCSA requires that ESCoSA recognize that the capacity of the network used by demand haulage customers is of a similar capacity used by commercial and residential consumers, and that rather than demand haulage consumers being penalized by being assessed the value of a notional standalone network, that all consumers be allocated the benefits of a shared network, just has been assumed between residential and commercial consumers.

SAIPAR was provided with a number of reasons as to why a standalone network is discriminatory. In appendix 2 there is provided a very cogent reason as to why BHP Petroleum is of the view that a standalone network as proposed by Envestra is contrary to the Gas Code. They appended a legal/economic view from Mallesons Lawyers which supports this BHP view. SAIPAR considered that this information was provided too late for this view to be considered. ECCSA raised this very issue in its response to the Envestra AA document, so ESCoSA does have the responsibility to assess matter and instruct Envestra to address the concern before Envestra modifies its AA to address the ESCoSA final decision.

Mobil also adds some telling observations as reported by SAIPAR:

“• On page 3 [of G.P. Bailey’s submission on behalf of Adelaide Refinery [updated version] (page 7)], it was also indicated that the stand-alone approach for determining Demand Haulage costs would “necessarily result in a higher allocation of capital to industrial customers” for several reasons, one of which was that “mapping existing demand delivery points in each region as a starting basis immediately results in a non-optimised system”.

• G.P Bailey (the second updated submission) (page 2-3) goes into further detail and notes that, using various conservative assumptions, the value of the Demand Haulage network should be significantly less than it presently is as proposed by Envestra.

They also note that Envestra would not accept their offer to consult on the design of Demand Haulage pricing and instead created their proposal in isolation.”<sup>29</sup>

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<sup>29</sup> SAIPAR final decision page 213

Mobil adds its concerns that attempting to set tariffs by just avoiding bypass is also beset with issues

“G.P. Bailey’s submission on behalf of Adelaide Refinery [updated version] (page 7) noted in a similar vein that it appeared “...bypass of distribution assets has been used as the benchmark for developing reference tariffs.

• It was also noted that “...it is totally inappropriate to develop (and maximise) reference tariffs on the basis of alternative economic bypass, or what it is perceived that the customer can bear”<sup>30</sup>

This sentiment was further reinforced to SAIPAR which noted that Mobil

“... goes in to further detail and notes that, using various conservative assumptions, the value of the Demand Haulage network should be significantly less than is presently proposed by Envestra. [Mobil] also note that Envestra would not accept their offer to consult on the design of Demand Haulage pricing and instead created their proposal in isolation.”<sup>31</sup>

SAIPAR obviously had its own concerns about the Envestra proposal as it commented:-

“In regard to the ‘stand alone’ notional network approach to determine Demand Haulage costs to be recouped, SAIPAR has some reservations about the appropriateness of this method when used in isolation. There are several scenarios where a ‘stand alone’ methodology will not yield efficient outcomes. There may be situations where a Demand Haulage customer is too small to make effective use of the bypass negotiation power, and in such cases could be burdened with a share of ‘stand alone’ costs that are inappropriately high. In a similar manner, there may be Users who do not possess the ability to avoid using the network (perhaps a hospital) and as such may be disadvantaged by stand-alone costing methodology that does not adequately reflect the importance of the tariff market and the temporal issues involved in situating in any given location. That is, the very existence of pre-existing loads may have made a User’s decision to locate itself in a given area possible, without which (the existing load) they would not have located in such an area.”<sup>32</sup>

SAIPAR goes on to state:-

“Bypass can often be significantly more expensive for a customer than the incumbent Service Provider (for example, economies of scale and access to land easements can play an important role) and so bypass tends to be unlikely in the vast majority of cases. This provides more scope for the

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<sup>30</sup> Page 213 SAIPAR final decision

<sup>31</sup> Ibid page 159

<sup>32</sup> Page 95 SAIPAR draft decision 13 April 2000

‘loading’ of costs onto a User if it is felt that option of bypassing the Service Provider’s network would be exceptionally difficult for that User to exercise. There may be a subsequent cross-subsidy within a given Service category as those deemed more likely to take up the bypass option are likely to be given a less ‘loaded’ cost-reflective allocation.”<sup>33</sup>

With the extent of doubt as to whether costing about half the network capacity on a stand alone basis and the legal/economic assessment as to whether the Gas Code permits the allocation of this degree of a network on a standalone basis, the ECCSA would recommend that ESCoSA review its tacit permission in the Draft Decision to allow Envestra to cost the demand haulage at the very highest cost possible.

If ESCoSA persists in permitting Envestra the ability to disadvantage one sector to the advantage of another by discriminatory practices as outlined above, then there is an obligation on ESCoSA to ensure that the cost calculations for a notional stand-alone network are fully detailed and substantiated. So far there has been no attempt to provide such information. Further if this approach is to be taken then there is a need for the Envestra proposal to be made available for review before such is bound into a final determination.

Certainly much more analysis is needed to provide the detail behind the calculation of the value of the notional network. In its current application there is no detail provided at all. In the first application Envestra set the value of the notional network, with the sum total of detail provided being in clause 5.2.1.2 of its first AA information document, wherein it provided the following:-

Region	Revenue (\$m)
Adelaide	11.26
Port Pirie	0.26
Whyalla	0.06
Peterborough	0.04
Riverland	0.07
South East	0.18
Total	11.9

This is totally inadequate and ECCSA assessed its view of the notional network at about half this value using the same costs as were accepted by SAIPAR for the entire network.

The ECCSA requires the opportunity to review **in detail** the Envestra build up of a stand-alone network costing before a final determination and then sufficient time to respond to ESCoSA or to seek additional information.

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<sup>33</sup> Page 104 SAIPAR DD

## Adelaide Zones

Envestra proposes to continue with the concept of the zonal structure as currently used for the Adelaide demand haulage consumers. Envestra provides no substantiation of this approach in its current Access Arrangement proposal so reference is made to the proposal provided by Envestra in its first application. In this Envestra comments:-

*“Zonal Pricing within the Adelaide Region*

Demand Delivery Points in the Adelaide Region have been divided into four Zones. A map showing boundaries of these Zones is included as Annexure D of the Access Arrangement.

