Access Arrangement for the Queensland Distribution Network

ENVESTRA LIMITED

DRAFT DECISION

RESPONSE

21 May 2001

TABLE OF CONTENTS

Section A – Summary of Key Issues ……………………………………………………………1
Section B – Detailed Responses to Proposed Amendments ……………………………………6
1. SERVICES POLICY..6
1.1 Envestra draft amendment E1 – Minimum One Year 6
1.2 Envestra draft amendment E2 – Disconnection Service 6
1.3 Envestra draft amendment E3 – Negotiated Service 7
1.4 Envestra draft amendment E4 – Separate Tariff Elements.................................... 7
2. TERMS AND CONDITIONS..8
2.1 Envestra draft amendment E5 – On a Reasonable Basis 8
2.2 Envestra draft amendment E6 – Credit Rating.. 9
2.3 Envestra draft amendment E7 – Interest on Security Held...................................10
2.4 Envestra draft amendment E8 – Service Quality..10
2.5 Envestra draft amendment E9 - Overruns 11
2.6 Envestra draft amendment E10 – Curtailment Priority 13
2.7 Envestra draft amendment E11 – Termination / Incorrect Bills...........................14
2.8 Envestra draft amendment E12 – Termination Notice..15
2.9 Envestra draft amendment E13 – Property Damage and Consequential Loss................16
2.10 Envestra draft amendment E14 – Indemnity..19
2.11 Envestra draft amendment E15 – Dispute Resolution.....................................20
3. TRADING POLICY...21
3.1 Envestra draft amendment E16 – Response Time..21
4. QUEUING POLICY...21
4.1 Envestra draft amendment E17 - Communication..21
5. EXTENSIONS AND EXPANSIONS POLICY...22
5.1 Envestra draft amendment E18 – Significant Extensions 22
6. REVIEW OF THE ACCESS ARRANGEMENT 23
6.1 Envestra draft amendment E19 – Review Date 23
7. REFERENCE TARIFF POLICY...24
7.1 Envestra draft amendment E20 – Trigger Mechanism..24
7.2 Envestra draft amendment E21 - Imposts 24
7.3 Envestra draft amendment E22 – Annual Reporting 25
8. REFERENCE TARIFF PRINCIPLES...25
8.1 Envestra draft amendment E23 – Fixed Principles...25
9. INITIAL CAPITAL BASE...26
9.1 Envestra draft amendment E24 - DORC...26
9.2 Envestra draft amendment E25 - ICB...28
10. ROLLING FORWARD THE CAPITAL BASE 29
10.1 Envestra draft amendment E26 – Capital Expenditure 29
10.2 Envestra draft amendment E27 – Redundant Capital.......................................30
10.3 Envestra draft amendment E28 - Depreciation...30
10.4 Envestra draft amendment E29 – Capital Base Calculation 30
11. RATE OF RETURN...32
11.1 Envestra draft amendment E30 – Post-tax nominal..32
11.2 Envestra draft amendment E31 – Risk free rate...33
11.3 Envestra draft amendment E32 – Market risk premium...................................33
11.4 Envestra draft amendment E33 – Equity Beta 33
11.5 Envestra draft amendment E34 – Cost of debt..34
11.6 Envestra draft amendment E35 – Dividend Imputation Rate 35
11.7 Envestra draft amendment E36 – Cost of tax 39
11.8 Envestra draft amendment E37 - Inflation..39
11.9 Envestra draft amendment E38 – Post-tax nominal WACC..............................40
12. NON CAPITAL COSTS 42

12.1 Envestra draft amendment E39 – Non-Capital Costs....42
12.2 Envestra draft amendment E40 - SUG....46
13. GAS DEMAND FORECASTS....46
13.1 Envestra draft amendment E41 – Gas Demand....46
14. REFERENCE TARIFFS AND PRICE PATHS....47
14.1 Envestra draft amendment E42 – Price constraints....47
14.2 Envestra draft amendment E43 – Tariff schedule....48

Attachment 1 Response to E25: Initial Capital Base – CRA Report
Attachment 2 Response to E25: Initial Capital Base – NECG Report
Attachment 3 Response to E39: Non-Capital Costs – PWC Report
Attachment 4 Response to E40: Non-Capital Costs – Envestra SUG Submission
Attachment 5 Response to E39: Non-Capital Costs – Supporting Documents
Attachment 6 Response to E39: Demand Forecast – Envestra Submission

SECTION A – SUMMARY OF KEY ISSUES

1. INTRODUCTION

On 22 March 2001, the Queensland Competition Authority issued its Draft Decision on the Access Arrangement submitted by Envestra in respect of its Queensland gas distribution network. While many of the amendments proposed by the QCA are accepted, albeit in some instances subject to clarification or modification, there are a number of amendments that Envestra cannot accept.

In all cases where Envestra has disagreed with proposed amendments, we have explained why we disagree and, where appropriate, offered an alternative for consideration by the QCA. In developing this response we have been mindful of the objectives of the *Gas Pipelines Access (Queensland) Act 1998* and specifically the National Third Party Access Code for Natural Gas Pipeline Systems (the Code).

We demonstrate in this submission that implementation of the Draft Decision proposed by the QCA would not encourage the extension of our networks in Queensland and, more importantly, is likely to impede the ability of Envestra to meet the changing needs of the market and to grow the business. The Draft Decision will need to be modified to meet the QCA's objectives of balancing the needs of the Services Provider and Network Users.

2. DOES THE DRAFT DECISION SATISFY THE QCA'S CRITERIA?

The Draft Decision would reduce Envestra's proposed revenue over the period of the Access Arrangement. For example, in 2005/6, revenue is proposed to be reduced from $37.4m p.a to $32.3m p.a (a 16% reduction). In proposing this reduction, the QCA stated in its letter dated 22 March 2001:

> *"In considering all of the information, the Authority has attempted to balance the interests of the service providers and users to achieve an efficient and equitable outcome. In particular, the Authority is cognisant of the need for service providers to achieve a reasonable return on their investment while retaining sufficient flexibility to meet the changing needs of the market. At the same time, the Authority recognises that consumers will be seeking to pay no more than the efficient costs of operating the gas distribution networks."*

While Envestra accepts that consumers will be seeking to pay no more than the efficient costs of operating the network, we do not accept that:

1. the price paths proposed by the QCA will provide a reasonable return on investment;
2. the parameters of the Draft Decision provide sufficient flexibility to meet the changing needs of the market.

These two issues are addressed in turn below.

2.1 Return on Investment

2.1.1 Implementation of the Draft Decision will make Queensland the least attractive place to invest in gas distribution networks in Australia

The QCA has proposed a post-tax nominal rate of return of 9.26% for Envestra's Queensland distribution assets. Adoption of this WACC would make Queensland the least attractive location in Australia to invest in gas distribution infrastructure. The table below demonstrates that the Draft Decision provides the lowest WACC and the lowest return on equity determined to date for any Australian gas distribution business. The Draft Decision provides Envestra with a nominal post-tax return on equity of between 90 and 210 basis points lower than any other Regulator has proposed. Similarly, the equivalent pre-tax WACC is between 50 and 110 basis points lower than other regulatory decisions.

Regulator & Decision	Date	Regulated Business	Nominal Post-Tax Return on Equity	Real Pre-Tax WACC
QCA Draft	March 2001	Envestra & Allgas	11.1% [1]	7.0% [2]
IPART Final	July 2000	AGLGN	12.0%	7.75%
OffGAR Final	June 2000	AlintaGas	12.7%	7.5%
SAIPAR Draft	April 2000	Envestra	13.4% [3]	8.1%
ORG Final	Nov. 1998	Stratus Networks	13.2%	7.75%

[1] Derived from the Draft Decision using the standard CAPM of $R_e = R_f + \beta_e(R_m - R_f)$

[2] Mid-point under the forward and reverse transformations

[3] SAIPAR did not quote an asset beta or an equity beta in its Draft Decision. The values for asset and equity beta used were from the paper prepared by K Davis, *The Weighted Average Cost of Capital for Access Arrangements for Envestra, A Report prepared for the South Australian Independent Pricing and Access Regulator (SAIPAR), October 1999*

2.1.2 *The Queensland gas market is more risky, implying returns should be higher than elsewhere*

The characteristics of the Queensland gas market, combined with the recommendations in the Draft Decision, result in market risks for gas distribution in Queensland being higher than in any other State in which Envestra can invest.

- **The investment environment is fundamentally more risky**
  With a low penetration rate, a lack of demand for space heating, stiff competition from electricity and LPG and a generally low public awareness of natural gas, Queensland is an inherently riskier location to invest in natural gas infrastructure relative to other parts of Australia. It is therefore reasonable for investors such as Envestra to expect a higher rate of return. The QCA does not appear to have recognised this in the Draft Decision as it has provided Envestra and Allgas with an equity beta of 0.97 (a measure of risk). This is lower than that approved by the ORG (1.2) and OffGar (1.08) and below the mid point of that proposed by IPART (0.9 to 1.1) notwithstanding the fact that risk in Queensland is higher than in the other jurisdictions.

- **There is a higher risk that Envestra will be unable to recover its target revenue**
  The demand forecasts determined by the QCA in the Draft Decision are aggressive and unlikely to be achieved. Consequently, Reference Tariffs derived using the Draft Decision demand forecasts are unlikely to recover the target revenue. This increases investment risk. Moreover, unachievable demand forecasts will result in a reduced rate of return earned by Envestra on it's existing distribution assets, below the already low WACC. This further decreases the attractiveness of investing in Queensland.

2.1.3 The Draft Decision will not enable Envestra to earn a reasonable return on investment

The QCA does not appear to have taken into account the fundamental impact of low average consumption levels and low penetration rates on returns on investment.

The effect of these factors is demonstrated clearly below by calculating gross annual returns from a hypothetical network extension supplying domestic consumers in Queensland and comparing them with the returns that could be earned from investing in Victoria in an equivalent sized extension.

Key assumptions are:

Initial investment	$1m
Number of potential consumers	400
Penetration rate in Queensland	50% [1]
Penetration rate in Victoria	95%
Annual average consumption in Queensland	14 GJ [2]
Annual average consumption in Victoria	55 GJ

It is assumed that the average network charge in Victoria is $5 per gigajoule. Total annual revenue generated from the extension in Victoria would be $104,500, producing a return on investment of 10.4%.

The Draft Decision proposes (p. 254) that the average network charge for domestic consumers in Queensland range from $12.10/GJ in year 1 to $15.50/GJ in year 5. These charges would generate revenue from the hypothetical extension in Queensland of about one third of that generated from the equivalent extension in Victoria. Return on investment in Queensland would be an unacceptable 3.5% in the first year of the Access Arrangement. Even in year 5 of the Access Arrangement, the charges proposed by the QCA are well below those required to give parity of returns with Victoria (4.3% return for Queensland compared with 10.4% for Victoria).

2.1.4 Network tariffs must provide appropriate investment incentives

In balancing the needs of Service Providers and Users, the QCA is required to ensure that network tariffs will encourage investment. A recent Productivity Commission report "Review of the National Access Regime" highlighted the need to ensure that regulatory decisions encourage appropriate investment. The Commission concluded (p xix) that the costs of inappropriate intervention to reduce monopoly prices is likely to be greater than the costs of not intervening when action is warranted if the determination reduced the incentive to maintain existing infrastructure or provide new services.

It has been demonstrated above that the network tariffs proposed by the Draft Decision will diminish the incentive for Envestra to invest in Queensland, especially investment in extending the network into new areas. This will result in potential consumers being denied access to natural gas. It will also discourage increased network utilisation, the most effective means of reducing prices to consumers in the longer term.

---

[1] This penetration rate is higher than the network average due to a higher percentage of homes in new developments being connected to gas, as a result of network marketing programmes.

[2] Assumed average consumption of 14GJ pa is higher than the network average of 10.5 GJ as the number of appliances per connection is typically higher in new developments.

2.2 Flexibility to meet changing needs of the market

The most significant change in Envestra's part of the Queensland natural gas market in recent years has been the conversion of the network from towns gas to natural gas. Conversion was completed at the end of 1996. The key changes resulting from conversion are:

- System Use Gas (SUG) has increased due to the drying out of joints in cast iron pipe, the doubling of heating value and increased average network pressures;

- access to natural gas has provided opportunities to offer a more attractive fuel to consumers and to increase gas usage.

The conversion of the network to natural gas has provided the potential to further develop the Queensland network and to increase the number of consumers. This will enable network utilisation to increase, bringing benefits to consumers through reduced prices. However, to fully realise this potential, it will be necessary for Envestra to:

- continue to invest to reduce SUG. This investment was not necessary prior to conversion. The benefit of the investment will be reduced operating costs;
- promote awareness in the community that natural gas is available and that it is a superior product to the towns gas previously distributed and to electricity and LPG. Continuing programs to increase natural gas awareness will be necessary to increase gas usage.

These initiatives formed an integral component of Envestra's Access Arrangement proposal, being the centrepiece of a strategy to improve the operational performance of the network and to increase utilisation of the assets. However, the QCA has proposed that expenditure on these programs be reduced significantly. By cutting funding to these programs, the QCA will significantly reduce the capacity of Envestra and therefore of consumers, to benefit from the changing market.

2.3 Overall Assessment of the Draft Decision

The Draft Decision does not satisfy the criteria specified by the QCA as being necessary to balance the interests of Service Providers and Users. Specifically, it will not:

- provide sufficient incentive for Envestra to invest in natural gas infrastructure in Queensland.
- allow Envestra to meet the challenges of the natural gas market in Queensland, which is relatively immature by national standards.

