



energy consulting group

**Review of AGLGN
Gas Access Arrangement
For
Independent Pricing and Regulatory
Tribunal

Supplementary Report**

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1. SUPPLEMENTARY REPORT

1.1 INTRODUCTION

The Independent Pricing and Regulatory Tribunal is currently assessing the proposed Access Arrangement for AGL Gas Networks (AGLGN). The Tribunal engaged Energy Consulting Group (ECG) to conduct a review of AGLGN's capital and non capital expenditure to assist the Tribunal in its deliberations.

ECG completed its review and issued a report to the Tribunal. The Tribunal published the report which included ECG's recommendations on 30 September 2004 seeking comments from interested stakeholders.

On 6 October 2004, AGLGN submitted its comments to the Tribunal. The Tribunal subsequently convened a meeting with representatives from AGLGN and ECG to discuss AGLGN's responses and ECG's recommendations.

At the meeting, the Tribunal requested AGLGN to supply additional information in relation to the following three items for ECG to consider before finalising its recommendations:

- Mains Unit Cost for Established Areas
- Meter Unit Cost for Medium/High Density Customers
- Working Capital

ECG has reviewed the information provided by AGLGN and details of ECG's assessment are provided below.

1.2 MAINS UNIT COST FOR ESTABLISHED AREAS

In section 7.4.1 of its report, ECG advised:

"However, AGLGN's unit cost for laying mains in established areas (E-G, New Homes-Built up) is more than two and half times the cost in new estates. While it is recognised that the cost for laying mains in established areas exceeds that of new areas, ECG's industry knowledge suggests that the established area rate should not be more than twice that for a new area."

In its response to ECG's report, AGLGN advises:

- Its average cost of connecting new customers is at the lower end of comparable Australian gas distributors, particularly those in Victoria.
- It has sourced virtually all of its capital requirements through external contractors in a competitive environment. AGLGN dispute that any unit rates determined in this manner should be considered inefficient.
- Application of the rule of thumb ignores the fact that the weighted average cost of laying mains in build-up-areas comprises mains of varying diameters, pressures and regional locations.....
- The recommendation has not taken into consideration conditions that apply to NSW and in particular the area of the footpath in which AGLGN is required to lay its gas mains coincides with the area of the footpath under which concrete footpaths are typically constructed.

Following the meeting, AGLGN has provided information¹ on its Contract Management Business Manual and a table showing the breakdown of the mains unit rate. ECG sought clarification of the information provided by AGLGN on 21 October 2004 and has concluded the following.

ECG believes that a high-level benchmark comparison of unit cost with other jurisdiction is only applicable if the mix of customers contributing to the unit cost is the similar.

In relation to network pressures, size of mains in various areas and specific conditions related to footpath, ECG has considered these items in its review. It is worth noting that networks similar in size to that of AGLGN would have various pipe sizes and pressures. Current technology using directional boring should reduce the need to open footpaths for main laying and this has also been considered in the review.

In relation to the contracting arrangement for the construction activities, AGLGN said that it has established an approved contractor's panel to carry out the construction works under \$100,000. AGLGN has divided its network into various regions and each region has a list of contractors assigned to the region. Contractors wanting to be considered for the panel have to respond to an expression of interest stating their price for a schedule of works. AGLGN then established the contractors' panel from the interested parties taking into consideration the price and the quality of service.

Each region then determines the price for a particular construction activity based on the lowest contractor's tender after taking quality of service into consideration. This price becomes the established price in the region and other contractors are then invited to carry out the work at this price.

From the additional information provided, ECG considers that the process used by AGLGN for the contractor's panel and establishing the unit cost for each Region would be expected by a service provider acting efficiently.

ECG believes that given the direct costs have been established through the tendering process described above, it therefore concurs that the direct cost would be considered efficient.

The overhead rate is shown as 22% of the total cost. The overheads attributed to construction in built up areas is approximately 2.7 times that in new estates². ECG considers this high. ECG accepts that construction activity in built up areas is more complex than in new estates, however ECG believes that the cost of supervision (i.e. overheads) should not be more than twice that of the cost in new estates. This means that the overheads for work in built up areas should not exceed \$16.52/m.

ECG therefore recommends that the overheads that would be expected of a prudent service provider acting efficiently should not exceed \$16.52/m. The recommended total unit cost for new estates is \$96.04/m³.

1.3 METER UNIT COST FOR MEDIUM/HIGH DENSITY CUSTOMERS

In section 7.4.3 of its report, ECG advised:

"..... ECG believes that the unit cost of \$699 is higher than what would be considered efficient. ECG considers that the cost should be within the range of \$550 to \$600"

In its response to the report, AGLGN said that:

¹ Email dated 18 October 2004

² 22.49/ 8.26 = 2.72

³ 79.52+16.52= 96.04

- The unit cost represents the best estimate of prudent efficient purchase and installed costs for medium/high density metering facilities.
- The average costs of \$699 include the physical water and gas meter sets, cost of meter data loggers and meter device. The cost also includes the capital cost of hydraulic design.