This zonal approach is required due to the elongated nature of that part of the Network located in the Adelaide metropolitan area. Because the city is constrained on the west by the coast and to the east by the Mount Lofty Ranges, development has taken place along a north-south axis. The Moomba to Adelaide transmission pipeline, which is the only source of Gas to the Adelaide Region, terminates at the northern suburbs.

Consequently the distance over which Gas is transported to Delivery Points varies considerably, with Delivery Points at the southern end of the Network situated up to 40 kilometres from the Receipt Points. As a result, applying a postage-stamp approach to pricing within the Region would not be cost-reflective or practical in the circumstances.

A zonal approach has therefore been selected as providing the best balance, with price increments between Zones determined on the basis of the average length of mains required to transport Gas from the Receipt Points.”<sup>34</sup>

SAIPAR did not challenge the Envestra statement that the orientation (ie the north/south development constrained by the Adelaide Hills and the sea) of the gas network causes the need for such an approach. In fact the Sydney and Perth gas network layouts have similar constraints with the sea on one side and hilly terrain to the other, and elongated north-south networks. No comment was made that in both cases the demand haulage arrangements are costed more to reflect actual usage of the networks with Sydney having some 400 unique demand haulage tariffs.

The approach by Envestra could be a significant contributing cause to the massive reduction of demand in the southern zone. This is certainly the view of Mobil (who have ceased using the Envestra gas network who observed in letters to SAIPAR that could well be seen as prophetic, as Mobil closed its refinery only a couple of years later:-

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<sup>34</sup>Clause 5.2.1.4 Envestra AA Information 21 July 1999

“... it was noted that the Adelaide Refinery may face tariff costs in excess of \$1,200,000 above the cost compared to a NW Zone location. It is indicated that there is a concern that the “...proposed zonal pricing structure will significantly disadvantage Southern Zone industry, and in particular, impact the long term viability of Adelaide Refinery through the imposition of uncompetitive natural gas supply tariffs”.<sup>35</sup>

### North West Zone

In its new proposed access arrangement, Envestra proposes to eliminate the NW zone as there is only one customer operating in this zone. This needs to be seen in context of the actual demands and projected growth in each zone.

The MMA review of the forecasts shows that:-

Exec Table 3 MMA forecasts of contracted MDQ for the Demand market by region and zone, GJ MDQ

	2005*	2006	2007	2008	2009	2010	2011
Adelaide							
Central	11,067	10,494	10,393	10,366	10,312	10,273	10,236
Northern	33,295	32,880	32,844	35,333	35,509	35,701	35,902
Southern	5,410	4,210	4,210	4,310	4,410	4,510	4,610
North Western	17,852	17,800	17,800	17,800	17,800	17,800	17,800
Regions							
	2005*	2006	2007	2008	2009	2010	2011
Peterborough	62	62	62	62	62	62	62
Port Pirie	3597	3596	3596	3596	3596	3596	3596
Riverland	750	750	750	750	750	850	850
South East	930	888	917	948	981	1016	1053
Whyalla	57	57	57	57	57	57	57
Monarto	0	0	0	0	283	378	472
<b>Total</b>	<b>73,020</b>	<b>70,737</b>	<b>70,629</b>	<b>73,222</b>	<b>73,760</b>	<b>74,243</b>	<b>74,639</b>

\* Actual MDQ in 2005.

Growth in demand is forecast by MMA to be negative (ie fall) in the Central zone and growth in the Southern Zone is predicted by MMA to remain constant (MMA

<sup>35</sup> Page 213 SAIPAR Final Decision

suggests this is due to uncertainties whereas the experience of consumers suggests that the high gas tariffs set by Envestra have had a significant impact).

Envestra has advised that it intends to dispense with the NW zone with regard to its tariffs and combine it with the Northern zone, due to the few consumers in the NW zone. A review of the demand in each of the zones indicates that in size, NW zone has the second largest demand (MDQ), after the northern zone. Southern zone is the smallest of the zones in respect of demand. It seems bizarre that Envestra sees that dispensing with NW zone is a higher priority than eliminating a zone which has a clearly declining growth potential!

It would make more sense to combine central and southern zones.

The fact that Envestra originally decided that it needed to maintain lower tariffs particularly in the NW zone and to a lesser extent in northern zone due to its concerns about potential bypass, has not changed. This concern about bypass is further reinforced by the decision to use a stand-alone network which (if approached correctly) leaves consumers neutral as to bypass or not. The incorporation of NW consumers into northern zone will only reinforce the drivers in the NW zone to cause demand haulage consumers to bypass, resulting in the actual stranding of assets which other consumers might still require (and pay for) as there is no indication as to whether the actual assets bypassed will be required by residential and commercial consumers.

The allocation of costs used by Envestra for demand haulage tariffs between the zones was based on two fundamental approaches

1. That the costs were to be allocated on 40% distance and 60% fixed
2. That central zone was 25% more expensive than northern zone and southern zone 50% more expensive than northern zone.

This is the sum total of the logic provided to allocate the notional standalone network costs between the zones. This lack of in-depth analysis is well matched in the total lack of substantiation used by Envestra to set the value of the notional network.

Despite the apparent logic that Envestra sees in allocating demand haulage to zones, it decided in its wisdom that commercial and residential tariffs should be “postage stamped” across Adelaide. Inconsistency is a constant throughout the Envestra approach!

## **Conclusions**

Whilst the principle behind allocating costs for demand customers on a “standalone” basis simplifies cost allocation, it also allows Envestra to structure a set of tariffs that minimize the opportunity for large users of gas located near the “citygate” to bypass the system.