3. REQUIRED CHANGES TO THE DRAFT DECISION

To satisfy the criteria set by the QCA, the Draft Decision must be amended. Key modifications required are summarised below with further detail provided in Section B of the response:

- The DORC valuation needs to be increased to recognise the residual value of system assets and new entrant replacement value (see expert opinions prepared by Charles River Associates (Asia Pacific) Pty Ltd and Network Economics Consulting Group). The approach used by the QCA in determining DORC is technically incorrect, inconsistent with the Code requirements for depreciation (section 8.33) and inconsistent with asset valuation approaches used by other Regulators;

- WACC must be increased to more accurately reflect the greater risks posed by the Queensland natural gas market relative to all other markets. Taking into account the specific risks from investing in the Queensland market, Envestra suggests that the post-tax nominal WACC should be increased from 9.26% to within the range of 9.4% to 9.8% (see response to amendment E38);
- Capital expenditure required for the mains replacement program must be approved and added to the regulatory asset base to reflect refurbishment of the system. These assets need to be replaced because they have outlived their economic life. In addition, both the growth and replacement programs have been demonstrated to satisfy the economic test in section 8.16 of the Code (see response to E26);
- Setting SUG targets in percentage terms is a nonsense. The target should be reviewed and expressed in terms of gigajoules per kilometre rather than as a percentage of throughput and an appropriate benchmark set for the Queensland network. We suggest 195 GJ/km (see response to E40 and the expert opinion provided by PricewaterhouseCoopers);
- Network marketing costs must be increased to reflect marketing needs in Queensland as proposed by Envestra in its proposed Access Arrangement (see response to E40 and the expert opinion provided by PricewaterhouseCoopers);
- The Non-Capital Cost (excluding SUG) reductions proposed in the Draft Decision must be modified to take into account Envestra's comments provided to UMS and the QCA. Specifically, the QCA must ensure that where benchmarking of Non-capital Costs is used it is applied strictly on a like-for-like basis (see response to E39);
- Demand forecasts must be reduced from those proposed by the QCA to reflect the different economic conditions prevailing in the area served by Envestra's covered distribution network relative to the rest of Queensland. Our response to E41 identifies an appropriate range of forecasts that are consistent with the microeconomic drivers of gas demand in the network;
- Reference Tariffs and price paths need to be recalculated to reflect the above amendments.

Envestra's detailed response to each of the QCA's recommendations follows in section B.

SECTION B: DETAILED RESPONSES TO PROPOSED AMENDMENTS

1. SERVICES POLICY

1.1 Envestra draft amendment E1 – Minimum One Year

In order for the Envestra access arrangement to be approved, the Authority requires Envestra to remove the minimum contractual requirement of one year for demand customers.

➢ *Not accepted*

The Demand Reference Tariffs have been designed to recover revenue based on Delivery Point MDQs. These MDQs have been based on the assumption that Demand consumers will contract for a MDQ which is reflective of the maximum daily consumption of gas over a 12 month period, and which takes into account any seasonal fluctuations. Total revenue has been calculated on this basis, ie that end-users will contract for their peak annual demand, not for example, on a peak monthly demand basis. To alter this fundamental assumption will decrease total revenue and require new (higher) Reference Tariffs to be calculated.

For example, with no minimum term, a manufacturing plant with high seasonal production could contract for a high MDQ for three months of the year and a low MDQ for the remainder of the year, despite having network assets dedicated to supplying the higher MDQ for twelve months of the year. This will have the effect of reducing revenue from such consumers, requiring the revenue shortfall to be recouped from other Demand consumers. This will unfairly penalise those Demand consumers with a flat load profile who are making more efficient use of the network.

To avoid the above situation, and to satisfy the QCA's concerns, Envestra would be prepared to adopt Allgas' approach whereby no minimum term is stipulated, but Envestra will agree the MDQ with the Network User. For end-users with demand history, the agreed MDQ will be the highest MDQ in the previous year unless agreed otherwise.

Notwithstanding the above, it is Envestra's experience that Demand consumers wish to enter into contract arrangements for periods greater than 12 months, in order to secure better retail pricing and certainty of costs. In order to provide a Reference Service, Envestra contends that it must cater for the majority of service requests, as required by the Code. A Network User that wishes to contract for less than 12 months will always be able to obtain a Negotiated Service.

1.2 Envestra draft amendment E2 – Disconnection Service

In order for the Envestra access arrangement to be approved, the Authority requires Envestra to include disconnection and reconnection services as utility reference services. The proposed charges for these services will be further considered by the Authority once submitted.

➢ *Not accepted*

Envestra has not included the above services, as they are not likely to be sought by a significant part of the market, if at all. Records suggest that only one service disconnection for non-payment has been carried out in the last eight years. On this basis, Envestra disagrees with the QCA that the services should be included as Reference Services. It may be that the QCA is referring to "disconnection" and "reconnection" in a retail sense, ie "turning-off" and "turning-on" a consumer's gas supply at the meter, as a consequence of a customer defaulting on

payments to a retailer. Envestra is not involved in this activity – it is being performed by the relevant retailer. The disconnection of a service, from Envestra's perspective, involves excavation work in the road or footpath to uncover the connection point of the inlet to the gas main. Once gas flow to the inlet has been stopped, the excavation is filled in, compacted and reinstated according to its location and other factors (eg if indications are that reconnection may not take place for some time, and the main is in a roadway, bitumen reinstatement would have to be completed). Because of the work and consequent cost involved in effecting such a disconnection, requests for this service are not common, since the costs would eventually need to be recovered from the delinquent customer.

1.3 Envestra draft amendment E3 – Negotiated Service

In order for the Envestra access arrangement to be approved, provisions for negotiated services are required to be included in the services policy.

- ***Accepted***

Envestra did not include a specific provision for negotiated services in its Access Arrangement as it believes such a provision to be unnecessary. Nothing prevents Envestra and another party negotiating agreements outside the Access Arrangement, and Envestra does not see the inclusion of provisions for a negotiated service as enhancing prospects for negotiating agreements. Nevertheless, Envestra proposes to satisfy the QCA's concerns by adding the following new paragraph 2.4 in the Access Arrangement (in addition to other consequential amendments):

> *2.4 Negotiated Services*
>
> *Any Network User or Prospective Network User may request Envestra to provide a Negotiated Service. A Negotiated Service is a Network Service that is different or priced differently from the Haulage Reference Services and the Utility Reference Services.*
>
> *The terms and conditions on which Envestra will provide Negotiated Services will be the same as the terms and conditions referred to in section 4, where Envestra determines that those terms and conditions are appropriate and applicable to the Negotiated Service requested by the Network User or Prospective Network User.*

1.4 Envestra draft amendment E4 – Separate Tariff Elements

In order for the Envestra access arrangement to be approved, the services policy must be amended to provide for users to be able to obtain a separate tariff for an element of any service as defined in the services policy.

- ***Already compliant***

Envestra's Access Arrangement already contains this provision in section 2.1. It may be that the QCA has not recognised that a 'Network Service' is a "Service provided by means of the Network" as defined in the glossary in section 10 of the Access Arrangement. The term "Service" is as defined in the Code. (Section 1.3 states that "unless otherwise defined in this Access Arrangement, terms used have the same meaning as they have in the Code".) It follows therefore that a Network User can obtain a separate tariff for an element of any service, as required by the QCA.

2. TERMS AND CONDITIONS

2.1 Envestra draft amendment E5 – On a Reasonable Basis

In order for the Envestra access arrangement to be approved, Envestra should replace the formulations:

- **in sections 5.5, 9.4, 9.8, 10.7, 12.1, 19.2, 21.2, 21.4 and 21.5 of the terms and conditions "…on whatever basis Envestra considers reasonable…"; and**
- **in section 16.4 "…in good faith…";**

with "…on a reasonable basis…".

➢ ***Accepted***

The respective clauses are amended as follows:

5.5 Quantities Received

Envestra may determine the Quantity of Gas delivered through each Network User Receipt Point by or for the account of the Network User on ~~whatever~~a reasonable basis, ~~Envestra considers reasonable~~ from time to time.

9.4 Form of Request

Whenever the Network User wishes to request Envestra to test the Metering Equipment at or from a Network User Delivery Point, the Network User must give Envestra whatever forms, documents and information Envestra reasonably requires.

9.8 Basis for Corrections

If Envestra is required by the Agreement to correct previous readings taken from any Metering Equipment, Envestra will make those corrections on ~~whatever~~a reasonable basis ~~it considers reasonable in the circumstances~~. The corrections will bind the Network User in the absence of manifest error.

10.7 No Measurements

If the Volume of Gas delivered at any Delivery Point during any period is not measured by the Metering Equipment at that Delivery Point for any reason whatsoever, Envestra may estimate the Volume of Gas delivered at that Delivery Point during that period on ~~whatever~~a reasonable basis ~~Envestra considers reasonable~~ in the circumstances.

12.1 Receipt Pressure

The Network User will ensure that Gas delivered at any Receipt Point by or for the account of the Network User is delivered at a pressure which is within the limits specified for that Receipt Point from time to time, as reasonably determined by Envestra. ~~by notice given to the User.~~Envestra shall give reasonable notice to the Network User in the case of changes to pressure limits.

16.4 Categorisation of Delivery Points

For the purposes of clause 16.3, Envestra will determine, ~~in good faith~~on a reasonable basis, into which category any particular Delivery Point falls, based on its actual knowledge of the Delivery Point. Envestra's determination will bind the Network User.

19.2 First Payment

On execution of the Agreement, the Network User will pay Envestra an amount equal to the Charges which Envestra reasonably estimates are likely to become payable by the Network User in respect of the period commencing on the Start Date and ending on the last day of the second calendar month to end after the Start Date. (For example, if the Start Date is in June, the Charges will be for the period up until the end of July.)

21.2 Meter Reading

If the Metering Equipment ……

> ***GHV*** *is the Gross Heating Value of Gas in the Network during that month, determined from time to time in accordance with procedures approved by the Technical Regulator, or if there are no approved procedures at the relevant time, on ~~whatever~~a reasonable basis~~ Envestra considers reasonable~~.*

21.4 No Meter Reading

If no reading was taken from the Metering Equipment at a Delivery Point during the month to which an invoice relates or if a reading was taken prior to the last day of that month, Envestra may estimate the Quantity of Gas delivered through that Delivery Point during that month (or, if the Metering Equipment was read prior to the end of that month, in the period since the last meter reading) on ~~whatever~~a reasonable basis~~ Envestra considers reasonable~~.

21.5 Allocation of Deliveries

If Envestra delivers Gas to any Delivery Point during any period for the account of the Network User and for the account of someone other than the Network User, then Envestra may determine on a reasonable basis at which times it delivered Gas for the account of the Network User and at which times it delivered Gas for the account of the other person~~, on whatever basis Envestra considers reasonable~~.

2.2 Envestra draft amendment E6 – Credit Rating

In order for the Envestra access arrangement to be approved, Envestra must replace section 4.3(e) and 4.3(f) of the access arrangement, together with associated explanations in section 4.3 of what constitutes an acceptable credit rating and how it might be altered, with words to the following effect:

"(e) The network user must demonstrate to the reasonable satisfaction of Envestra the user's ability to meet all financial obligations under the agreement."

- ***Accepted***

2.3 Envestra draft amendment E7 – Interest on Security Held
In order for the Envestra access arrangement to be approved, Envestra must insert a requirement in section 19 of the terms and conditions that Envestra will credit users on their regular account with interest on the security held, with the interest rate equal to the quoted rate for 90 day bills for the last day of the previous quarter.

➢ ***Not Accepted***

Envestra does not hold security. Section 19 applies the same principles contained in Envestra's current haulage agreements with several retailers. This involves invoicing the Network User in advance, based on estimated deliveries. In the four to five weeks following the advance payment, Envestra renders a haulage service to the Network User, to which the payment is applied. The value of the 'advance' payment therefore diminishes over the monthly billing cycle, with reconciliation being undertaken in subsequent months as meter readings become available. The advantage of a pre-payment system is that it removes the need for Envestra to obtain a security deposit or to require more stringent credit ratings as pre-requisites for an agreement.

2.4 Envestra draft amendment E8 – Service Quality
In order for the Envestra access arrangement to be approved, it must:
(a) amend section 5.3 of the terms and conditions so that Envestra will have an obligation to maintain the network in accordance with good engineering and industry practices; and
(b) amend section 5.6 of the terms and conditions to the effect that Envestra must not connect a new delivery point to the network unless the system has sufficient capacity to sustain that end user.

➢ ***Part (a) accepted in principle***

Envestra accepts the obligation to maintain the network as described, but believes the obligation is better placed in clause 2.4 of the Access Arrangement, Network Service Standards, as follows:

> *2.4 Network Service Standards*
>
> *Envestra will provide each Network Service, including each Reference Service, in accordance with and subject to the requirements of any Distribution Licence or applicable law and in accordance with good engineering and industry practice.*

➢ ***Part (b) already compliant***

Clause 5.6 already satisfies the requirement stated. However, it appears that the QCA is of the view that Envestra may have too much discretion in relation to the requirement. Envestra therefore proposes to amend the clause as follows:

> *Envestra must not connect a new Delivery Point to the Network if ~~Envestra believes~~it is apparent that, under 'normal conditions' and as a consequence of connecting that new Delivery Point, there will be insufficient Capacity in the Network to meet the anticipated demand for Gas at any Network User Delivery Point. 'Normal conditions' here means those conditions which normally occur in the Network when taking into account daily, weekly and seasonal influences.*

2.5 Envestra draft amendment E9 - Overruns

In order for the Envestra access arrangement to be approved, Envestra must:

(a) amend sections 6.4, 6.5 and 6.6 of the terms and conditions to the effect that an increase in MDQ will occur should an end user's actual demand exceed its MDQ on four days in any period of 30 days or 10 days in any period of 12 months;

(b) delete sections 7.5 and 7.6 of the terms and conditions regarding penalties relating to one twelfth of MDQ; and

(c) delete sections 6.2 and 7.2 of the terms and conditions, relating to overrun charges.

