



Final Decision Errata

**Proposed Access Arrangements for Gas
Distribution Networks:
Allgas Energy Limited and
Envestra Limited**

November 2001

ERRATA

The Queensland Competition Authority released its Final Decision in relation to the proposed access arrangements for the Allgas Energy Limited (Allgas) and Envestra Limited (Envestra) gas distribution networks on 3 October 2001. The Final Decision was to not approve the access arrangements in their present form and to require a series of amendments. Allgas and Envestra are required to submit revised access arrangements incorporating those amendments by 12 November 2001.

Since the release of the Final Decision, the Authority has identified an error in the calculation of one of the parameters used to determine the rate of return for the regulated businesses. The equity beta was set at 0.97 in the Final Decision rather than its correct value of 0.99. This change impacts on the post-tax nominal rate of return, which should have been set at 9.27 rather than the 9.22 listed in the Final Decision. The slightly higher rate of return has in turn required changes to the revenue figures in Chapter 18 of the Final Decision.

The alterations to the equity beta, the post-tax nominal rate of return and the revenue figures have required minor changes to the detail of a number of the required amendments as well as some of the tables contained in the Final Decision. The altered amendments and tables are set out below. There will also be some consequential changes required in the text accompanying these tables, but those changes are not separately identified.

PAGE 201**RATE OF RETURN**

The Authority has estimated the rate of return using a Weighted Average Cost of Capital/Capital Asset Pricing Model (WACC/CAPM) framework. The post-tax nominal rate of return is calculated to be 9.27 per cent.

In accordance with the Draft Decision, the risk free rate has been re-estimated, based upon a 20 trading day average rate.

Individual parameter estimates are as follows:

<i>Risk free rate</i>	<i>5.96 per cent</i>
<i>Market risk premium</i>	<i>6.00 per cent</i>
<i>Debt margin</i>	<i>1.55 per cent</i>
<i>Asset beta</i>	<i>0.55</i>
<i>Debt beta</i>	<i>0.26</i>
<i>Equity beta</i>	<i>0.99</i>
<i>Gamma</i>	<i>50 per cent</i>
<i>Tax rate</i>	<i>30 per cent</i>
<i>Expected inflation</i>	<i>2.5 per cent.</i>

PAGE 231**Allgas amendment A26**

In order for the Allgas access arrangement to be approved, the equity beta used in calculating the WACC must be set at 0.99.

Envestra amendment E31

In order for the Envestra access arrangement to be approved, the equity beta used in calculating the WACC must be set at 0.99.

PAGE 245**Table 15.13: Summary of WACC parameters**

Parameter	Allgas proposal	Envestra proposal	QCA Draft Decision	QCA Final Decision
Risk free rate (%)	6.2	6.2	5.97	5.96
Market risk premium (%)	6.0	6.0-7.0	6.0	6.0
Asset beta	0.5	0.5-0.55	0.55	0.55
Equity beta	1.1	0.98-1.11	0.97	0.99
Cost of debt margin (%)	1.1	1.4-1.6	1.60	1.55
Cost of debt	7.3	7.6-7.8	7.64	7.51
Capital structure – proportion of debt (%)	60	60	60	60
Gamma	0.5	0.3-0.5	0.5	0.5
Tax rate (%)	30	30	30 ¹	30 ¹
Inflation rate (%)	2.50	2.50	2.40	2.50
Nominal post-tax WACC	9.50²	9.39 – 10.27³	9.26⁴	9.27⁵

1. The statutory tax rate is set at 34 per cent in the 2000-01 tax year and 30 per cent thereafter.
2. Allgas applied a WACC 1 of 7.28% - this equates to a WACC 3 of 9.50%. If the debt beta is amended to remove the administrative costs of raising debt WACC 1 becomes 7.05% which corresponds to a WACC 3 of 9.21%. When recalculated with a risk free rate of 5.77% the WACC 3 equals 8.78%.
3. Envestra proposed a real pre-tax WACC of 7.75% based on low and high parameters resulting in a pre-tax real range of 7.01% to 8.48%. The reported range represents the QCA estimated WACC 3 based on the inputs supplied by Envestra. If the debt beta is amended to remove the administrative costs of raising debt the range for the WACC 3 becomes 9.22% to 10.04%. When recalculated with a risk free rate of 5.77% the WACC 3 is in the range 8.79% to 9.61%.
4. Alternative measures of WACC would have produced the following results using data from the QCA Draft Decision column in the above table. WACC 1 = 7.06%, WACC 2 = 8.58%, WACC 4 = 7.90%. The formulas for the different versions of the WACC can be found in Appendix B.
5. Alternative measures of WACC would have produced the following results using data from the QCA Final Decision column in the above table. WACC 1 = 7.07%, WACC 2 = 8.59%, WACC 4 = 7.91%. The formulas for the different versions of the WACC can be found in Appendix B.