Envestra provides no indication as to whether any assets bypassed would still be required as demand consumers bypassing Envestra as a result of merging NW and northern zones. It is probable that Envestra would still require the assets bypassed to provide services to residential and commercial customers, causing an increase in the costs to all consumers as well as those demand haulage consumers

It would appear that little effort has gone into demonstrating that the costs to be allocated to this customer class do in fact replicate reasonable costs. SAIPAR tacitly accepted the lack of substantiation by not even requiring Envestra to demonstrate that the costs used by Envestra really did reflect a notional network specifically sized for the demand.

Finally there was no demonstration by Envestra (or indeed by SAIPAR) whether the approach used was permitted by the Gas Code as acceptable, particularly as IPART was convinced to move away from this approach to a cost reflective sharing basis as was ORG/ESCoV. This methodology used by Envestra is heavily biased against demand customers but provides a miniscule benefit for all other classes of consumers.

## **8. General Comments**

### **Service policy**

ECCSA supports the draft decision and its requirements of Envestra in this area.

### **Terms and Conditions**

ECCSA supports the draft decision and its requirements of Envestra in this area.

Specifically with regard to

- Payment terms ECCSA supports the ESCoSA changes
- MDQ decreases ECCSA supports the ESCoSA changes
- Gas balancing in the network, ECCSA supports the ESCoSA approach and changes required.
- Gas balancing within delivery zones, ECCSA believes that there is a need to place a “reasonable endeavours” obligation on Envestra for this service
- Quantities received, ECCSA supports the ESCoSA requirements
- Force Majeure, ECCSA supports the ESCoSA requirements

### **Reference Tariff policy**

ECCSA supports the draft decisions and the ESCoSA requirements

### **Total Revenue Requirements**

ECCSA supports the draft decisions and the ESCoSA requirements, except

- ECCSA does not agree with ESCoSA offering a range of inputs and outcomes as this provided Envestra with the ability to select the inputs it sees will provide the highest revenue
- ESCoSA states (line 4955) that it is in the Public Interest that the regulatory decision must encourage investment. This is incorrect as the regulatory decision must only encourage investment which is prudent and efficient

### **Reference Tariffs**

ECCSA supports the draft decisions and the ESCoSA requirements except

- ECCSA does not agree that a standalone tariff methodology approach for demand haulage customers provides the best outcome for all consumers
- Automatic pass through, ECCSA believes that a materiality threshold of 1% is too low and should be 5%
- Automatic pass through, ECCSA believes that there should be a requirement for negative pass throughs and these should be netted off against positive pass throughs
- ESCoSA must define the adjustment processes for the standalone tariffs, as these have no relationship to the tariffs developed under the approach

for other reference tariffs. In particular, direction must be provided for the side constraints, that these are independent of the basket of tariffs that the smoothing adjustment must be unique for the standalone tariffs and that a trigger event does not apply.

### **Fixed Principles**

ECCSA supports the draft decisions and the ESCoSA requirements, except

- It is inappropriate to allow any under run of expenditure to be assumed to be an efficiency gain. Where Envestra has made a significant error in estimating the cost of work then an under run should not be prima facie evidence that Envestra has been more efficient
- Positive efficiencies must be netted off with negative efficiencies for the incentive to be symmetrical. It is not efficient to leave negative efficiencies to be reviewed at the next review. This is equitable for both consumers and Envestra.

- Appendix 1

## Financial Data Downloaded from Commonwealth Securities Ltd

Company Profile: Envestra Limited ASX Code: ENV  
Last update: 26 April, 2006

## Substantial shareholder list at 25-08-05

Shareholder Name	Share Holding	% Shares Held
Cheung Kong Infrastructure Holdings	134,955,100	17.53
Origin Energy Ltd	134,955,000	17.53

## Key Measures

VALUE	Company	All Ords	Sector	Previous Close	52 week high	52 week low		
P/E ratio	--	16.56	24.31	1.24	1.26	1.10		
P/B ratio	5.30	2.29	1.75	<b>P/E Ratio</b>				
P/E Growth ratio	--	1.26	2.70	--				
P/S Growth ratio	3.15	2.44	3.34	<b>Sector</b>				
				Utilities				
				<b>Market Capital</b>				
				\$976 million				
				<b>Total Shareholder Return (avg annual rate)</b>				
				<b>1yr</b>	<b>3yr</b>	<b>5yr</b>	<b>10yr</b>	
				16.7%	12.7%	16.4%	--	
				<b>Earnings and Dividends Forecast (cents per share)</b>				
				<b>2005 2006 2007 2008</b>				
				EPS	-3.1	-0.6	0.9	2.1
				DPS	9.5	9.5	9.5	9.5
<b>RISK</b>								
	Company	All Ords	Sector					
Beta	0.50	1.09	0.31					
Current ratio	0.81	1.55	1.37					
Quick ratio	0.79	1.02	1.06					
Earnings stability	--	100.0%	100.0%					
Debt/Equity ratio	1,168.7%	37.9%	77.6%					
Interest Cover	0.95	5.47	1.24					
<b>CAPITAL STRUCTURE (\$ 000s)</b>								
Total Debt				2,104,070				
Long Term Debt				2,057,970				
Preferred Stock								
Shareholders equity								
<b>CURRENT POSITION (\$ 000s)</b>								
	2003	2004	2005					
Cash Assets	10,602	87,089	50,224					
Receivables	25,763	28,543	39,038					
Inventory	--	--	--					
Others	2,083	1,886	2,756					
<b>TOTAL CURRENT ASSETS</b>	<b>38,448</b>	<b>117,518</b>	<b>92,018</b>					
Accounts Payable	24,969	31,986	25,690					
Debt Due	187,714	101,584	46,100					
Others	13,541	36,328	41,345					
<b>CURRENT LIABILITIES</b>	<b>226,224</b>	<b>169,898</b>	<b>113,135</b>					