➢ ***Part (a) not accepted***

The QCA has not provided any sound basis for the increase in threshold from 8 to 10 days in any period of 12 months, but merely states that "the QCA considers adequate signals …would be provided by a considerably higher threshold …than has been proposed by the service providers".

It appears that the QCA may have taken into consideration IPART's approval of the 10 day threshold in relation to Great Southern Energy Gas Networks' Access Arrangement. However, this was accompanied by a monthly threshold of 2 days, compared with the 4 days proposed by Envestra. On balance, Envestra's threshold levels are therefore not only appropriate, but more reasonable, since it is more likely that a consumer's overruns would be concentrated within a particular month as a result of higher than normal production levels (due to seasonal or other factors).

Ergon Energy raised a concern that increases in MDQ could be triggered if "over a four hour period there was a problem, such as a gas leak or equipment fault". While Envestra considers such an event unlikely, Envestra has no intention of applying the trigger mechanism to cases of "force majeure". Nevertheless, to avoid such a problem, the QCA has recommended (p57 of Draft Decision) that:

Where MHQ is used to measure usage, overruns in MHQ will need to be on separate days to trigger an increase in the maximum agreed amount.

In the event of multiple hourly overruns in one day, Envestra's intention in the Access Arrangement was for the highest hourly overrun only to be considered. This in effect reflects the QCA's view. To clarify this in the terms and conditions, Envestra proposes to amend clause 7.1 as follows:

> ***7.1 Telemetered Delivery Points***
> *Whenever the Quantity of Gas delivered through any Telemetered Delivery Point during any period of 60 minutes exceeds one twelfth of the MDQ for that Delivery Point, the Network User will pay Envestra an hourly overrun charge in accordance with this section. Where there is more than one hourly overrun in one Network Day, an overrun charge shall only be applied in respect of the highest hourly overrun.*

➢ ***Part (b) not accepted***

It is imperative that Network Users understand that the overrun charges proposed by Envestra are not a ‘penalty’, as described by the QCA, but a payment towards the provision of a service provided that is higher than the service contracted for. Had the Network User initially contracted the higher capacity utilised, even on a short-term basis, the cost to the Network User would be much higher.

For example, a consumer in the Brisbane Region with an annual usage of about 50 TJ (MDQ of approximately 230 GJ) that overruns on a particular day by 15% would incur an overrun charge of $385, equivalent to 0.2% of an annual charge of $176,000. The overrun charge paid by the consumer would equate to that consumer having contracted the required capacity for 8 days. This compares with an annual charge of $193,000 had the required capacity been contracted for the entire year.

Distribution networks are designed to handle maximum hourly demand and have negligible linepack. Consequently, it is important to retain pricing signals that reflect the cost drivers of the network. While this implies that tariffs should be based on MHQ alone, Envestra has decided to opt for tariffs based on MDQ, as Network Users are more familiar with this concept (MDQ is used in relation to transmission pipelines, where linepack can be substantial). Therefore, while tariffs are based on MDQ, a relationship must be maintained between hourly and daily demand if a distribution network is to be efficiently and prudently managed.

Without this link, cross-subsidisation between consumers will occur, ie those with flatter profiles subsidising those with peaky profiles. For example, take two consumers with identical MDQs, but one uses the contracted capacity over 16 hours and the other over 8 hours. It is feasible that the latter will require larger pipework and a meter station double the capacity of the former, and yet still pay the same tariff.

Envestra submits that maintaining the relationship between MHQ and MDQ encourages efficiency and cost reflectivity and is consistent with the aims of the Code.

➢ ***Part (c) not accepted***

The QCA considers that overrun charges are not required as an incentive to ensure consumers don’t underestimate their capacity requirements. Envestra disagrees with this view. The secondary purpose of overrun charges is to ensure that consumers have an incentive to keep within their contracted capacity entitlements, once the latter are in place (see above example). If the QCA believes that the other clauses relating to threshold changes in MDQ provide sufficient incentive for consumers to not exceed their contracted capacity, then the QCA must agree that the frequency of overrun penalties will be rare, in which case the QCA should not be overly concerned with the imposition of overrun charges. If Envestra is to prudently manage its network, it is obliged to consider measures which ensure appropriate use of network capacity. The very small number of Demand consumers account for the majority of gas throughput in the network, and to allow regular instances of unrestrained usage beyond that contracted and for which the network is designed may result in network supply problems. (It would also be difficult for Envestra to meet the requirements sought by the QCA in E8(b) without adequate control of overall network capacity).

The QCA’s decision that there should be no overrun charges is inconsistent with commercial practice in existence prior to the introduction of the Code, and which has been recognised by other Regulators in approving access arrangements for the:

- NSW network
- Wagga Wagga network
- Moomba to Sydney Pipeline

- Moomba to Adelaide Pipeline
- Central West Pipeline; and
- ACT, Queanbeyan and Yarrowlumla network.

Envestra strongly believes that

- it would be imprudent to not have measures in place to avoid such potential problems;
- consumers should pay for their use of uncontracted capacity; and
- the removal of overrun charges will cause consumers to under-state their real capacity requirements, in the knowledge that additional free capacity is available on a regular basis. As a consequence of this, Envestra would need to revisit the Demand Reference Tariffs to ensure that the required revenue from this market is maintained.

The QCA incorrectly ascertains (p58 of Draft Decision) that:

> *"it is theoretically possible that users may have sufficient control over gas use to cause overruns on a specific number of days, to avoid an increase in their MDQ and that a penalty charge could be required to prevent this occurring. However, this must be considered unlikely, especially given gas use is actually determined by end-users (consumers), rather than the retailers."*

Envestra submits that retailers would pass on to end-users the terms and conditions relevant to overrun charges, and that end-users would be required to be accountable for their contracted capacity.

2.6 Envestra draft amendment E10 – Curtailment Priority

In order for the Envestra access arrangement to be approved, it must insert in the final paragraph in section 16.3 of the terms and conditions to the effect that retailers and customers within each priority class will be treated equitably when considering curtailment.

➢ ***Partly accepted***

Envestra accepts that retailers must be treated equitably, but it may be necessary to treat customers within a priority class differently, for example where medical illness or condition is a factor. Envestra proposes to amend clause 16.3 as follows:

> *Where two or more Delivery Points fall within a particular category specified in this clause, Envestra may interrupt or curtail deliveries to those Delivery Points in such order as Envestra determines having regard to the relevant circumstances, but Envestra will not select which Delivery Point to curtail or interrupt based on the identity of the Network User.*

2.7 Envestra draft amendment E11 – Termination / Incorrect Bills

In order for the Envestra access arrangement to be approved, it will need to amend section 23 of the terms and conditions so that:

(a) if payment has not been made by the due date, Envestra will issue a written notice requiring the user to pay the amount calculated by Envestra as being due within seven days. If the amount due has not been paid within the seven days allowed, Envestra may then suspend services or terminate the contract; and

(b) Envestra will pay interest to the user on amounts found to be incorrectly billed, calculated and paid on the same basis as set out in section 23.1 of the terms and conditions.

- ***Part (a) accepted***

Envestra proposes to amend clause 23.3 of the terms and conditions as follows:

23.3 Right to Suspend Services

If the Network User does not pay any amount due to Envestra under the Agreement, or under any Related Haulage Agreement, by the due date, then Envestra will issue a written notice advising the Network User that unless the Network User pays the amounts due within seven days, then Envestra may cease delivering Gas through any Delivery Point to or for the account of the Network User, and may cease performing any of its other obligations under the Agreement, until such time as the Network User has paid in full all unpaid amounts due to Envestra together with any interest accrued on those amounts.

- ***Part (b) not accepted***

The QCA's proposal is to implement the same 'penalty' (section 23.1) for defaulting on payment to amounts that might be billed in error. Envestra believes the proposal not only to be unnecessary, but neither fair nor reasonable. Envestra also does not accept the QCA's proposal on the following grounds:

(a) The proposal ignores the reality of the billing process, which is based upon a continual process of estimation and reconciliation in combination with actual meter reading data. Because the majority of meters are only read every three months, there is a continual process of billing reconciliation. Consequently, it is not foreseeable that 'incorrect billing', as envisaged by the QCA, can occur. The QCA believes that its proposal will act as an incentive to Envestra to ensure its billing is accurate, but as explained, the proposal will not have the intended effect.

(b) Billing information will continually flow from Envestra to Network Users, as the information is required in order for Network Users to bill their customers. This same information will be used in determining monthly haulage charges, and therefore Network Users will essentially have access to the same information as Envestra in respect to their invoices. An incentive as proposed by the QCA is only appropriate where significant information asymmetry exists between two parties.

(c) No public submissions have been received in relation to this issue. The QCA has not identified any real need for its proposal, or evidence suggesting that billing of Network Users is prone to errors, let alone errors that only favour the Service Provider; and

(d) The QCA's proposal is one-sided in that it does not propose that should a computer-generated error, for instance, result in an under-payment by the Network User, the latter is not required to pay interest on the amount of underpayment.

It is also understood that the QCA may be concerned that, in the event of a dispute, payments might continue to be made to Envestra that might subsequently, once the dispute is resolved (which may be before or after invoking the dispute resolution procedure), be deemed to be over-payments, and that perhaps interest should be payable on such over-payments. However, once the dispute is resolved, this would necessarily be resolved to the satisfaction of both parties, which may involve the payment of interest.

2.8 Envestra draft amendment E12 – Termination Notice

In order for the Envestra access arrangement to be approved, it must:

(a) amend section 24.2(a) of the terms and conditions, to the effect that if payment has not been made by the due date, Envestra will issue a written notice requiring the user to pay the amount calculated by Envestra as being due. If the amount due has not been paid by the expiry of that seven days, Envestra may then terminate the contract;

(b) amend section 24.2(b) of the terms and conditions, to the effect that Envestra may terminate the agreement if the user does not remedy a fault to the reasonable satisfaction of Envestra; and

(c) delete section 24.2(e) of the terms and conditions, relating to Envestra terminating the agreement in the event there is a material change in the ability of the network user to comply with its obligations under the agreement.

➢ ***Part (a) already compliant***

Clause 24.2(a) already contains this requirement, ie "Envestra may terminate the Agreement by seven days' notice given to the Network User at any time, in the event that the Network User fails to pay …".

➢ ***Part (b) accepted***

Envestra will amend 24.2(b) as follows:

"the Network User breaches any other obligation under or in relation to the Agreement or any Related Haulage Agreement and, where that breach can be remedied, fails to remedy that breach to the reasonable satisfaction of Envestra within 14 days after it receives notice of that breach"

➢ ***Part (c) not accepted***

The QCA's proposal is inconsistent with the pre-requisites for an agreement, as accepted by the QCA, ie draft amendment E6:

"the network user must demonstrate to the reasonable satisfaction of Envestra the user's ability to meet all financial obligations under the agreement".

By default, if there is a material change in the Network User's ability to meet all financial obligations under the agreement, it stands to reason that Envestra must retain the right to terminate the agreement. Furthermore, Envestra would not be fulfilling its fiduciary obligations if it continued trading with an entity in circumstances where it was apparent that the entity cannot meet its ongoing financial obligations.

It is also important to note that:

- the clause says that Envestra "may terminate" and not "shall terminate";
- the clause refers to a "material change in the ability of the Network User to comply with obligations" as distinct from a material change in credit rating or financial status.

It is not in Envestra's interests to discontinue an agreement where it is apparent that a Network User will be able to meet its financial obligations, and any decision to terminate would not be taken lightly. It is likely that such a decision would be taken in consultation with and in cooperation with the retail licensing authority, to enable retailer of last resort actions to be implemented.

Envestra contends that it is not fair and reasonable to expect the Company to continue an agreement with a party that cannot fulfil its obligations, and objects strongly to such a commercially unsatisfactory proposal. Any costs which Envestra does not recover from an insolvent Network User would eventually be borne by other Network Users. This is neither fair nor reasonable on those Network Users.

2.9 Envestra draft amendment E13 – Property Damage and Consequential Loss

In order for the Envestra access arrangement to be approved, it must amend section 25 of the terms and conditions to the effect that:

(a) Envestra would be required to make good or pay compensation to an equivalent value for damage to property caused by Envestra or its agents in installing, reading or servicing equipment used for the purpose of delivering gas; and

(b) neither party will be liable for any indirect or consequential loss arising out of or in connection with the agreement (except as provided for elsewhere in the access arrangement).

➢ ***Part (a) accepted***

Envestra proposes to insert a new clause 25.1 in the terms and conditions as follows:

> ***25.1 Property Damage***
>
> *Subject to the other terms of the Agreement (other than clauses 25.6), Envestra will make good (or indemnify the Network User against) any damage that is caused to property of the Network User as a result of any negligent act or omission on the part of Envestra or its servants, agents or contractors in connection with:*
>
> *(a) the provision to the Network User of Network Services pursuant to the Agreement; or*
>
> *(b) the operation, maintenance, repair, administration or management of the Network or any part of it,*
>
> *provided that Envestra will have no obligation to make good (or indemnify the Network User against) any damage to the extent that it results from any act or omission on the part of the Network User or its servants, agents or contractors (including, but without limitation, any breach by the Network User of its obligations under the Agreement).*

Note: As a consequence of this new clause:

- existing clauses 25.1 to 25.9 will need to be renumbered and cross-references corrected;
- in the clause to be renumbered 25.2, before the words "as a result of any breach", the following words will be inserted: "pursuant to the indemnity in clause 25.1";

- in the clause to be renumbered 25.6 (existing clause 25.5), the following words will be added at the beginning: "Subject to clauses 25.1 and 25.7 and".