Following the meeting, AGLGN provided additional information⁴ regarding the above cost. AGLGN advises that:

- The forecast unit cost included in the AAI included cost associated with hydraulic design.
- Hydraulic design costs are not associated with metering.
- Hydraulic design costs are capitalised by AGLGN as a separate category and depreciated over the life of the inlet service (50 years) not over the life of the meter (20 years).
- The forecast cost of hydraulic design was overestimated as it was assumed that the design was required on more units than actually is necessary.
- As a consequence of the above, the corrected forecast unit cost of high-rise metering should have been \$618/connection not \$699.
- As a consequence of the above, total forecast capital costs of hydraulic design should be reduced by \$319K in 2004 and \$357 K to \$385K pa thereafter.

ECG believes that the unit cost of \$618 per installation is at the high end of the range that would be expected for this type of installation. However the unit cost proposed by AGLGN is approximately 3% higher than that recommended by ECG. This difference is not considered material.

ECG therefore recommends that the Tribunal accept the unit cost of \$618 as that which would be expected from a prudent service provider.

1.4 WORKING CAPITAL

In section 6 of its report in relation to creditors:

“ECG has assumed an even split of capital expenditure between contractors and equipment, which results in an average 27.7 days of working capital on capital expenditure.”

In its response to ECG’s report, AGLGN advises that:

- Major construction projects and motor vehicles are the only significant items purchased under 30 day terms. The vast majority of capital expenditure comprises small-scale construction projects in which contractors provide both labour and material and are paid on a seven -day terms. This type of expenditure has comprised over 95% of AGL capital expenditure in recent years and is expected to reduce to approximately 90% in the forecast period due to increasing value in major projects.
- AGLGN cannot accept that ECG’s recommendation that 50% of capital expenditure is paid in 7 days.

⁴ Email dated 15 October 2004

Subsequent to the meeting, AGLGN reviewed its capital expenditure for 2002/03 and 2003/04 and advised it had incorrectly assumed metering equipment, which comprised approximately 30% of capital expenditure over these two years, was acquired on 7-day trading terms. As a result, AGLGN's now considers that ECG's assumption is fair and reasonable.

ECG accepts AGLGN's advice

1.5 REVISED CAPITAL EXPENDITURE SUMMARY

ECG has amended its capital expenditure recommendations accordingly.

**Table 1-1 Recommended Market Expansion Capital Expenditure
(Real 2005 \$ million)**

	1999/00	2000/01	2001/02	2002/03	2003/04
Mains	24.8	23.0	10.4	7.5	9.6
Services	26.7	26.0	25.7	24.2	23.8
Meters	12.3	11.9	13.7	18.5	15.1
Total Market Expansion	63.8	60.9	49.8	50.2	48.5

Note: Replaces table 7-16 in page 42 of the Report.

**Table 1-2 Recommended Market Expansion Capital Expenditure
(Nominal \$ million)**

	1999/00	2000/01	2001/02	2002/03	2003/04
Total Market Expansion	55.8	54.7	46.2	48.0	47.4

Note: Replaces table 7-17 in page 42 of the Report.

Table 1-3 Recommended Capital Expenditure 2000-2004
(Nominal \$ million)

	1999/00	2000/01	2001/02	2002/03	2003/04	July-Dec 04
Market Expansion	55.8	54.7	46.2	48.0	47.4	23.7
System Reinforcement/ Renewal/Replacement	17.1	13.4	5.6	9.5	15.6	15.8
<i>System Reinforcement</i>	1.5	0.5	2.5	6.7	3.5	2.8
<i>Renewal/Replacement</i>	15.6	12.9	3.1	2.8	12.1	13.0
Non System Assets	5.3	2.2	5.8	2.7	5.2	4.0
Total	78.2	70.3	57.6	60.2	68.2	43.5

Note: Replaces table 7-31 in page 53 of the Report. July – Dec 04 is the first half of 2004/05 from the table below.

Table 1-4 Recommended Market Expansion Capital Expenditure
(Real \$ million 2005)

	2004/05 ⁵	2005/06	2006/07	2007/08	2008/09	2009/10
Mains	4.8	11.7	10.9	9.3	9.2	9.1
Services	11.7	23.8	23.2	23.1	23.0	22.9
Meters	7.2	14.5	14.4	14.4	14.4	14.5
Total Market Expansion	23.7	50.0	48.5	46.8	46.6	46.5

Note: Replaces table 8-10 in page 60 in the Report.

Table 1-5 Recommended Capital Expenditure 2005-2010
(Real \$ million 2005)

	Jan-June 05	2005/06	2006/07	2007/08	2008/09	2009/10
Market Expansion	23.7	50.0	48.5	46.8	46.6	46.5
System Reinforcement/ Renewal/Replacement	15.8 ⁶	59.9	40.2	37.4	23.2	17.1
<i>System Reinforcement</i>	2.8	16.4	8.2	3.5	4.0	4.1
<i>Renewal/Replacement</i>	12.5	29.5	18.0	16.1	14.5	13
<i>Sydney Primary Loop</i>	0.5	14.0	14.0	17.8	4.7	0
Non System Assets ⁷	4.0	8.0	8.0	8.0	9.2	9.7
Total	43.5	117.9	96.7	92.2	79.0	73.3

Note: Replaces table 8-27 in page 85 of the Report.

⁵ Note that data for 2004/05 is from January to June.

⁶ The expenditure is higher than in the Access Arrangement Information due to a reinforcement project in 2003/04 being deferred to 2004/05.

⁷ FRC Costs of \$2.32 million for IT has not been included as advised by AGLGN.