## Company Historicals

### PER SHARE STATISTICS

	6/97	6/98	6/99	6/00	6/01	6/02	6/03	6/04	6/05
Sales(\$)	--	0.33	0.43	0.45	0.43	0.42	0.39	0.41	0.39
Cash Flow (cents)	--	12.2	9.6	14.5	12.7	13.1	12.1	21.0	9.9
Earnings(cents)	--	-2.0	-1.1	-2.4	-5.4	-1.9	1.8	-4.3	-3.1
Dividends(cents)	--	7.7	8.1	9.0	9.2	9.5	9.5	9.5	9.5
Franking(%)	--	--	--	--	--	--	--	--	--
Capital Spending (cents)	--	-6.0	-15.2	-21.6	-11.5	-10.3	-10.6	-12.4	-11.3
Book Value(\$)	0.30	0.28	0.23	0.85	0.66	0.19	0.22	0.27	0.23
Shares Outstanding(m)	353	353	353	533	609	705	727	769	769
Avg annual PE ratio	--	--	--	--	--	--	54.5	--	--
Relative P/E(%)	--	--	--	--	--	--	417.3	--	--
Total Return(%)	--	--	-1.6	--	36.1	13.7	41.8	8.7	9.3
+/- Market(%)	--	--	-15.6	--	25.9	18.4	43.8	-12.7	-16.7
+/- ASX sector (%)	--	--	-15.5	--	9.5	16.2	--	--	--

### HISTORICAL FINANCIALS

	6/97	6/98	6/99	6/00	6/01	6/02	6/03	6/04	6/05
Revenues (\$million)		115	150	238	253	264	277	299	303
Operating margin(%)	--	37.3	61.3	58.9	48.0	68.8	71.1	68.9	67.2
Depreciation (\$million)		-16	-21	-31		-36	-39	-43	-50
Amortisation (\$million)	--	-1	-2	-6	-5	-5	-1	-5	-5
Net profit before abnormals (\$million)	--	-7	-3	-12	-31	-12	12	-31	-24
Net profit (\$million)	--	-7	-16	-12	-31	-12	12	22	-24
Income tax rate(%)	--	-70.8	-145.2	29.9	-96.5	-47.2	-431.2	59.1	-338.9
Net profit margin(%)	--	-6.1	-2.5	-5.4	-12.6	-4.7	4.6	-10.7	-8.0
Employees (thousands)	--	--	--	--	--	--	--	--	--
Long term debt (\$million)	805	788	2,034	1,733	1,776	1,993	1,868	1,974	2,058
Shareholders equity (\$million)	105	97	81	454	405	135	161	204	180
Return on capital(%)	--	1	2	3	3	4	6	4	4
Return on equity(%)	--	-7.2	-4.6	-2.8	-7.9	-9.1	7.9	-15.6	-13.4
Payout ratio(%)	--	-383	-753	-371	-172	-492	530	-219	-303

## **Appendix 2**

**Excerpts from BHP Petroleum submission to SAIPAR dated 18 May 2000 in reference to the first Envestra Access Arrangement including an opinion from Mallesons Stephens Jacques**

## 5. Standalone/Marginal Pricing

BHP believes that SAIPAR cannot approve an Access Arrangement that includes any form of standalone/marginal pricing. At issue is whether Envestra's proposed cost allocation complies with the requirements of the Code. The Code has a number of tests that apply to cost allocation. These tests are found in Sections 8.1, 8.37, 8.38 and 8.44. It is important to note that the Code only deals with the allocation of target revenue to Reference Tariffs. It does not consider that there is an intermediate step of allocating target revenue to customer classes. In an Access Arrangement that deals with whole of market access, dividing the market into just two customer classes is highly arbitrary.

Section 8.1 lays out the objectives that should be achieved through the design of a Reference Tariff. These include:

- a) "providing the Service Provider with the opportunity to earn ... revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets ...";
- b) "replicating the outcome of a competitive market";
- c) "not distorting investment decisions in Pipeline transportation systems or in upstream or downstream industries";
- d) "efficiency in the level and structure of the Reference Tariff".

Section 8.37 is specific that a Reference Tariff may only provide for the recovery of efficient non capital costs of delivering the Reference Service.

Section 8.38 states that a Reference Tariff should, to the maximum extent that is commercially and technically reasonable, be designed to recover the portion of target revenue that includes the costs directly attributable to the Reference Service and a share of joint costs that has been determined in accordance with a methodology that meets the objectives of Section 8.1 and is otherwise fair and reasonable.

Section 8.42 further provides that, subject to prudent discounts, a Reference Tariff should to the maximum extent that is technically and commercially reasonable, be designed so that a particular user's contribution to target revenue is consistent with Section 8.38.

All natural gas Access Arrangements approved under the National Code, have adopted fully distributed costing for both capital and non-capital costs. This is clear evidence that:

1. Regulator's (ACCC, ORG and IP ART) consider that Reference Tariffs based on fully distributed costing meet the objectives of Section 8.1 of the Code.

2. It is technically and commercially reasonable to allocate joint costs to Reference Tariffs on a fully distributed basis.
3. That fully distributed costing achieves 1 and 2 above and is otherwise fair and reasonable.

SAIPAR in proposing to approve standalone/marginal pricing has not shown why it should deviate from previous regulatory decisions on cost allocation or how Envestra's proposed cost allocation complies with the requirements of the Code.

If SAIPAR wish to set a national precedent by approving discriminatory pricing for whole customer classes on gas distribution networks, it must, as a matter of public responsibility, very clearly demonstrate that discriminatory pricing based on customer size is clearly compliant with the Code and in the public interest.

Attachment 1 contains a legal/economic opinion that BHP commissioned from Malleson Stephen Jaques and NECG for submission to IP ART. While the opinion concerns AGLGN's proposal in NSW the issues under Envestra's proposal for its South Australian distribution system are exactly the same. The conclusions reached by Mallesons/NECG are equally applicable to AGLGN and Envestra.