➢ ***Part (b) not accepted***

The QCA has accepted that it is appropriate for Envestra to have the benefit of an exclusion clause that exempts Envestra from liability for consequential loss. This is consistent with the approach taken by Regulators in other jurisdictions.

By amendment E13(b), the QCA has decided that Envestra's terms and conditions should also give Network Users the benefit of an exclusion clause that will exempt Network User's from liability to Envestra for consequential loss (except as otherwise provided in the Access Arrangement).

This decision is not consistent with the approach taken by Regulators in other jurisdictions. Regulators in other jurisdictions have accepted Envestra's approach to risk allocation and have not required Envestra to forego consequential loss claims against Network Users.

Section 3.6 of the National Third Party Access Code states that the terms and conditions must be reasonable. The rationale for the QCA's decision appears to be that the terms and conditions as proposed by Envestra are asymmetrical. Given section 3.6 of the Code, the QCA's decision is only justifiable if it is not reasonable for this asymmetry to exist. Envestra's view is that the asymmetry is reasonable and justifiable.

A consequential loss exclusion clause is a risk allocation, or risk management, tool. The effect of the clause is to dictate who should bear consequential loss. As the Access Arrangement is currently drafted, a Network User will be responsible to Envestra for consequential losses that arise as a result of a breach of contract by the Network User or as a result of a tort committed by the Network User.

This is Envestra's first point: It is important to understand that a Network User will only be liable for consequential loss where the Network User has breached its contract or committed some legal wrong. A consequential loss exclusion clause for the benefit of Network Users will protect Network Users from the consequences of their wrongdoing. Envestra believes that this would be inappropriate and unreasonable.

In Envestra's view, the starting point must always be that people should be expected to bear the consequences of their wrongdoing. That is fair, equitable and reasonable. It is what the law provides in the absence of an exclusion clause.

If someone claims that they should not have to bear the consequences of their wrongdoing, then the onus should be on that person to demonstrate why it is fair and reasonable for them to be protected or exempted from those consequences.

This is not to say that it is always inappropriate to protect someone from the consequences of their wrongdoing. The Access Arrangement gives Envestra the benefit of a consequential loss exclusion clause and, like other Regulators, the QCA has accepted that this is appropriate in the circumstances (and, in particular, the fact that Envestra cannot refuse to offer services to Network Users and their customers on the basis that they are "high risk" (i.e. because their potential consequential losses might be large)).

It does not follow that, because Envestra has the benefit of a consequential loss exclusion clause, this benefit must also be extended to Network Users. Rather, it is necessary to ask whether there is some reason why it is fair and reasonable for Network Users to be protected or

exempted from the usual consequences of their wrongdoing. Envestra is not aware of any reason why Network Users should have that protection and the QCA has not offered any cogent reason in its decision.

Unless there is some cogent reason why it is unfair or unreasonable for Network Users to bear the consequences of their wrongdoing, Network Users should be expected to bear those consequences. They should not get the protection of a consequential loss exclusion clause.

This leads to Envestra's second point, which is that it would be unfair and unreasonable to give Network Users the benefit of a consequential loss exclusion clause. This becomes apparent when one considers the economic and commercial consequences of giving that benefit to Network Users.

Imagine that a Network User committed some wrongdoing, such as delivering gas at a receipt point at a pressure that exceeded the maximum pressure set pursuant to clause 12.1 of the terms and conditions. The consequence of this breach might be that the receipt point is damaged and Envestra is, therefore, unable to receive gas into the distribution network or distribute gas through the network. The consequential losses that Envestra might suffer in these circumstances will probably include lost tariff revenue (because the volumes of gas distributed will be lower) and will perhaps also include compensation paid to other end-users.

If the terms and conditions do not give Network Users the benefit of a consequential loss exclusion clause, then Envestra will be entitled to recover these consequential losses from the Network User who breached the receipt pressure clause. In this case, the loss will be borne by the Network User who breached contract. That Network User will be liable to make up the shortfall in tariff revenue and also to fund any compensation due to other Network Users.

If amendment E13(b) is accepted and Network Users have the benefit of a consequential loss exclusion clause then, in the first instance, Envestra will have to fund the shortfall in revenue and any compensation claims brought against it. It is important to appreciate that, if Envestra is exposed to these potential costs then, as a prudent distribution system operator, Envestra will have to manage these costs. As a prudent distribution system operator, Envestra would seek to manage these costs by:

(a) adopting more stringent (and, hence, more costly) operating procedures or incurring other costs to decrease the risk of damage to its network; or

(b) effecting business interruption insurances and other insurances (at higher levels or on more comprehensive terms than those it currently carries); or

(c) by including within its operating costs some form of contingency or self-insurance.

Each of these risk management techniques involves potential increases in the costs of operating and managing the network and providing services. These are costs that would be incurred by a prudent network operator, acting efficiently, in accordance with accepted and good industry practice. Hence, they are costs that Envestra would be entitled to recover through its Reference Tariffs (see section 8.37 of the Code). The ultimate outcome then is that the costs of breach by one Network User will ultimately be borne by all Network Users (as distinct from just the Network User who breached contract and caused the loss).

In short, from an economic and commercial perspective, the effect of a consequential loss exclusion clause that benefits Network Users is to transfer the cost of wrongdoing from the Network User that engages in wrongdoing to all Network Users. This is inconsistent with the principles that are expressed in the Code (and, in particular, in section 8 of the Code). In broad terms, the Code contemplates that there should be incentives to reduce costs and that tariffs

should reflect the principle of "user pays". A consequential loss exclusion clause for the benefit of Network Users results in cross-subsidisation.

This leads to Envestra's third point: If the QCA insists on amendment E13(b), then it has shifted the risk and cost of consequential loss from Network Users who commit wrongdoing to Envestra (in the first instance). This is unfair because the Reference Tariffs that Envestra has submitted in its Access Arrangement do not take account of this increase in risk and cost. The QCA needs to understand that amendment E13(b) has risk and cost implications and, by insisting on amendment E13(b), the QCA will have effectively changed the rules on Envestra.

This leads to Envestra's fourth point: If the QCA does not insist on amendment E13(b), this will mean that Network Users will bear the risk and cost of consequential loss that results from their wrongdoing. There is nothing inherently unfair in that proposition. The terms and conditions are a public document and Network Users will consequently be aware that, if they contract for a Reference Service, they will need to manage this risk and cost, either by effecting insurance, self-insuring or adopting a more stringent approach to their operations. In other words, if amendment E13(b) is not adopted, it will simply mean that Network Users will need to manage the risk and potential cost. This is something that is within their control. That is not unfair or unreasonable.

As noted earlier, given section 3.6 of the Code, the correct question for the QCA to ask itself is whether the terms and conditions are unreasonable if they do not contain a consequential loss exclusion clause for the benefit of Network Users. For the reasons that have been explained, Envestra believes that the terms and conditions are reasonable without a consequential loss exclusion clause for the benefit of Network Users.

Draft amendment E13(b) was not prompted by any submission from a Network User or a prospective Network User and no cogent reason has been advanced in support of it. In these circumstances, given the reasons against the amendment, Envestra requests the QCA to accept the terms and conditions without amendment E13(b).

2.10 Envestra draft amendment E14 – Indemnity

In order for the Envestra access arrangement to be approved, it must amend section 29.6 of the terms and conditions to the effect that a user is not required to indemnify Envestra for any loss, cost, expense or damage arising where Envestra or its agents damage property while installing, reading or servicing equipment used for the purpose of delivering gas.

- ***No change is required to clause 29.6 because of the proposed new clause 25.1.***

2.11 Envestra draft amendment E15 – Dispute Resolution

In order for the Envestra access arrangement to be approved, it must:

(a) amend section 33.5 of the terms and conditions to the effect that an appropriate person would select the independent expert; and

(b) amend section 33.9 of the terms and conditions to the effect that the referral of a dispute to an independent expert will only occur where both parties agree in writing.

➢ ***Part (a) accepted***

Envestra proposes to amend clause 33.5 of the terms and conditions as follows:

33.5 Selection of Expert

Within five Business Days after a notice is given under the previous clause, the Parties will endeavour to agree on a person to be appointed as Independent Expert to resolve the Dispute. If they are unable to agree within that period, the Parties will jointly request the ~~Regulator~~ Australian Gas Association to nominate a person who has appropriate commercial, technical and practical expertise in relevant areas.

➢ ***Part (b) accepted***

Envestra presumes that the QCA's proposal relates to clause 33.4 (Referral to Expert) rather than clause 33.9 (Decision Binding). Envestra proposes to amend clause 33.4 as follows:

"If the Parties are unable to resolve a Dispute through negotiation within 10 Business Days after notice was given referring that Dispute for resolution (or within whatever longer period the Parties may agree) then the Parties will have no further obligation to continue negotiations. However, if both Parties agree in writing, they may refer the dispute to an Independent Expert. ~~either Party may notify the other that it wishes to refer that Dispute to an Independent Expert.~~"

Consequential amendments are as follows – at the beginning of clauses 33.5 (Selection of Expert) and 33.11 (Legal Proceedings), add the following words:

"If the Parties have agreed to refer a dispute to an Independent Expert"

3. TRADING POLICY

3.1 Envestra draft amendment E16 – Response Time

In order for the Envestra access arrangement to be approved, the trading policy must be amended to include words to the effect that:

(a) Envestra will reply to any request from a user for Envestra's consent to a transfer (other than a bare transfer) or for a change in receipt point or delivery point, within 14 business days of receiving the request accompanied by information which is reasonably necessary to enable Envestra to consider the request; and

(b) if, at the time the request is made, the user informs Envestra that due to hardship the user requires an urgent reply to its request, Envestra will use reasonable endeavours to respond to the request within two business days of receiving the request.

- ***Accepted***

Envestra proposes to add a new clause 6.5 to the Access Arrangement as follows:

> ***6.5 Timelines***
>
> *Where a Network User requires Envestra's consent pursuant to section 6.2 or 6.3, Envestra will reply to such a request within 14 Business Days of receiving the request.*
>
> *If, at the time the request is made, the Network User informs Envestra that, due to hardship, the Network User requires an urgent reply to its request, Envestra will use reasonable endeavours to respond to the request within two Business Days of receiving the request.*

4. QUEUING POLICY

4.1 Envestra draft amendment E17 - Communication

In order for the Envestra access arrangement to be approved, Envestra must amend the queuing policy so as to require it to provide information to potential users about:

(a) the length of time the user could expect to wait until capacity is available; and

(b) developments that may affect the interests of a potential user that is already in the queue.

- ***Accepted***

Envestra proposes to add the following words at the end of section 7 (Queuing Policy):

> *"In any event, Envestra shall notify Prospective Network Users of the length of time before it is expected that sufficient capacity may become available. Subsequently, Envestra shall also notify those Prospective Network Users of system augmentations or other changes that materially affect Envestra's ability to satisfy a Prospective Network User's request."*

5. EXTENSIONS AND EXPANSIONS POLICY

5.1 Envestra draft amendment E18 – Significant Extensions

In order for the Envestra access arrangement to be approved, the extensions/expansions policy should be altered to the effect that all extensions and expansions of the network will automatically be included as part of the network covered by the access arrangement.

➢ ***Not Accepted***

Envestra needs to manage risks associated with extensions to the network that are not of a usual nature, eg those that involve significantly more capital than usual and that relate to the supply of gas to a new business. Within the existing network, there is no scope for Envestra to increase its overall rate of return to account for the increased risk profile associated with such ventures or significant extensions.

Where those significant extensions take place on the fringes of the existing network, in some cases up to many kilometres from the "covered pipeline", there is a higher risk that the pipeline will remain dedicated to a single consumer or small number of consumers. Such projects are essentially greenfields projects of various scale, and Service Providers need to balance the risks associated with such projects with the anticipated rate of return. The Code (section 3.16(a)(ii)) specifically allows for extensions not to be 'covered' for this reason, and it is therefore appropriate that Envestra be allowed this discretion. Otherwise, Envestra may be exposed to a higher risk of stranded assets. By treating a significant extension outside of the covered network, Envestra can manage such risks appropriately. It is appropriate that the QCA allows this in accordance with section 2.24(a) of the Code (Service Provider's legitimate business interest).

In its Draft Decision, the QCA notes (p84) that "there seems little argument for allowing one part of an integrated network to lie outside of an access arrangement that has been approved for the remainder of the network". Envestra agrees with this view, but submits that a significant extension is not an integrated part of the network. By their very nature, significant extensions can be many kilometres from the 'network', and often involve extensive negotiations that result in unique tariffs and terms and conditions. It is not appropriate for such extensions to be treated in the same way as a connection within the network. As pointed out by the QCA in its Draft Decision, this has been recognised by other Regulators, ie ACCC, IPART, SAIPAR and OffGAR.

In relation to Envestra's Access Arrangement, Envestra accepts that, as pointed out by Ergon Energy, the definition of a significant extension may require review. Ergon Energy cites the example of the possibility of non-coverage of a minor extension to a 11TJ consumer. It is Envestra's intention that a significant extension is applicable where the new consumer is some distance away from the existing network, eg one kilometre or more. However, the risk associated with significant extensions is related more to the capital outlay rather than a distance factor. Capital expenditure in the order of $200k is typical of the magnitude of capital expenditure necessary for a one kilometre extension and associated works to supply a large consumer. Envestra therefore proposes to modify the definition of significant extension as follows:

"A significant extension is an extension to one or more Delivery Points, where the anticipated Quantity of Gas delivered exceeds 10 TJ per year and the anticipated capital expenditure for the extension exceeds $200k."