PAGE 246**Allgas amendment A30**

In order for the Allgas access arrangement to be approved, the post-tax nominal WACC must be set at 9.27 per cent.

Envestra amendment E35

In order for the Envestra access arrangement to be approved, the post-tax nominal WACC must be set at 9.27 per cent

PAGE 290**Table 18.4: QCA revised total revenue targets for Allgas (\$m, nominal) – Final Decision**

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Return on capital	13.4	14.3	15.2	16.0	16.8	17.6
Return of capital (depreciation)	4.5	4.7	5.1	5.2	5.3	5.6
Non-capital costs	8.0	8.0	8.2	8.5	8.9	9.1
Unaccounted for gas	1.3	1.3	1.4	1.5	1.6	1.7
Tax (net of franking credits)	0.6	0.9	1.0	1.2	1.4	1.6
Total	27.7	29.2	31.0	32.6	34.0	35.7

Numbers may not add due to rounding.

PAGE 292**Table 18.6: QCA revised total revenue targets for Envestra (\$m, nominal) – Final Decision**

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Return on capital	11.9	12.7	13.6	14.4	15.3	16.1
Return of capital (depreciation)	4.4	4.8	5.2	5.6	6.0	6.4
Non-capital costs	10.2	10.5	10.7	11.0	11.2	11.5
Unaccounted for gas (SUG)	1.0	1.1	1.1	1.2	1.3	1.3
Tax (net of franking credits)	0.8	0.8	1.0	1.1	1.3	1.5
Total	28.3	29.7	31.4	33.2	34.9	36.7

Numbers may not add due to rounding. Totals include contributions to joint costs made by excluded extensions to the network (see pp.152-155).

PAGE 300**Table 18.11: QCA cost reflective revenue requirements by customer class (\$m) – Final Decision**

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Allgas large customer class	8.3	8.7	9.2	9.7	10.2	10.8
Allgas small customer class	19.4	20.5	21.8	22.9	23.8	24.9
Allgas total	27.7	29.2	31.0	32.6	34.0	35.7
Envestra demand (large) customer class	7.1	7.3	7.4	7.6	7.8	8.0
Envestra volume (small) customer class	21.2	22.4	24.0	25.6	27.1	28.7
Envestra total	28.3	29.7	31.4	33.2	34.9	36.7

Numbers may not add due to rounding.

PAGE 301**Table 18.12: QCA transitional revenue targets for Allgas (\$m) – Final Decision**

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Large customer class	10.0	10.1	10.3	10.4	10.6	10.8
Small customer class	17.8	19.1	20.5	21.9	23.6	25.3
Total	27.7	29.2	30.7	32.4	34.2	36.1

Numbers may not add due to rounding.

Table 18.13: QCA transitional revenue targets for Envestra (\$m) – Final Decision

	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
Demand (large) customer class	7.1	7.3	7.4	7.6	7.8	8.0
Volume (small) customer class	21.1	22.5	23.9	25.4	27.0	28.7
Total	28.2	29.7	31.3	33.0	34.8	36.7

Numbers may not add due to rounding.

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Table 18.15: Pricing scenarios for the Allgas small customer class – Final Decision

	Initial average price (\$/GJ)	Ongoing price changes	Average price yr 5 (\$/GJ)	Retail price impact yr 1 (%)	Retail price impact yr 1 (\$/yr)	
					Small user	Large user
Scenario 1: achieve full cost reflectivity for domestics by year 5						
Domestic end users	12.40	CPI + 4.1%	17.10	4.2	4.10	11.45
Medium end users	5.30	CPI – 4.1%	4.90	-0.7	-35	-775
Scenario 2: achieve full cost reflectivity for domestics by year 10						
Domestic end users	12.40	CPI + 3.3%	16.50	3.7	3.60	10.10
Medium end users	5.30	CPI – 2.8%	5.20	-0.2	-7.00	-155

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Table 18.17: Pricing scenarios for the Envestra volume customer class – Final Decision

	Initial average price (\$/GJ)	Ongoing price changes	Average price yr 5 (\$/GJ)	Retail price impact yr 1 (%)	Retail price impact yr 1 (\$/yr)	
					Small user	Large user
Scenario 1: achieve full cost reflectivity for domestics by year 5						
Domestic end users	14.10	CPI + 1.9%	17.45	2.9	2.50	6.80
Medium end users	10.40	CPI – 1.8%	10.75	0.4	30	665
Scenario 2: achieve full cost reflectivity for domestics by year 10						
Domestic end users	14.10	CPI + 1.0%	16.70	2.3	2.00	5.30
Medium end users	10.40	CPI – 0.8%	11.30	1.1	75	1630