Recommendations:

1. SAIPAR require Envestra to allocate all costs to Reference Services on a fully distributed cost basis.
2. SAIPAR reject any Envestra proposal that is built on discriminatory pricing.  
SAIPAR demonstrate that any cost allocation method it approves complies with the Code and is in the public interest.

## **Attachment 1**

Legal and Economic Opinion as to whether AGLGN's Reference Tariff and Reference Tariff Policy Complies with the National Third Party Access Code for Natural Gas Pipeline Systems

**Legal and Economic Opinion as to whether AGLGN's Reference Tariff and Reference  
Tariff Policy complies with the National Third Party Access Code for  
Natural Gas Pipeline Systems**

**Mallesons Stephen Jaques and NECG**

**6 December 1999**

**Introduction**

BHP Petroleum Pty Ltd has asked Mallesons Stephen Jaques and NECG to provide a legal and economic opinion as to whether the requirements of the National Third Party Access Code for Natural Gas Pipeline Systems<sup>1</sup> ("**the Code**") would be satisfied if AGLGN were to charge contract customers a Reference Tariff based on the capital and non-capital costs of a notional pipeline system which services the contract market alone, and simultaneously charge tariff customers a Reference Tariff based on the incremental costs of an additional pipeline system required to service tariff customers. The proposed Reference Tariff would mean that tariff customers would not contribute to the common costs of AGLGN's New South Wales Distribution Network.

**Summary**

- A. AGLGN's Reference Tariffs do not comply with sections 8.1, 8.38, 8.42 or 8.43 of the Code<sup>2</sup>.
- B. IPART should not approve AGLGN's proposed Access Arrangement because the Access Arrangement is inconsistent with the criteria set out in section 2.24 of the Code. IPART'S reasons for not approving AGLGN's Access Arrangement should be that the Access Arrangement:
- would not promote the economically efficient operation of AGLGN's network;

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<sup>1</sup> Given effect by the *Gas Pipeline Access (New South Wales) Act 1998*

<sup>2</sup> In our view, AGLGN's Access Arrangement is subject to section 8 of the Third Party Access Code for Natural Gas Distribution Networks in New South Wales by virtue of paragraphs 3(4)(a) and (b) of *Gas Pipelines Access (New South Wales) Act 1998*, and not section 8 of the National Third Party Access Code for Natural Gas Pipeline Systems. In IPART's view, however, AGLGN's Access Arrangement is subject to section 8 of the National Third Party Access Code for Natural Gas Pipeline Systems.

- would not be in the public interest, including the public interest in having competition in markets; and
- does not satisfy AGLGN's obligations under the Code.

### **Pricing principles in the Code**

1. The National Third Party Access Code for Natural Gas Pipelines Systems sets out the principles that AGLGN must adopt in establishing its Reference Tariffs. Section 8.1 contains the general principles and requires that prices should achieve the following objectives:

- a) 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;*
- b) replicate the outcome of a competitive market;*
- c) ensure the safe and reliable operation of that Pipeline;*
- d) not distort investment decisions in Pipeline transportation systems, or in upstream or downstream industries;*
- e) is efficient in the level and structure of the Reference Tariff; and*
- f) provides an incentive for the Service Provider to reduce costs and to develop the market for Reference and other Services.*

2. In addition, section 8.38 of the Code requires that total revenues derived from a Reference Tariff must cover all directly attributable costs, and must include a contribution to joint costs which is consistent with the foregoing objectives.

3. Finally, section 8.42 of the Code requires that, to the *maximum extent that it is technically and commercially reasonable*, the Reference Tariff charged to an individual customer should cover all costs directly attributable to that customer and must include a contribution to joint costs.

4. The following paragraphs explain why AGLGN's Reference Tariffs do not comply with sections 8.1, 8.38, 8.42 or 8.43 of the Code and why, in exercising its discretion under section 2.24 of the Code, IPART should not approve AGLGN's current pricing proposal.

**Relevant considerations in section 8.1**

5. AGLGN has not suggested that the structure and levels of its proposed Reference Tariffs have been determined by the requirement to earn revenue to recover efficient costs, or by the requirement for safe and reliable operation of its network. Nor has AGLGN suggested that the structure of prices in respect of allocation of joint costs to different customer classes is constrained by the requirement for incentives for reducing costs and developing the market (section 8.1 (f) of the Code).

6. The legislative objectives of:

- (a) replicating a competitive outcome;
- (b) not distorting investment decisions; and
- (c) providing an efficient level and structure of prices,

are compatible with the objectives of recovering efficient costs, safe and reliable operation of the network and providing incentives to reduce costs. In our view, one of the factors which IPART should take into account in deciding whether to approve AGLGN's proposed Access Arrangement under section 2.24 of the Code is whether AGLGN has satisfied its obligations under the Code and, in particular, whether AGLGN's proposed Reference Tariffs satisfy AGLGN's obligations under paragraphs 8.1 (b), (d) and (e) of the Code.

**Appropriate upper and lower bounds of prices**

7. IPART has stated that cross-subsidies should be removed from access pricing and accepted that the lower and upper bound of prices for the purpose of determining a cross-subsidy are the incremental costs and stand-alone costs of provision of the Service. For example, in its July 1997 Final Determination of AGLGN's Access Undertaking IPART stated:

*"The Tribunal is of the view that cost over-recoveries also distort consumption, production and investment decisions. On this basis, the immediate objective should be to ensure access prices are subsidy-free and do not over-recover costs through the exercise of market power."*<sup>3</sup>

*"The Tribunal considers that the most appropriate measure of a cross subsidy is the extent to which revenue under-recovers incremental costs."*

*"... // competitive pressures prevent a lift in tariff market revenues sufficient to recover incremental costs, any ongoing 'gap' should not be recovered through prices for other customers set above stand-alone costs."*<sup>4</sup>

8. IPART's statements are consistent with two inter-related, well established and necessary conditions for ensuring productive efficiency in network and retail service provision, namely:

- (a) no price, or set of prices, should exceed the stand-alone costs of providing the service or services, where stand-alone costs are defined as the costs that an efficient competitor would incur in providing just that service or group of services; and
- (b) no price, or set of prices, should be less than the incremental (or avoidable) costs of providing the service or services, where incremental costs are the additional costs incurred by the monopolist in providing just that service or group of services.<sup>6</sup>

9. In its Final Determination IPART required that revenue from contract customers should fall to a staging point of \$84m in 1999/2000, which represented IPART's view of the subsidy-free contract

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3 IPART, July 1997, *AGL Gas Networks Limited, Access Undertaking (as varied), Determination*, pg 27

4 *ibid*, pg 30

5 *ibid*, pg 33

6 See Baumol, W J and Sidak, J G (1994), *Toward Competition in a Local Telephony*, Cambridge, for a more detailed explanation of floor and ceiling prices for multi-product firms. They note that *"The price-ceiling standard applies not only to the products of the firm considered one at a time, but to every combination of the services of the firm... the combinatorial stand alone price ceiling means that the prices of every combination of the firm's products must yield combined revenues not exceeding the corresponding stand-alone cost of the combination of products in question. Applied to the full set of products supplied by the firm,, this rule dictates that the firm's total revenue must not exceed its total costs."*

revenue.<sup>7</sup> Subsequently, AGLGN indicated that it agreed with I PART'S approach to determining subsidy-free revenue requirements,<sup>8</sup> and has presented an estimate of the stand-alone cost of meeting a contract demand of \$70m. Table 1 shows AGLGN's proposed annual contract revenues from 2000 to 2004. Contract revenues fall to \$70m by 2003.

**Table 1. AGLGN's revenue from contract customers (2000-2004)**

Year ending	:	:	:	:	:
Contract	:	:	:	:	\$

Source: AGLGN 1999, *Revised Access Arrangement Information for NSW Network*

10. Section 8.38 of the Code does not specify a floor or a ceiling for the allocation of joint and common costs. Therefore, to the extent that it is consistent with the objectives set out in section 8.1 of the Code, a Reference Tariff could include a zero, or very close to zero, component for joint and common costs.
11. Thus, assuming that AGLGN's estimates of total costs and stand-alone costs for contract customers are correct, it would appear that the contract revenue does not exceed the stand-alone ceiling, and that tariff revenue does not fall below the incremental cost floor. On that basis, AGLGN's tariffs would not necessarily involve a cross-subsidy.
12. In order to satisfy the objectives set out in section 8.1 of the Code, AGLGN must do more than merely establish that the proposed Reference Tariffs do not contain a cross-subsidy. AGLGN must also appropriately allocate joint and common costs in order to comply with its obligations under section 8.1 of the Code.

<sup>7</sup> AGL Gas Networks Limited, 1999, *Revised Access Arrangement Information for NSW Network*, pg 13.

<sup>8</sup> Ibid, pg 27

**The contestable market is the appropriate competitive market benchmark**

13. Paragraph 8.1 (b) of the Code specifies that one objective of the Reference Tariffs should be to replicate the outcomes of a competitive market. The appropriate competitive benchmark for a transmission facility such as that owned by AGLGN is a *contestable market*. Like perfect competition, prices are driven to costs, and economic efficiency is maximised in a contestable market. However, perfect competition cannot provide guidance as to what are reasonable prices in the case of AGLGN because AGLGN's cost structure exhibits scale economies and includes fixed costs. Under perfect competition it must be possible to recover costs by setting a single price available to all and which is equal to marginal cost. This condition does not hold for AGLGN's gas network.
14. In a contestable market, revenues are set above incremental costs in a manner which minimises efficiency losses. Consumers with more inelastic demands for access and usage contribute more to fixed costs. They may do so because the price they face at the margin exceeds marginal cost by more than it does for more price sensitive customers, and/or because they make a greater contribution through access and other inframarginal charges.<sup>9</sup>
15. Alignment of AGLGN's proposed Reference Tariffs with the contestable market benchmark would therefore ensure that the resultant prices satisfy paragraphs 8.1 (b), (d) and (e) of the Code.
16. In the following paragraphs we explain why AGLGN's current proposal is inconsistent with the contestable market benchmark and why it fails to satisfy the relevant objectives set out in section 8.1 of the Code.

**The Reference Tariffs are not consistent with the contestable benchmark**

17. In a contestable market, prices are set to minimise efficiency losses, with the result that consumers with more inelastic demands for access and usage contribute more to joint costs.

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<sup>9</sup> The classic example of contestability comes from Baumol, Bailey and Willig, 1977, *Weak Invisible Hand Theorems on the Sustainability of Prices in a Multi-product Monopoly*, American Economic Review, 67: 350-65. They model a natural monopoly where firms can only set linear prices (that is, prices can not vary with volume purchased). Free entry and exit result in supply by a single firm that earns no profit. Prices are set according to the Ramsey formula—they are marked up above marginal cost in proportion to consumers' demand elasticities so as to just recover the firm's costs.

Baumol et al (1977) show that under linear pricing, prices are set according to the Ramsay formula whereby the mark-up of prices over marginal cost is inversely proportional to demand elasticity.

18. AGLGN has not referred to demand elasticities in establishing its proposed Reference Tariffs. Indeed, the Reference Tariffs identify only two customer classes, contract and tariff, and allocate all the joint costs to the contract customers and none of the joint costs to the tariff customers. Thus, the proposed prices are at the extreme ends of the price range that can be set in this market without violating the stand-alone ceiling and incremental cost floor. It is highly unlikely that the characteristics of each customer group are such as to make this outcome efficient. For example, the linear price model formulated by Baumol *et al* (1977) would require that all of AGLGN's tariff customers have perfectly elastic demands and that all contract customers have perfectly inelastic demands.
  