6. REVIEW OF THE ACCESS ARRANGEMENT

6.1 Envestra draft amendment E19 – Review Date

In order for the Envestra access arrangement to be approved, section 9 must be amended to the effect that:

(a) the revisions commencement date will be five years after commencement of the access arrangement;

(b) the revisions submission date will be nine months before the revisions commencement date; and

(c) the access arrangement that is current at the time will continue to apply until such time as the regulator approves any revisions.

➢ ***Partly accepted***

Parts (b) and (c) are accepted. However, Envestra understands that the QCA proposes that the revisions commencement date be exactly five years from the commencement of the Access Arrangement. This could mean a revisions commencement date, for example, of 1 August or 1 September of the year concerned. It is Envestra's view that the revisions commencement date should, as far as practicable, coincide with normal business accounting and reporting periods, so that Access Arrangement preparation costs are minimised. All forecasts in Envestra's proposed Access Arrangement are based on financial years, and any alteration to this would necessitate amendments to forecasts for part-years, which in Envestra's view is unnecessary. Envestra's proposal is for the next Access Arrangement Period to commence on 1 July 2006. In the event that the QCA has not approved revisions to Envestra's Access Arrangement by that time, the existing Access Arrangement will continue to operate. Envestra does not recognise any need for the first Access Arrangement Period to cover a period of exactly five years.

Envestra proposes to amend section 9 of the Access Arrangement as follows:

> ***9.1 Revisions Submission Date***
> *Envestra will submit revisions to this Access Arrangement to the Regulator at least nine months before the Revisions Commencement Date defined in section 9.2.*

The following sentence will be added to section 9.2:

> *"The Access Arrangement that is current at the time will continue to apply until such time as the Regulator approves any revisions."*

7. REFERENCE TARIFF POLICY

7.1 Envestra draft amendment E20 – Trigger Mechanism

In order for the Envestra access arrangement to be approved:

(a) the review trigger relating to retail contestability in section 3.3.8 must be deleted; and

(b) the access arrangement must be amended to include review triggers, which could be triggered by either the regulator or Envestra, in the event gas demand (sales volume) in a single year differs from the forecast demand by more than 10 per cent for each customer class.

➢ ***Part (a) accepted***

Section 3.3.8 of the Access Arrangement will be deleted.

➢ ***Part (b) not accepted***

Envestra believes that it is not appropriate to apply such a trigger mechanism to the Demand market. It is feasible (indeed likely) that a new Demand consumer could connect to the network with a demand greater than 250 TJ which could be sufficient to invoke the trigger. However the additional revenue obtained by Envestra from such a consumer would be small relative to Total Revenue Requirement. It is therefore unnecessary from a regulatory perspective, and potentially costly to both Envestra and the QCA to apply the trigger mechanism to the Demand market.

Envestra also disagrees with the QCA's proposal to apply the trigger mechanism to the Volume market. This appears to be inconsistent with 8.1(f) of the Code that states that the Reference Tariff Policy should be designed to provide an incentive to the Service Provider to develop the market. It also appears to be unnecessary given section 3.18 of the Code, which suggests that trigger mechanisms were only contemplated in the drafting of the Code if the Access Arrangement Period extended beyond five years.

Notwithstanding the above, the nature of the Queensland domestic market is such that it is highly unlikely that growth in any one year would be greater than 10% above forecast. Furthermore, any likelihood of this occurring could only be towards the end of the Access Arrangement period, where the effect of any trigger mechanism is minimised.

7.2 Envestra draft amendment E21 - Imposts

In order for the Envestra access arrangement to be approved, the definition of impost must be adjusted to reflect:

(a) changes in taxation; or

(b) other major changes in government policy (for example, costs associated with the introduction of full retail contestability).

➢ ***Accepted***

Envestra's definition of Impost already refers to "tax". Also, part (c) of the definition of Impost already takes into account costs which Envestra incurs in complying with any government requirement. Nevertheless, part (c) of the definition will be amended to specifically refer to contestability as follows:

"any cost, expense or other amount of any nature whatsoever which Envestra incurs in complying with (or attempting to comply with) any direction, order or requirement of any government, governmental instrumentality or public or statutory authority in or in respect of the repair, maintenance, administration or management of the Network (or any part of it) or in respect of the Network (or any part of it) or in respect of the provision of Network Services (including, but without limitation, costs associated with the introduction of full retail contestability)."

7.3 Envestra draft amendment E22 – Annual Reporting

In order for the Envestra access arrangement to be approved, it must be amended so that Envestra will report to the regulator by no later than 31 August of each year on performance against forecasts for the previous financial year of gas demand on an aggregate (whole of covered network) basis and for each customer class.

➢ ***Not Accepted***

Envestra has not accepted the requirement for the trigger mechanism as stated in its response to amendment E20(b). However, should Envestra be required to submit any information such as that above, Envestra believes the date of 31 August should be amended to 30 September. This would ensure that the reporting requirement does not conflict with that for the Australian Stock Exchange. It would be inappropriate for Envestra to submit information to the Regulator before submitting it to the Australian Stock Exchange.

8. REFERENCE TARIFF PRINCIPLES

8.1 Envestra draft amendment E23 – Fixed Principles

In order for Envestra's access arrangement to be approved, Envestra is required to delete the paragraph in section 3.3.6.5 of the access arrangement providing that the Reference Tariff policy is a fixed principle and applies until the end of the year 2009-10. References to this fixed principle in the access arrangement information (for example, section 6.3.1) should also be deleted.

➢ ***Conditionally accepted***

Envestra accepts the amendment if the approved Reference Tariffs result in total revenue being cost reflective by the end of the first Access Arrangement period.

9. INITIAL CAPITAL BASE

9.1 Envestra draft amendment E24 - DORC

In order for the Envestra access arrangement to be approved, the DORC valuation should be amended to be $160.1 million.

➢ *Not Accepted*

The QCA has determined that the DORC valuation should be $160.1m at 30 June 1999. However, Envestra calculated the DORC for its Queensland network to be $195.5m. Envestra's calculation was checked and concluded to be correct by Brown and Root (who advised QCA on DORC issues). The lower value of DORC used by the QCA was obtained by discounting unit rates for insertable assets by between 25% and 50% (depending on the type of asset) and removing residual value from the depreciation profile used to determine DORC.

Envestra does not accept that the value determined by the QCA to be DORC is in fact DORC. Indeed the net effect of the two adjustments made by the QCA was to reduce the asset value to 82% of DORC (if one uses the generally accepted definition of DORC that has been applied in other jurisdictions).

The QCA quoted the following table which expresses the Initial Capital Base (ICB) as a percentage of DORC. It is clear that the ICB proposed by the QCA (82% of DORC) is at the lower end of the range of asset valuations approved by Regulators around Australia.

Table 13.1: Initial capital base for gas transmission and distribution systems

Entity/Author	Industry	Basis for valuation of the ICB	% of DORC
ACCC (1998)	Gas transmission	DORC value, adjusted downward by approximately 2.8 per cent to avoid tariff increases	97
ACCC (2000b)	Gas transmission	DORC value incorporating negative depreciation (but nominally equivalent to the DAC value as this is a new pipeline – 12 months old at the time of valuation)	111
OffGAR (2000b)	Gas transmission	Value based on the optimised deprival value of the pipeline, impacts on tariffs and a balancing of interests between the service provider and users, and subject to a redundant capital policy that will see the value reduced if forecast market growth does not eventuate	95
ORG (1998b)	Gas distribution	DORC value, adjusted downward by between zero and 8 per cent for different parts of the distribution systems in order to avoid tariff increases	94
IPART (1999f)	Gas distribution	DORC value, adjusted downwards by approx. 7% to avoid network price differentials	93
IPART (1999d)	Gas distribution	Value determined at an approximate mid point between DAC and DORC values on the basis of a balance of interests between the service provider and users providing for reasonable financial outcomes for the service provider and real reductions in tariffs	77

IPART (1999b)	Gas distribution	Value determined between DAC and DORC values on the basis of impacts on tariffs and a balancing of interests between the service provider and users	86
OffGAR (2000a)	Gas distribution	Value based on (a version of) deprival value of the pipeline, incorporating consideration of impacts on tariffs and a balancing of interests between the service provider and users	76
SAIPAR (2000)	Gas distribution	100 percent of DORC value as determined by the regulator, which was below the DORC calculation provided by the regulated entity	100

Source: QCA Draft Decision, p 139

The QCA should acknowledge that its definition of DORC is not one that is commonly used by the industry. Moreover, it is incorrect and misleading to make statements in the Draft Decision that imply that the QCA has set ICB to 100% DORC (eg p224).

Envestra has concluded that, in many respects, the approach and arguments used by the QCA to support the DORC valuation are inconsistent with:

- regulatory precedent;
- economic principles of regulation and competition; and
- emerging codes of practice in relation to asset valuation.

The above is a result of the QCA's rejection of the residual/insertion value of the network, and then actually adopting the insertion value to discount the replacement cost of insertable assets. The latter stems from the QCA's interpretation that "replacement cost" relates to that of an "incumbent" rather than a "new entrant".

It is important to note that Envestra's views are also shared by independent experts in the field of economics, regulation and competition. Envestra sought the opinions of the following eminent consultants in this area:

- Professors Stephen King and Joshua Gans of Charles River Associates (Asia Pacific) Pty Ltd (CRA); and
- Mr. Henry Ergas and Dr John Small of Network Economics Consulting Group (NECG).

Both CRA and NECG have formulated responses to the above issues. Their respective papers (Attachments 1 and 2) confirm the need for the QCA to revise its approach to the DORC valuation.

As outlined to the QCA by engineering consultants, GHD, residual value was taken into account in the valuation of the Victorian gas networks (Westar, Stratus and Multinet) and the AlintaGas distribution network.

In relation to the "incumbent versus new entrant" issue, GHD also pointed out that it is universally accepted by practitioners within the industry that a DORC valuation requires the application of "new entrant" costs. This is also accepted by the ACCC in their "Draft Statement of Principles for the Regulation of Transmission Revenues" (p44).

Notwithstanding the above, the use of an "incumbent" approach is inconsistent with the principles of DORC valuation. As defined in the New South Wales Treasury paper "Policy Guidelines for Valuation of Network Assets of Electricity Network Businesses" (p8), replacement costs are those "determined by reference to the current buying price, current

reproduction cost or current replacement cost of modern equivalent assets". The reference to the term "current buying price" makes it clear that the replacement cost is not related to the incumbent's refurbishment cost, but to the market cost or "reproduction" cost faced by a new entrant.

In relation to the calculation of DORC and residual value, the same NSW Treasury paper (p8) states:

> *"…. a class of assets may have a residual value. This issue may arise particularly where the asset is not totally scrapped, but is refurbished with a substantial amount of components replaced. In this situation, assuming the refurbishment brings the asset back to "as new" condition, the residual value (RV) should be calculated as:*
>
> *RV = Replacement Cost – Cost of Refurbishment"*

Envestra's treatment of residual value is consistent with the above principles. Other industries are either using or seriously addressing the principle of residual value. In the telecommunications industry, large cable ducts, box culverts and cable tunnels are valued separately and as such are an indication of the residual value.

The New Zealand Infrastructure Asset Valuation Guidelines (supported by the New Zealand Office of the Auditor-General) specifically allows for residual value in section 4.4.3 (Residual Values), where it states:

> *"Some assets can be replaced by techniques that utilise the existing asset to minimise the cost of replacement (for example, pipe insertion technology). In such cases it is possible to recognise the value of the hole in the ground by depreciating the asset to a residual value equivalent to the hole in the ground. The 'depreciable amount' is therefore the value of the pipe insertion technique."*

In Victoria, residual value is also specifically allowed for in the "Final Practice Statement for Victorian Water Industry Asset Valuation and Financial Reporting" issued by the Department of Treasury and Finance and the Department of Natural Resources and Environment. Section 9.44 states:

> *"It is increasingly common practice for utilities to rehabilitate existing assets by relining or otherwise revitalising existing structures. The valuation should recognise the residual value of the asset being rehabilitated as well as the cost of rehabilitation. The residual value of the asset being rehabilitated can be measured by reference to the cost avoided by rehabilitating rather than completely replacing the existing asset"*

The above arguments, as well as those contained in the attached papers, show clearly that the QCA must review its Draft Decision in relation to the DORC valuation by explicitly allowing residual value and a new entrant approach to replacement cost.

9.2 Envestra draft amendment E25 - ICB

In order for the Envestra access arrangement to be approved, the ICB value must be set at the Authority's determined DORC value of $160.1 million.

- ***Not accepted – see response to E24.***

10. ROLLING FORWARD THE CAPITAL BASE

10.1 Envestra draft amendment E26 – Capital Expenditure

In order for the Envestra access arrangement to be approved, forecast capital expenditure for the five years of the access arrangement period must be amended in accordance with table 14.5.

- ***Not accepted.***

The QCA has disallowed all Replacement Capital Expenditure from Envestra's forecast New Facilities Investment. This is clearly inappropriate given the age profile of the network with many assets past the end of their economic useful life ('EUL'). As assets reach the end of their economic life prudent pipeline operating practice is to replace those assets in the most cost-effective fashion to maintain the integrity of the network. The replacement capital expenditure included in the forecast New Facilities Investment represents Envestra's view on the most efficient level of network replacement that will satisfy the requirements of section 8.16 of the Code, and is also consistent with the availability of contracting resources.

Unfortunately in section 4.2.5.2 of Access Arrangement Information Envestra incorrectly stated that Replacement Capital included the cost of an 'Accelerated Mains Replacement Program'. The term 'accelerated' does not accurately reflect the nature of that replacement expenditure. The mains targeted for replacement have reached the end of their economic useful life ('EUL').

Due to a combination of changes in ownership, changes in industry structure, infrequent past tariff increases and uncertainty surrounding future prices, there is a 'maintenance debt' associated with Envestra's Queensland network. This is reflected in the Brown and Root[3] sanctioned DORC valuation, which brings to light the substantial proportion of the network that is at, or close to, the end of its economic useful life ('EUL'). The table below shows that around 20 percent of mains and around 45 percent of inlets were past their EUL as at 30 June 1999.

Assets past EUL as at 30 June 1999	Quantity	Percentage of Total	Replacement Value
Mains	384.6 km	19.3%	$21.4m
Inlets	31,788	45.2%	$16.0m

The estimated cost to replace these assets with the modern engineering equivalent is $37.4 million. Furthermore, Envestra estimates that by 30 June 2006 an additional $6.3 million worth of assets will reach their EUL and need to be replaced, taking the total forecast replacement capital expenditure to $43.7 million over 2000/01 to 2005/06. This is consistent with our replacement capital expenditure forecast (revised forecast provided on 4 April).

The Replacement Capital detailed in Table 13 of the Access Arrangement Information has been evaluated and shown to comply with section 8.16 of the Code. It must therefore be included in the Reference Tariff calculation for the Access Arrangement Period.

---

[3] Brown & Root Services Asia Pacific Pty Ltd, *Review of the Depreciated Optimised Replacement Cost of the Envestra Natural Gas Distribution Network*, 16 March 2001

10.2 Envestra draft amendment E27 – Redundant Capital

In order for the Envestra access arrangement to be approved, the redundant capital policy (section 3.3.4) must state that Envestra will remove an amount from the capital base so as to share costs associated with a decline in the volume of sales of services provided by means of the covered pipeline between the service provider and users.

- ***Accepted***

Envestra proposes to insert the following paragraph after the first paragraph of section 3.3.4 of the Access Arrangement:

> *"Envestra will also remove an amount from the Capital Base so as to share costs associated with a decline in the volume of Gas delivered via the Network, between Envestra and Network Users."*

10.3 Envestra draft amendment E28 - Depreciation

In order for the Envestra access arrangement to be approved, depreciation charges for the five years of the access arrangement period must be amended in accordance with table 14.6.

- ***Not accepted***

Envestra disagrees with the QCA's view in relation to residual value, as is detailed in the response to draft amendment E24. Depreciation will also need to be adjusted to be consistent with revised New Facilities Investment forecasts provided on 4 April. Envestra will prepare a revised depreciation schedule following the Final Decision.

10.4 Envestra draft amendment E29 – Capital Base Calculation

In order for the Envestra access arrangement to be approved, the capital base calculation must be adjusted in accordance with table 14.8.

- ***Not accepted***

The QCA have determined in the Draft Decision that Envestra's capital base is to roll forward in accordance with Table 14.8. Envestra cannot accept this amendment due to:

1. **Unacceptable Adjustment to 2000/01 Capital Expenditure**
   The Draft Decision was not released until March 2001 and the Final Decision will not be released until after May 21, 2001. Assuming a 1 July 2001 start date for the Access Arrangement it is unreasonable for a Regulator to retrospectively adjust actual capital expenditure down by 30% (from $9.9m in AAI to $6.9m in Table 14.8) as this expenditure will have already occurred. An adjustment such as this is harmful to Envestra's legitimate business interests and does not comply with section 2.24(a) of the Code. Envestra has evaluated the forecast capital expenditure of $9.9 million and it satisfies the requirements of section 8.16 of the Code. The QCA must therefore incorporate the 2000/01 forecast capital expenditure into the regulatory asset base.

2. **Actual Inflation**
   The revaluation/indexation component of the capital base appearing in Table 14.8 is calculated using the expected inflation level This is acceptable for the purpose of illustration in the Draft Decision. However, the actual revaluation/indexation that is rolled forward into the capital base must be calculated using actual inflation, as measured by the March Quarter weighted average of eight capital cities Consumer Price Index published by the Australian Bureau of Statistics. Therefore, to the extent that actual inflation differs from

forecast inflation (2.4% per annum) the ‘revaluation’ component of the capital base rolling forward in 1999/2000 and 2000/01 will differ from that contained in Table 14.8.

Furthermore, there are a number of unresolved issues surrounding capital expenditure (E26) and depreciation (E28). These issues need to be finalised before Envestra can endorse the calculations associated with rolling forward the capital base.

Envestra notes that there are minor inconsistencies between the adjusted forecast capital expenditure in Table 14.5 and the capital expenditure used in rolling forward the capital base in Table 14.8.

11. RATE OF RETURN

11.1 Envestra draft amendment E30 – Post-tax nominal

In order for the Envestra access arrangement to be approved, the WACC must be expressed in post-tax nominal terms.

- ***Not accepted***

Envestra proposed the use of a real pre-tax WACC. The QCA has proposed that the nominal post-tax approach to WACC be adopted. Envestra favours the real pre-tax approach to WACC over the post-tax approach for the following reasons:

1. Post-tax is Intrusive and Heavy Handed
Taxation is complex, dynamic and resource and data intensive. Calculation of a regulated business' tax position over a future regulatory period requires significant knowledge of taxation law and the regulated business (eg prior accounting treatment of assets and other expenditure items). Furthermore tax issues require detailed data, time-consuming calculations, and a view on the future direction of tax policy. The post-tax approach is a heavy-handed and intrusive form of economic regulation. The pre-tax approach to WACC is less intrusive and provides an appropriate outcome for consumers and asset owners.

2. Post-Tax is More Complex
One of the factors persuading the QCA to use a post-tax approach is concern over the complexity of the post-tax to pre-tax conversion of the cost of equity. The conversion of the post-tax cost of equity to its pre-tax equivalent is significantly less complex than the calculations and data requirements necessary to determine the Cost of Tax. Consequently, the real pre-tax WACC is significantly easier to administer than the post-tax WACC.

3. Prices Change with Taxes
Under the post-tax approach Reference Tariffs are explicitly linked to tax and tax depreciation legislation. Changes in either tax or depreciation rates will immediately impact cost reflective revenue via the Cost of Tax. The table below shows how corporate tax rates have changed over the past 30 years. On occasions the corporate tax rate has been revised upward. It is not unreasonable to assume that this may occur in the future. Reference Tariff adjustments that are explicitly linked to changes in tax and depreciation create uncertainty which is not desirable for either consumers or retailers alike.

Year	Corporate Tax Rate
2001/02	30.0%
2000/01	33.0%
1995/96	36.0%
1993/94	33.0%
1988/89	39.0%
1987/88	49.0%
1985/86	46.0%
1975/76	42.5%
1972/73	47.5%

The reasons detailed above are not exhaustive but demonstrate the inherent disadvantages of the post-tax approach over the real pre-tax approach.

11.2 Envestra draft amendment E31 – Risk free rate

In order for the Envestra access arrangement to be approved, a risk free rate of 5.97 per cent is required to be adopted in the determination of the WACC. This rate will be updated in the Authority's Final Decision, and may therefore be required to be further amended prior to final lodgement of the service providers' access arrangements.

➢ ***Accepted***

The QCA determined that a risk free rate of 5.97% would be used in the Final Decision, but will be amended in accordance with the 20-day trading average yield for the ten-year Commonwealth Government bond. The QCA's amendment is consistent with that proposed in Envestra's Access Arrangement Information. However, the 5.97% used by the QCA in the Draft Decision related to the 20 trading days prior to 30 November 2000. This rate was almost four months out of date at the time of the Draft Decison and did not reflect the changes that occurred in Monetary Policy over February and March 2001. Bond yields can change significantly in short periods and using a four month old risk free rate in the WACC calculation is potentially misleading as it did not reflect interest rates at the time of the Draft Decision.

11.3 Envestra draft amendment E32 – Market risk premium

In order for the Envestra access arrangement to be approved, the market risk premium used in the calculation of the WACC must be set at 6 per cent.

➢ ***Accepted***

The QCA have proposed that a Market Risk Premium ('MRP') of 6 percent be used in the WACC calculation. Envestra selected a MRP in the range of 6 percent and 7 percent, which was based on consistent empirical evidence and the MRP used in recent regulatory decisions. The MRP in the Draft Decision is at the low end of the range.

11.4 Envestra draft amendment E33 – Equity Beta

In order for the Envestra access arrangement to be approved, the equity beta used in calculating the WACC must be set at 0.97.

➢ ***Not accepted***

The QCA have determined that Envestra's WACC will need to be calculated using an asset beta of 0.55 and an equity beta of 0.97. Given regulatory precedents and the higher relative risks associated with gas distribution in Envestra's part of the Queensland market the equity beta should have a value of at least 1.1.

1. Higher Systematic Risks

Envestra's Queensland natural gas distribution market is small with growth rates lower than comparable markets. Moreover, it has relatively few large (>100 TJ pa) consumers, making asset stranding a serious risk. Given these systematic risks inherent in the Queensland market one would expect that the values determined by the QCA for asset beta and equity beta would be higher than those of the southern States gas distributors. The table below presents the values for asset and equity betas for other gas distribution businesses.

Regulator	Gas Distribution Business	Asset beta	Equity beta
ORG (1998)	MultiNet, Stratus, Westar	0.45-0.6	1.20
IPART (1999)	Albury Gas Co	0.4-0.5	0.9-1.1
IPART (2000)	AGLGN NSW	0.4-0.5	0.9-1.1
IPARC (2000)	AGLGN ACT	0.4-0.5	0.9-1.1
OffGAR (2000)	AlintaGas	0.55	1.08
SAIPAR[1]	Envestra	0.5	1.06
QCA (2001)	Allgas & Envestra	0.55	0.97

[1] SAIPAR did not quote an asset beta or an equity beta in its Draft Decision. The values for asset and equity beta used were from a paper prepared for SAIPAR by K Davis, *The Weighted Average Cost of Capital for Access Arrangements for Envestra, A Report prepared for the South Australian Independent Pricing and Access Regulator (SAIPAR), October 1999.*

The ORG determined an equity beta of 1.2 in their most recent gas decision, for distributors in arguably the lowest risk market for natural gas in Australia. It is apparent that the Draft Decision equity beta of 0.97 is too low requiring the QCA to revise its estimate upward to at least 1.1.

2. Additional Risk in Demand Forecasts

The aggressive demand forecasts generated by MMA and accepted by the QCA in the Draft Decision will, in Envestra's opinion, be extremely difficult to achieve given the characteristics of the Queensland market. Furthermore, the Draft Decision reduces Envestra's planned network marketing expenditure by around 30%, compounding the difficulties of increasing demand. Due to the linkage between demand forecasts, revenue and Reference Tariffs, Envestra's Draft Decision revenue stream carries a low probability of being achieved and is therefore higher risk. This higher risk must be compensated for in the CAPM (and WACC) by choosing an asset beta in the range of 0.55 to 0.60 and an equity beta greater thatn 1.1

Should the true risks associated with the Queensland natural gas market not be fully incorporated into the Draft Decision asset and equity betas, the QCA will deprive shareholders (the providers of capital) of part of their rightful returns. This type of regulatory signal will result in reduced gas infrastructure investment in Queensland to the detriment of economic development in that State.

11.5 Envestra draft amendment E34 – Cost of debt

In order for the Envestra access arrangement to be approved, the cost of debt for calculating the WACC must be set at a debt margin of 160 basis points above the risk free rate.

➢ ***Accepted***

A Debt Margin of 160 basis points above the risk free rate for debt rated at BBB+ was applied in the Draft Decision for use in calculating the WACC. Envestra agrees with the QCA's analysis and decision. However, there are other non-margin costs associated with debt. These non-margin 'bank costs' include syndication, legal, negotiation and structuring costs that are not captured in the Draft Decision Debt Margin. Based on experience and advice from the capital markets (confidential submissions are provided in Attachment 5) Envestra has calculated bank costs to be equivalent to 40 basis points per annum. The Draft Decision (p 302) communicated the QCA's preference for these non-margin related bank costs to be removed from the Debt Margin and be included in the operating expenses of the business. Envestra has complied with

this and will make the commensurate adjustment for bank costs in its revised Non-Capital Costs (see response to E39).

11.6 Envestra draft amendment E35 – Dividend Imputation Rate

In order for the Envestra access arrangement to be approved, a dividend imputation rate of 0.5 should be assumed in the cash flows of the business.

➢ ***Not accepted***

In Envestra's Access Arrangement dividend imputation was accounted for in the WACC and the value of imputation was in the range 0.3 to 0.5. The value of dividend imputation credits determined in the QCA Draft Decision was 0.5 and it was to be treated as a cash flow item. The Draft Decision is a significant departure from the Access Arrangement proposal. Recent empirical evidence has caused Envestra to reconsider the position taken in the Access Arrangement. Envestra is now of the view that the value of dividend imputation for the marginal shareholder in the Australian share market is zero. Envestra does not accept the QCA's determination because:

(1) dividend imputation is not a personal withholding tax.

(2) dividend imputation is not a cash flow item for a tax paying corporate entity. Including the value of imputation credits in the cash flows, via a reduction in the Cost of Tax, inaccurately reflects the legitimate Cost of Tax to the business

(3) the imputation credit utilisation rate of 0.5 overstates the extent to which the marginal shareholders are able to utilise franking credits. Based on recent research the true value of imputation credits is close to zero and its impact on WACC negligible.

(4) Hathaway and Officer[4] express serious concerns about the ability to measure dividend imputation at the correct level given the data are unobservable. Hence the accuracy of the Hathaway and Officer research is questionable.