19. The most recent published evidence that we are aware of which concerns demand elasticity for gas in Australia was produced by Australian Gas Association and ABARE in 1996.<sup>10</sup> Their estimates are shown in Table 2.

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<sup>10</sup> AGA/ABARE 1996, *Price Elasticities of Australian Energy Demand*, AGA Research Paper No3, September 1996.

**Table 2. AGA/ABARE estimates of gas demand elasticities**

	Short	Long
Industrial	-0.29	-0.30
Manufactur	-1.06	-1.06
Residential	-0.78	-0.78
Commercial	-0.09	-0.10

\*The initial estimates were based on a model which did not include manufacturing firms. However the authors note that the figure for industrial customers includes a wide range of industries, and AGA's estimate of own price elasticity of demand for gas in the manufacturing sector was -1.06.

It should be noted that there is some disagreement in the industry whether these values are robust. We have not been able to independently verify them, and do not warrant their reliability. However, there is broad acceptance that industrial and residential customers show some price elasticity. As a result, the allocation of joint and common costs in the Reference Tariffs is likely to be inefficient.

20. Given these elasticity estimates, the Reference Tariffs proposed by AGLGN cannot be said to be consistent with the objectives set out in section 8.1 of the Code. In particular, the allocation of joint and common costs in the Reference Tariffs is inconsistent with the outcome one would expect absent market power, as represented by a contestable market where, for example, efficiency would require that commercial customers, many of whom are in the tariffed customer class, bear the largest proportion of joint and common costs.

**The Reference Tariffs are likely to distort investment, contrary to section 8.1 (d) of the Code**

21. The proposed prices are inconsistent with section 8.1 (d) of the Code because they are likely to generate incorrect incentives for investment. The Reference Tariffs proposed by AGLGN are knife-edges with respect to investment. That is, there is a high risk that small errors in estimation will result in prices which encourage inefficient bypass, or discourage efficient investment in increased capacity. Thus, the proposed Reference Tariffs are likely to distort investment decisions in gas transport infrastructure and in upstream and downstream activities.

22. If the incremental cost to tariff customers is under-estimated, tariff customers will make inefficiently high use of the network — demand will be greater than would be expected under efficient pricing — and tariff customers will also inefficiently over-invest in downstream activities that depend on gas as an input. In addition, AGLGN may over-invest in capacity (if it continues to under-estimate the cost of meeting tariff customer demand).
23. If the price to contract customers is set so as to cover their stand-alone costs, contract customers are indifferent between investing in a new pipeline or purchasing from AGLGN. If any error is made and the price is set too high, inefficient bypass investment may take place, or at least customers will waste effort preparing to do so before AGLGN responds with lower contract prices. Contract customers will also under-invest in downstream activities when upstream prices are too high.
24. AGLGN's proposal will likely distort efficiency because no margin is allowed for measurement error. If the Reference Tariff proposed for tariff customers is based on an underestimate of actual costs, and/or an overestimate of actual demand, the tariff customers may fail to cover their incremental costs. For example, suppose:
- (a) there is a 50% chance of underestimating total incremental costs and a 50% chance of overestimating demand;
  - (b) the impact of underestimating costs and underestimating demand is just as likely to result in a net cost shortfall as in a net surplus, and similarly for an overestimate of cost and overestimate of demand; then
  - (c) in fully half of all realised outcomes incremental costs will not be covered. This is illustrated in Figure 1

**Figure 1. Outcomes in the event of mis-estimation of costs and demand**

		Total incremental cost estimates	
		Too high	Too low
D e	T o	50% under-	Under-recover
	T o	50% over- Over-recover	50% under- 50% over-

Shaded area indicate outcomes where the service provider would fail to recover their costs.

25. A more prudent strategy would require a contribution towards shared costs by tariff customers, reducing the expected efficiency losses associated with estimation errors.

**The Reference Tariffs are not consistent with section 8.42 of the Code**

26. 0

*It is not sufficient to establish that the proposed Reference Tariffs contain no cross-subsidy in order to show that they satisfy the objectives set out in section 8.1<sup>11</sup>*

27. IPART's statement suggests that, within the broad customer class definitions adopted by AGLGN, the Reference Tariffs do not contain a cross-subsidy. However, the reality is that it is likely that some tariff customers would face prices below incremental cost.<sup>12</sup>

28. Considerable heterogeneity exists within each customer class. For example, the tariff market covers residential gas users who use gas for heating, cooking and hot water as well as light industrial customers who use gas in their manufacturing processes. Contract customers include fertiliser manufacturers who use gas as a feedstock and hospitals which use gas for heating and

11 Section 8.1 of the New South Wales Third Party Access Code for Natural Gas Pipeline Systems which is substantially similar to section 8.1 of the National Third Party Access Code for Natural Gas Pipeline Systems.

12 The same argument does not apply in the case of stand-alone costs. Setting stand-alone costs for a group of customers is not likely to result in some individual customers paying more than their own stand-alone costs, because the stand-alone cost for a single customer is likely to be very high indeed.

hot water. The separation between tariff and contract customers is based on total gas use rather than customer type. These different types of customers can be expected to have:

- (a) different demand characteristics which result in differences in willingness to pay for gas and different demand elasticities; and
- (b) different incremental or directly attributable costs of service.

29. Hence, it is likely that some individual tariff customers would not cover their incremental costs even though the Reference Tariff might cover the incremental cost of tariff customers overall.

30. This would not satisfy section 8.42 of the Code because it could not be said that AGLGN has, *to the maximum extent technically and commercially reasonable*, attempted to design Reference Tariffs that recover a particular customer's share of total revenue in a manner which is consistent with the principles laid down in section 8.38 of the Code.

31. AGLGN's proposed Reference Tariffs are, to a limited extent, differentiated based on total consumption. However, there is no *a priori* reason why tariffs based upon size are efficient, since total energy consumption does not relate to willingness to pay.