(5) adjusting rates of return for only dividend imputation and ignoring other significant changes to the tax system, such as the introduction of Capital Gains Tax in 1985, unfairly represents the true situation.

1. Dividend Imputation is Not a Personal Witholding Tax

Dividend imputation is the method by which corporate profits are taxed only once at the company level. Taxation ruling number IT 2417 supports this view:

> *A new system of taxing company dividends known as the "Imputation System" has effect from 1 July 1987. Under this system, a dividend paid by an Australian resident company will have an imputation credit attached to it, to the extent of the Australian income tax borne at the company level.*

Resident companies generate imputation credits when they pay corporate tax. Imputation credits record the amount of corporate tax paid on profits distributed as dividends. Hence, dividend imputation is not a personal withholding tax.

[4] Hathaway, N.J. and Officer, R.R., (1995) *The Value of Imputation Credits*, Finance and Research Group, Graduate School of Management.

2. Dividend Imputation Is Not A Corporate Cash Flow Item
Dividend imputation does not impact the cash flows of a business. This is demonstrated by the fact that the cash flows of a corporate taxpayer are identical whether corporate profits are distributed as fully franked or unfranked dividends.

The QCA's proposed treatment of dividend imputation in the cash flows is a theoretical abstraction that negatively effects the cost of service revenue calculation. Corporate taxpayers pay tax as part of their legal obligation to remit the correct amount of corporate tax to the Australian Taxation Office. Neither the tax law nor corporate taxpayers view dividend imputation as a withholding tax for shareholders. Corporate tax will be paid irrespective of whether the company chooses to distribute franked or unfranked dividends.

The treatment of dividend imputation as a cash flow item fails to recognise the fact that the franking credits are reconciled between the resident shareholders and the Australian Taxation Office and not between the shareholders and the corporate. Under tax law corporate taxpayers are not able to reduce the amount of corporate tax paid by distributing the equivalent amount as unfranked dividends. This is the logical extension to the QCA's proposed cash flow treatment of imputation credits. However, this is not legally possible so it is nonsensical to treat dividend imputation as a cash flow item.

3. Value Of Imputation Credits Is Zero
A research paper published in the Journal of the Securities Institute of Australia, (JASSA, Issue 1 Autumn 2001) by Wayne Lonergan demonstrates that the value of imputation credits for the marginal shareholder in the Australian share market is close to, if not, zero. Therefore the purported reduction in the weighted average cost of capital due to dividend imputation is an illusion resulting in some shareholders being deprived of part of the rate of return that they are properly entitled to.

The key arguments presented in the Lonergan paper to support the proposition that dividend imputation has had a negligible impact on the after-tax WACC are:

(i) Individual Australian resident shareholders have benefited substantially following the introduction of imputation.

(ii) The effect of dividend imputation on domestic companies has generally been neutral due to the inter-company dividend rebate pre-imputation.

(iii) Foreign investors were relatively neutral to dividend imputation because many received a full credit in their own countries for either the underlying rate of tax or at least the withholding tax.

(iv) The Australian share market represents about 1% of the total world's share market capitalisation. The Australian share market is insignificant in the global capital market. Given the relative freedom of global capital flows, Australia is a price taker in the global capital market.

(v) The price-makers in the Australian share market are the large investors, such as domestic institutional investors (e.g. Superannuation funds, Life Insurance Companies) and foreign investors.

(vi) The marginal shareholders in the Australian share market are the price-makers. The returns have not changed significantly pre and post imputation so the return they require on capital has not changed. Therefore, dividend imputation has had a negligible impact on the after-tax cost of capital.

(vii) Returns in the Australian share market did not significantly outperform world equity markets following the introduction of imputation. One would expect out-performance if imputation resulted in lower WACC leading to high equity valuations.

(viii) Independent Experts Reports prepared in the context of company acquisitions do not support the adjustment to the WACC for dividend imputation. Given that Independent Experts Reports are commissioned to assist company directors obtain a higher offer, one would have expected the wide spread use of an imputation credit adjustment to the cost of capital in order to lower the discount rate and increase the valuation.

(ix) From both international capital flow perspective and a local capital market perspective, the proposition that imputation has reduced the cost of equity capital in Australia can not be supported.

Lonergan concluded that the cost of capital had not reduced as a result of dividend imputation. To the extent that the Regulators reduce the cost of capital for dividend imputation they are depriving investors of returns and distorting investment decisions.

4. Data Integrity Issues With Empirical Studies

The Hathaway and Officer estimate of the value of imputation credits was determined using dividend drop-off analysis. Dividend drop-off is not a reliable method of estimating the value of imputation credits[5] because:

i) The analysis is unable to split the value attributable to the franking credit and the value of tax losses accruing to investors who buy the stock before the ex-dividend date and sell soon after;

ii) There are significant unexplained movements in share prices around the ex-dividend date;

iii) Share-price movements measured as whole cents may imply a value outside the expected range of 0 to 1. This may occur because share prices are prevented by most stock exchanges from trading in fractions of cents above certain price levels;

iv) Transaction costs, including stamp duty and brokerage, are likely to distort the results from dividend drop-off analysis by making it uneconomical to trade on all arbitrage opportunities that exist between the cum-dividend and ex-dividend dates;

v) There are significant apparent inconsistencies in the studies. For example, small companies (likely to have the largest number of shareholders able to utilise imputation credits) have the lowest imputation utilisation factors. These legitimate results were dismissed as anomalous simply because they did not fit with their *a priori* assumptions; and

vi) Dividend payout ratios for some companies increased following imputation. This behavioural change should be (but is not) backed out when extrapolating the dividend drop-off statistics to the alleged impact on cost of capital.

Therefore, the accuracy of the academic research is questionable and may misrepresent the true value of imputation credits (Hathaway and Officer acknowledge this). The transparent legitimacy of the regulatory process is compromised when decisions are based on academic inputs that are widely acknowledged to be questionable; the resulting regulatory decision becomes more of a subjective judgement with no underlying empirical facts. Regulators must

---

[5] Lonergan, W, The *Disappearing Returns*, JASSA Issue 1, Autumn 2001, pp 16-17.

therefore take into account other evidence and analyses to form a view of the correct value for imputation credit.

5. Other Tax Changes Have Influenced the Cost Of Capital & Rates Of Return

Adjusting the cost of capital downwards for dividend imputation is opportunistic and inappropriate because dividend imputation has had a negligible impact on the cost of capital (as outlined in section 2). Notwithstanding this, adjusting the rate of return for only one aspect of the taxation system will produce a biased result as it ignores other relevant changes in the taxation system, such as Capital Gains Tax ('CGT').

CGT was introduced in Australia in 1985. CGT has had the effect of reducing the after-tax returns to investors. The combined impacts of dividend imputation and CGT have had a minimal, if any, impact on returns to marginal shareholders (i.e. the price-making Superannuation Funds and foreign investors) and the cost of capital in Australia[6].

6. Conclusion

Dividend imputation has not affected the cost of capital in Australia. The Australian share market is insignificant in global terms and is a price-taker in the world capital market. The marginal shareholders in the Australian equites market are not resident individuals, but domestic institutional investors and foreign investors. The introduction of dividend imputation has had, at best, a minor impact on the rate of return required by the marginal shareholder. Moreover, it is inconsistent to make a downward adjustment to the cost of capital for dividend imputation and ignore the effect of capital gains tax, which would raise the cost of capital.

The results from the Hathaway and Officer research are unreliable. Significant results from their analysis have been dismissed and not incorporated into the conclusions. Also, the data availability for dividend drop-off studies does not provide reliable measures for valuing imputation credits as the benefit of dividend imputation is at the shareholder level. Data at the shareholder level is unobservable[7].

Dividend imputation is not a cash flow item. The proposition to include dividend imputation in the cash flows disadvantages regulated corporate entities because it is not consistent with the legal framework surrounding dividend imputation and not representative flow of funds between corporate taxpayers, the Australian Taxation Office and shareholders.

Therefore, Envestra is of the view that the dividend imputation rate should be set at, or close to, zero. To do otherwise artificially lowers rates of return and will distort infrastructure investment in Australia.

---

[6] Lonergan, W, *The Disappearing Returns*, JASSA Issue 1, Autumn 2001, pp 15-16
[7] Lonergan, W, *The Disappearing Returns*, JASSA Issue 1, Autumn 2001, pp 16-17

11.7 Envestra draft amendment E36 – Cost of tax

In order for the Envestra access arrangement to be approved, Envestra must include forecasts of the cost of tax for each year of the regulatory period in the cash flows.

➢ ***Not accepted***

The Draft Decision requires Envestra to include a forecast, for each year of the regulatory period, the Cost of tax and include it in the cash flows. Furthermore, the QCA proposes to adjust the forecast Cost of tax in future regulatory periods in accordance with the actual Cost of tax. Envestra cannot accept this amendment because:

1. Intrusive and Complex
Envestra's preference, as detailed in its response to amendment E30, is for the QCA to use a real pre-tax WACC which negates the intrusive and complex issues surrounding taxation. The pre-tax approach also provides the Service Provider with an incentive to manage its taxation affairs in the most efficient manner.

2. Incorrect Treatment of Dividend Imputation
Notwithstanding our view that the value of dividend imputation credits to the marginal shareholder in the Australian share market is zero (amendment E35), the Cost of tax calculation incorporates an adjustment for dividend imputation. This adjustment incorrectly treats dividend imputation credits as a cash flow item for the business. The distribution of franking credits does not affect the cash flows of a corporate entity (refer to our response to amendment E35). The Cost of tax calculation must remove the effects of dividend imputation to reflect the legal and cash flow realities surrounding dividend imputation.

3. Increased Regulatory Risk
The Cost of tax calculation is circular and complex. For it to be accurate it requires all other forecasts (i.e. demand, Non-Capital Costs, New Facilities Investment) to also be correct otherwise, by definition, the forecast Cost of tax will not be realised. The QCA's desire to retrospectively adjust the forecast Cost of tax in accordance with the actual Cost of tax, increases the regulatory risk as it increases the uncertainty of Envestra's cash flows. This is inconsistent with the principles of incentive regulation. These higher risks have not been taken into account in setting the equity beta and WACC.

Envestra's preference is for a real pre-tax WACC, which would negate the requirement for the Cost of tax and simplify the whole process whilst still providing an appropriate outcome.

11.8 Envestra draft amendment E37 - Inflation

In order for the Envestra access arrangement to be approved, expected inflation is to be set at 2.40 percent.

➢ ***Accepted***

Envestra accepts the proposed inflation rate as appropriate for determining forecasts. However, actual inflation, as measured by the Australian Bureau of Statistics March Quarter weighted average of eight capital cities Consumer Price Index, must be used to roll forward the capital base as applicable.

11.9 Envestra draft amendment E38 – Post-tax nominal WACC

In order for the Envestra access arrangement to be approved, the post-tax nominal WACC is to be set at 9.26 percent

➢ ***Not Accepted***

The QCA has determined that a nominal post-tax WACC of 9.26% is appropriate for both Envestra and Allgas. As previously stated, Envestra prefers the rate of return to be quoted in real pre-tax terms. Notwithstanding this preference, the 9.26% post tax nominal is too low due to the use of inappropriate parameters. Our responses on specific WACC parameters are detailed in E30, E33, E35 and E36.

The Draft Decision post-tax nominal WACC of 9.26% is the lowest rate of return determined by an Australian Regulator for a gas distribution business, provides little incentive to invest and does not adequately compensate the providers of capital for risk. The table below illustrates our point, showing the Queensland post-tax nominal return on equity and real pre-tax WACC are the lowest determined for any Australian gas distribution business. Given the higher risks associated with gas distribution in Queensland it suggests that the Draft Decision WACC of 9.26% has not appropriately balanced the interests of asset owners and consumers.

Regulatory Decision	QCA Draft Decision March 2001 Envestra & Allgas	IPART Final Decision June 2000 AGLGN	OffGAR Final Decision June 2000 AlintaGas	SAIPAR Draft Decision April 2000 Envestra	ORG Final Decision Nov 1998 Stratus, MultiNet, Westar
Nominal Post-Tax ROE	11.1% [1]	12.00%	12.70%	13.4% [3]	13.20%
Real Pre-Tax WACC	7.0% [2]	7.75%	7.50%	8.10%	7.75%

[1] Derived from the Draft Decision using the standard CAPM of $R_e = R_f + \beta_e(R_m - R_f)$

[2] Mid-point under the forward and reverse transformations

[3] SAIPAR did not quote an asset beta or an equity beta in its Draft Decision. The values for asset and equity beta used were from a paper prepared for SAIPAR by K Davis, *The Weighted Average Cost of Capital for Access Arrangements for Envestra, A Report prepared for the South Australian Independent Pricing and Access Regulator (SAIPAR), October 1999*

The table below summarizes Envestra's view on each of the WACC parameters appropriate for use in the WACC calculation. Notwithstanding Envestra's preference for a real pre-tax WACC, for the purposes of comparison with the Draft Decision Envestra believes that a nominal post-tax WACC and return on equity should be within the ranges of 9.4% to 9.8% and 12.4% to 13.5% respectively.

WACC Parameters	**Parameter Values**
Debt	60%
Equity	40%
Nominal Risk Free Rate	5.8%
Debt Margin	160%
Nominal Cost of Debt	7.40%
Market Risk Premium	6.0 – 7.0%
Asset Beta	0.55 – 0.60
Equity Beta	1.1
Annual inflation rate	2.4%
Nominal Post-Tax Cost of Equity#	12.4% - 13.5%
Nominal Post-Tax WACC^	9.40% - 9.84%

CAPM of $R_e = R_f + \beta_e(R_m - R_f)$

^ Plain vanilla WACC as per Draft Decision of $K_e(E/V) + K_d(D/V)$

12. NON CAPITAL COSTS

12.1 Envestra draft amendment E39 – Non-Capital Costs

(a) In order for the Envestra access arrangement to be approved, Envestra is required to amend its projected non-capital costs (excluding unaccounted for gas/systems use gas) to reflect those costs outlined in table 16.12.

The Authority reserves the right to revisit these numbers in light of further analysis prior to issuing its Final Decision.

(b) Envestra is also required to include a commitment in its access arrangement that distribution marketing will not include the name of the incumbent retailer or the network service provider.

➢ ***Part (a) not accepted.***

The QCA has concluded that Envestra's non-capital costs proposed in the Access Arrangement are high relative to other networks and expenditure is above the efficient level. This conclusion is based on a benchmarking study undertaken by UMS on behalf of the QCA, as well as internal analysis undertaken by the QCA to compare:

- operating costs per customer;
- operating costs per TJ of gas delivered; and
- operating costs per kilometre of mains.

Envestra highlighted to UMS and the QCA a number of misinterpretations in the UMS report that have distorted the results and overstated Envestra's costs relative to the sample average. These misinterpretations are currently being corrected by UMS. Until final results are available Envestra is unable to provide final comments on the UMS recommendations. Envestra will respond to the UMS recommendations once the study has been completed.

In addition to the UMS study, the QCA has undertaken some internal benchmarking analysis which is presented in tables 16.5, 16.6, 16.7 and 16.8 of the Draft Decision (p211). This analysis was carried out by examining "various performance indicators for the service providers' first year expenditure proposals relative to those of other jurisdictions".

The QCA considered the performance indicators without making any adjustments for the different characteristics of each network, and differences in the treatment of some operating costs in the various regulatory jurisdictions, ie the comparisons were not 'like for like'. The more important factors that need be taken into account when making comparisons are:

- Envestra's operating costs are higher than for other network operators because of the nature of the Operating and Management contract with OEAM. Envestra does not currently own any property plant or equipment as this is provided by OEAM and is paid for as an operating cost. In contrast, Allgas has property, plant and equipment assets included in its asset base and receives a rate of return and depreciation on these assets in its revenue calculation. We understand that the return received by Allgas on these assets would be about $600k-$800k per annum;

- The treatment of some operating costs is different in some regulatory jurisdictions. The Victorian distributors do not undertake meter reading as this is treated as a retail cost and so is not included in network non-capital costs. Licence fees vary across the jurisdictions, and the Queensland charge is higher than in most other States;

- non capital costs per customer will be higher in Queensland as the customer penetration rate is much lower than in other States, and being the smallest capital city network, does not have the benefit of the economies of scale that apply to other networks;
- Great Southern Energy's network operates only in a provincial city (Wagga Wagga) and does not incur the additional costs and overheads of operating in a capital city central business district. GSE also supplies one very large industrial consumer so reducing cost per TJ of gas delivered;
- non capital costs per TJ of gas delivered is virtually irrelevant as an indicator for comparing operating costs in different networks, as it is greatly influenced by the volume of gas delivered to large industrial customers. Envestra has the highest operating cost per TJ delivered because it has the smallest proportion of gas delivered to large industrial consumers. Most of the large industrial consumers in Brisbane are located on the Allgas network.

It is not possible to correct for these factors without undertaking a more detailed analysis (such as that being undertaken by UMS). Indeed this point is acknowledged by the QCA where it states that the results from their internal benchmarking are "broadly indicative rather than directly comparable" (p212).

As indicated above, Envestra has provided additional information that should improve the accuracy of the UMS study. Until this study has been completed, it is premature to draw any conclusions on the efficiency of Envestra's Non-Capital Cost forecasts.

Productivity Improvements

The QCA also proposed ongoing productivity improvements of 3.5 per cent per annum. This is based on advice provided by UMS and supported by the QCA's own analysis.

The QCA sets out in table 16.11 of the Draft Decision the average ongoing real reductions in non-capital costs in other jurisdictions. The QCA acknowledged that "such comparisons ignore the starting level for each organisation".

It is relevant that the distributors with the highest average reductions per annum (in percentage terms) are the three Victorian distributors and Albury Gas Company, which at the time of the decision were about to be privatised by the Victorian Government. Significant cost savings were achieved as a result of the restructuring, out-sourcing and privatisation process - cost savings not available to other distributors that had always been privately owned. If these four distributors are excluded from the analysis, the average reduction falls from 3.7% to 2.5%, slightly below the 2.6% reduction proposed by Envestra.

To further support their case for ongoing productivity improvements of 3.5% per annum, UMS indicated that costs per customer in the electricity industry had reduced by 3.5% over the last 10 years. However, UMS failed to take into account the differences between the gas and electricity industries, especially in relation to ownership and privitisation. In the last decade, State governments have been pursuing privitisation of electricity assets in order to achieve greater efficiencies in the electricity industry, ie efficiencies have been achieved from a relatively high base.

Envestra has already built a 2.6% per annum real reduction in operating cost into its Access Arrangement forecasts. Taking into account forecast growth in customer numbers, the reduction in cost per customer over the Access Arrangement period is 4.2% per annum.

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Non Capital cost ($m)	13.6	13.5	13.4	13.3	13.3	13.5
Real Non-Capital costs ($m)	13.6	13.2	12.7	12.3	12.0	11.9
No of customers	71250	72470	73820	75320	76990	78660
Cost/customer ($2000/01)	190	182	173	164	156	151

Therefore the productivity improvements incorporated in Envestra's non-capital cost forecasts already exceed the productivity improvement proposed by the QCA.

The high productivity growth rate reflects the benefits forecast to be obtained through reducing SUG and growing the network. However the QCA should note that these benefits are only possible due to current opportunities to improve the network (eg replacement of aged pipes and growth in demand). It is unlikely that productivity improvements of this order would be sustainable in the longer term. A report by London economics for IPART indicated that long term sustainable nominal cost reductions in the electricity industry overseas varied from 0.7% to 3.5% (IPART 1999 "Efficiency and Benchmarking Study of the NSW Distribution Businesses" for electricity businesses). There is less potential for productivity-improving technological change in the gas industry relative to the electricity industry because there is less opportunity to use emerging technology. One would therefore expect the long term trend in gas productivity improvements to be lower than in electricity. For these reasons, Envestra is of the view that the productivity trend incorporated in its Access Arrangement is reasonable.

Network Marketing Costs

The QCA also considered network marketing costs, by comparisons with other regulatory decisions shown in Table 16.6 of the draft decision. The QCA concluded that:

"for marketing costs a relevant benchmark is the industry average cost per customer ($13.20). If Envestra's marketing costs were based on this industry average rate, the marketing budget in the first access arrangement period would be reduced from $1.3million to $0.9million."

Table 16.6 shows that there is a wide range in the costs allowed by regulators for network marketing. A high of $31.40 per customer for AGL, to a low of $1.50 per customer for Multinet in Victoria. The wide range reflects the different circumstances faced by each network operator. The low cost in Victoria is due to the high gas penetration rates, weather conditions and general acceptance of natural gas in that State. In Sydney and Brisbane, a much higher rate is required to increase the level of acceptance of natural gas.

Envestra obtained an expert opinion on non-capital costs (including marketing costs) from PricewaterhouseCoopers (see Attachment 3), which concluded:

"it is not appropriate simply to rely upon and adopt industry benchmark levels to determine …..marketing costs as it is likely that the efficient, prudent costs that are in accordance with accepted and good industry practice for Envestra's Queensland network are higher than the industry benchmark levels;"

Envestra has demonstrated in the review of capital costs that the level of marketing expenditure proposed is justified by the increase in gas sales expected to result from that expenditure.

Debt Costs

In line with our response to recommendation E34, non-margin related debt costs will be removed from the Debt Margin and included in the operating costs. Assuming an asset base of $195.5m at 30 June 1999, debt costs to be included as Non-Capital Costs would be as follows:

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06
Bank Costs ($m)	0.51	0.53	0.56	0.59	0.62	0.65

Debt costs have been assumed to be 40 basis points per annum (see Attachment 5 for supporting evidence).

➢ ***Part (b) not accepted***

Envestra does not accept that the appearance of its name in any network marketing material is contrary to any aspect of the Code. Envestra's name or logo is not affiliated with any retailer, and there are no ringfencing issues posed. Furthermore, we believe it to be unethical and improper, for example, to distribute gas marketing leaflets to households without identification. Thus in many cases it will be necessary for Envestra to include its name and logo on marketing material.

Envestra also disagrees with the QCA's decision in relation to the incumbent retailer. In many instances, in order for marketing to be effective, it is essential that the public identify a point for further contact. Unlike retailers, Envestra is not set up to deal with public enquiries, and, even if it could, it is not desirable or efficient to have potential gas consumers contact a party that was not able to fully service their requirements.

Envestra is currently of the view that, where applicable, it is preferable to include the names of all relevant retailers (those able to provide a service under the contestability arrangements) in marketing advertisements, rather than no names at all.

It has been accepted by the Technical Regulator in South Australia that network marketing advertising may contain the name of the incumbent retailer, until contestability, at which time the situation will be reviewed.

12.2 Envestra draft amendment E40 - SUG

In order for the Envestra access arrangement to be approved, Envestra is required to amend its system use gas costs to reflect those outlined in table 16.19.

➢ ***Not accepted.***

The QCA's proposed amendment is unacceptable because it:

- it proposes an invalid target establishment process, ie percentage target;
- is inconsistent with the Code;
- is inconsistent with decisions made by other Regulators in Australia;
- does not take account of the specific circumstances of Envestra's network;
- is based on incorrect assumptions about the relationship between prudent operating costs and the DORC valuation methodology;
- provides for increasing SUG volumes over time when SUG should be decreasing;
- assumes past decisions have not been in the consumers' best interests;
- incorrectly suggests that not allowing SUG costs is a valid incentive for Envestra to reduce SUG; and
- is inconsistent with the QCA's decision to exclude the capital expenditure required to achieve the SUG reductions.

The above points are explained in the detailed response contained in Attachment 4. Many of the above points are also referred to in Envestra's response to draft amendment E39(a), pertaining to the QCA's proposed reductions in allowable operating expenditure.

13. GAS DEMAND FORECASTS

13.1 Envestra draft amendment E41 – Gas Demand

In order for the Envestra access arrangement to be approved, the gas demand forecasts, and hence the Reference Tariffs, should be adjusted to reflect the post price impact demand forecasts as outlined in table 17.4.

➢ ***Not accepted.***

Envestra does not accept amendment E41. The MMA demand forecasts have been generated utilising an inappropriate macroeconomic methodology for Envestra's Queensland covered network. Furthermore, the MMA forecasts are biased upwards and will not allow Envestra to recover the efficient costs of operating the network. Consequently, the MMA Demand Forecasts do not satisfy the requirements of sections 8.1(a) and 8.2(e) of the Code.

A detailed assessment of the MMA Demand Forecasts is provided in Attachment 6.

14. REFERENCE TARIFFS AND PRICE PATHS

14.1 Envestra draft amendment E42 – Price constraints

In order for the Envestra access arrangement to be approved, the Authority requires that:

(a) the small customer class be subject to an average price constraint of CPI - 4.4 per cent;

(b) the large customer class be subject to an average price constraint of CPI - 3.6 per cent;

(c) a side constraint be included on individual prices for end users, to be set at CPI + 2.7 per cent;

(d) the total revenue requirements for each customer class be revised to those indicated in table 18.13; and

(e) an amendment be inserted requiring that changes to reference tariffs be submitted to the regulator for approval to ensure they are in accordance with the above requirements.

➢ ***Parts 'a', 'b' and 'd' accepted in principle.***

Envestra accepts that it will be appropriate for the Access Arrangement to include price paths. However, the price paths proposed by the QCA are not accepted. Envestra has highlighted in this submission a number of changes that should be made to the Draft Decision. Implementation of these changes will impact on revenue targets, which in turn will change price paths. Envestra will recalculate price paths according to the allowable revenue determined by the QCA in the Final Decision.

➢ ***Part 'c' not accepted.***

Envestra accepts the QCA's desire to protect small domestic consumers from excessive price rises. However, it is unlikely that a side constraint on prices for individual end users as proposed by the QCA will be the most effective option for providing this protection, while still enabling Envestra to fully recover its revenue requirement.

The problem is that average network tariffs for individual consumers vary significantly due to the wide range of consumption levels. It would be difficult to administer a uniform price path that would apply to all consumers. Moreover, depending on the current network tariff for individual consumers, relative to the approved Reference Tariff, it could take many years to transition to cost reflective tariffs if tariff increases were restricted to CPI + 2.7. This could result in Envestra being unable to recover its allowed revenue.

Envestra would like to work with the QCA to develop an appropriate mechanism for transitioning from current to cost reflective prices that is fair to consumers, but that will still enable Envestra to recover its allowed revenue. Alternative options need to be evaluated, eg price paths with maximum dollar increases (that may apply to consumers with small bills).

➢ ***Part 'e' not accepted.***

This amendment cannot be accepted as the Code does not currently provide for Regulators to review Reference Tariffs within the Access Arrangement period.

14.2 Envestra draft amendment E43 – Tariff schedule

In order for the Envestra access arrangement to be approved, the Authority requires that the reference tariff schedule be revised to reflect:

- **The revised transitional revenue requirements for each year of the regulatory period;**
- **The revised CPI-X targets for each customer class; and**
- **The CPI+X side constraint for individual customers.**

The Authority is also of the view that the general views on tariff structure expressed above should be considered by Envestra in developing its revised tariff schedule.

➢ ***Accepted.***

Envestra will revise its Reference Tariffs scheduled to be consistent with the Final Decision, taking into account approved revenue requirements and price paths.