**The Reference Tariffs are inconsistent with section 8.43 of the Code**

32. The foregoing analysis suggests that prices for some tariff customers are likely to be below incremental cost, and therefore could be said to be subsidised.

33. Section 8.43 of the Code allows Service Providers to offer prudent discounts if, and only if, the customer would not use the service if it were priced at the nearest Reference Tariff, or if the addition of the User would reduce the Reference Tariff. The Code allows for the difference in revenue between the prudent discount and the nearest Reference Tariff to be recovered from other customers if, and only if, the resultant Reference Tariffs are:

- (a) consistent with section 8.42 of the Code and I PART considers the Reference Tariffs to be *fair and reasonable*; or

- (b) consistent with section 8.38 of the Code and IPART considers the Reference Tariffs to be *fair and reasonable*.

34. It follows that AGLGN may only offer prices that are below the incremental costs of providing the service in very limited circumstances. Those circumstances are set out in section 8.43 of the Code.

35. In our view, AGLGN's pricing proposal for the tariff market does not satisfy the criteria in section 8.43 of the Code because:

- (a) AGLGN has not suggested that its proposed tariffs to contract or tariff customers are prudently discounted versions of an overarching Reference Tariff. Rather, AGLGN has presented uniform Reference Tariffs for each of these customer classes;
- (b) the proposed tariffs do not discriminate as to who gets below cost tariffs on social or any other grounds;
- (c) the resultant discounted tariffs could be economically inefficient, and therefore inconsistent with the objectives set out in section 8.1 of the Code; and
- (d) even if this were not the case, AGLGN would need to demonstrate that the discounts were justifiable by reference to the criteria in section 8.1.

36. Since AGLGN's pricing proposal for the tariff market does not satisfy the first requirement of section 8.43 of the Code (i.e., that the proposal is consistent with section 8.42 or 8.38 of the Code), the question of whether, in IPART's opinion, it is a *fair and reasonable* proposal should not arise for consideration.

37. Even if IPART were to err and decide that AGLGN's pricing proposal is consistent with section 8.42 or 8.43 of the Code, AGLGN's pricing proposal is not *fair and reasonable* for all the reasons set out above.

**Conclusion**

38 It follows that AGLGN's Reference Tariffs do not comply with sections 8.1, 8.38, 8.42 or 8.43 of the Code".

39. It also follows that IPART should not approve AGLGN's proposed Access Arrangement because the Access Arrangement is inconsistent with the criteria set out in section 2.24 of the Code. In our view, IPART's reasons for not approving AGLGN's Access Arrangement should be that the Access Arrangement:

- would not promote the economically efficient operation of AGLGN's network;
- would not be in the public interest, including the public interest in having competition in markets; and
- does not satisfy AGLGN's obligations under the Code.

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<sup>13</sup> In our view, AGLGN's Access Arrangement is subject to section 8 of the Third Party Access Code for Natural Gas Distribution Networks in New South Wales by virtue of paragraphs 3(4)(a) and (b) of *Gas Pipelines Access (New South Wales) /4cM998*, and not section 8 of the National Third Party Access Code for Natural Gas Pipeline Systems. In IPART's view, however, AGLGN's Access Arrangement is subject to section 8 of the National Third Party Access Code for Natural Gas Pipeline Systems.

**Appendix 3****Listing of comparative equity betas and dividends****Data sourced from Commonwealth Securities Web site**

<b>Sector</b>	<b>Sub-sector</b>	<b>ASX code of typical company</b>	<b>Beta 27Feb06</b>	<b>Sector dividend yield 27Feb06</b>
<b>All ordinaries</b>			<b>1.08</b>	<b>4.3</b>
<b>Consumer discretionary</b>	Automobiles and components	OEC	1.02	6.2
	consumer durables and apparel	GUD	1.75	5.3
	consumer services	TAH	0.93	4.3
	Media	PBL	1.51	4.5
	Retailing	HVN	1.18	4.6
<b>Consumer staples</b>	Food and drug retailing	WOW	0.62	3.8
	Food beverage and tobacco	LNN	0.58	4.3
<b>Energy</b>	Energy Equipment and services	HZN	<b>0.96</b>	<b>3</b>
	Oil and Gas	ORG		
<b>Financials ex property</b>	Banks	CBA	0.86	4.3
	Diversified financials - resources	BNB	1.19	3.5
	Diversified financials - holdings	SOL	1.19	3.5
	Insurance	AMP	1.58	4.2
<b>Property Trusts</b>	Investment trusts management and development	WDC	<b>1</b>	<b>6.9</b>
		CEQ	1	6.9

<b>Sector</b>	<b>Sub-sector</b>	<b>ASX code of typical company</b>	<b>Beta 27Feb06</b>	<b>Sector dividend yield 27Feb06</b>
<b>Health Care</b>	Equipment and services	SHL	1.19	2.8
	Pharma & Biotech	SIP	1.81	2.3
<b>Industrials</b>	Capital goods	COA	1.11	4
	Commercial services and supplies	BIL	1.11	4
	Transportation	ADZ	0.9	4.7
<b>Info Tech</b>	Software and services	CPU	1.82	4.6
	hardware and equipment	KYC	1.15	4.4
	Semiconductors	LGD	1.15	0
<b>Materials</b>			<b>1.39</b>	<b>3.1</b>
	Chemicals	ORI		
	Construction materials	ABC		
	Containers and packaging	AMC		
	Aluminium	AWC		
	Diversified metals and mining	BHP		
	Gold	NCM		
	Precious metals and minerals	ERA		
	Steel	BSL		
	paper and forest products	PPX		
<b>Telecommunications</b>			<b>0.44</b>	<b>5.7</b>
	Diversified	ENG		
	Wireless	HTA		
<b>Utilities</b>			<b>0.31</b>	<b>5.2</b>
	Electric	HDF		
	gas	ALN		
	Multi	SPN		
<b>Unclassified</b>		BQF	<b>1</b>	<b>6.9</b>