

Further Final Decision and Final Approval of the Proposed Revisions to the Access Arrangement for the Mid-West and South-West Gas Distribution Systems

Submitted by
AlintaGas Networks Pty Ltd

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Economic Regulation Authority



WESTERN AUSTRALIA

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DECISION

1. On 28 February 2005 the Authority issued a draft decision (**Draft Decision**) not to approve proposed revisions to the Access Arrangement for the Mid-West and South-West Gas Distribution Systems (**GDS**) submitted by AlintaGas Networks Ltd (**AGN**) on 31 March 2004. The reason for the Authority's decision was that the proposed revisions to the Access Arrangement did not satisfy the principles in sections 3.1 to 3.20 of the *National Third Party Access Code for Natural Gas Pipeline Systems* (**Code**).
2. In the Draft Decision the Authority also decided, pursuant to section 2.30(a) of the Code, that it was not satisfied that the Access Arrangement Information submitted on 31 March 2004 with the proposed revisions to the Access Arrangement met the requirements of sections 2.6 and 2.7 of the Code.
3. In the Draft Decision the Authority, therefore, specified 96 amendments to the proposed revisions to the Access Arrangement and Access Arrangement Information which the Authority required AGN to make before it would approve the proposed revisions to the Access Arrangement.
4. On 27 May 2005, in response to the Draft Decision, AGN submitted to the Authority an amended Access Arrangement Information. Further, on 10 June 2005, also in response to the Draft Decision, AGN submitted amended proposed revisions to the Access Arrangement.
5. On 12 July 2005, the Authority issued a final decision (**Final Decision**) not to approve the amended proposed revisions to Access Arrangement submitted on 10 June 2005 for the reason that the amendments did not meet the requirements of the Draft Decision. Further, in the Final Decision, the Authority also decided pursuant to section 2.30(a) of the Code that the amended Access Arrangement Information submitted by AGN on 27 May 2005 did not meet the requirements of the Draft Decision and therefore the Authority was not satisfied that the amended Access Arrangement Information met the requirements of sections 2.6 and 2.7 of the Code.
6. The Authority's Final Decision specified 24 amendments to the amended proposed revisions to the Access Arrangement submitted on 10 June 2005, and to the amended Access Arrangement Information submitted on 27 May 2005, which the Authority required AGN to make before it would approve proposed revisions to the Access Arrangement.
7. The Final Decision required AGN, in accordance with section 2.38(b)(ii) of the Code, to submit amended proposed revisions to the Access Arrangement addressing the requirements of the Final Decision to the Authority by Wednesday, 27 July 2005. On 27 July 2005, AGN sought an extension of time to submit its amended revisions to the Access Arrangement until Friday, 29 July 2005. On 28 July 2005, the Authority granted AGN's requested extension.
8. On 29 July 2005 AGN submitted to the Authority amended proposed revisions to the Access Arrangement and amended Access Arrangement Information responding to the Final Decision.
9. The Authority notes that on 9 August 2005 AGN provided the Authority with a copy of the proposed revisions to the Access Arrangement which had been submitted on

29 July 2005 which corrected certain typographical and formatting errors, and altered certain words to better reflect AGN's intent. These changes did not, however, materially change the proposed revisions to the Access Arrangement.

10. To the extent that the proposed revised Access Arrangement submitted by AGN on 9 August 2005 incorporated the amendments referred to in paragraph 9, the Authority has decided to treat it as a late submission and, pursuant to section 2.37 of the Code, has exercised its discretion to accept it.
11. The Authority agrees that the typographical or formatting corrections, or changes in wording to better reflect AGN's intent, should be included in the manner proposed in the proposed revised Access Arrangement submitted on 9 August 2005. Accordingly, the references in this decision to the proposed revised Access Arrangement are to the proposed revised Access Arrangement as corrected on 9 August 2005.
12. Section 2.42 of the Code sets out the requirements for the Authority's consideration of the proposed revised Access Arrangement submitted to the Authority by AGN:
 - 2.42 If the Service Provider submits amended revisions to the Access Arrangement by the date specified by the Relevant Regulator under section 2.38(a)(ii) or (b)(ii) then the Relevant Regulator must issue a further final decision that:
 - (a) if the Relevant Regulator is satisfied that the amended revisions to the Access Arrangement incorporate the amendments specified by the Relevant Regulator in its final decision under section 2.38(a)(ii) or (b)(ii), approves the amended revisions to the Access Arrangement; or
 - (b) if the Relevant Regulator is satisfied that the amended revisions to the Access Arrangement either substantially incorporate the amendments specified by the Relevant Regulator or otherwise address to the Relevant Regulator's satisfaction the matters the Relevant Regulator identified in its final decision as being the reasons for requiring the amendments specified in its final decision under section 2.38(a)(ii) or (b)(ii), either approves or does not approve the amended revisions to the Access Arrangement (in the Relevant Regulator's discretion); or
 - (c) in any other case, does not approve the amended revisions to the Access Arrangement.
13. Pursuant to section 2.42 of the Code, the Authority's further final decision (**Further Final Decision**) is to approve the proposed revised Access Arrangement submitted to the Authority on 29 July 2005. The Authority is satisfied that AGN has incorporated the amendments to the proposed revised Access Arrangement required by the Final Decision or has otherwise addressed to the Authority's satisfaction the matters the Authority identified in its Final Decision as being reasons for requiring the amendments.
14. The Authority is also satisfied that the Access Arrangement Information submitted by AGN on 29 July 2005 has incorporated the amendments to the Access Arrangement Information required by the Final Decision or has otherwise addressed the Authority's reasons for requiring the amendments. Therefore, the Authority's further final decision is that the Access Arrangement Information satisfies the requirements of sections 2.6 and 2.7 of the Code.
15. The detailed reasons for the Authority's decision are set out below in this Further Final Decision.

16. The revised Access Arrangement will commence on 25 August 2005, being a date which is not less than 14 days after the date of this decision.¹ Therefore, 25 August 2005 is the “Effective Date” for the purpose of clause 6 of Part A of the revised Access Arrangement, and is also the “Commencement Date” of the revisions to the Access Arrangement as defined in the Glossary in Schedule 2 of Part A of the revisions to the Access Arrangement.

REASONS

Reference Tariffs and Reference Tariff Policy

Depreciation of Initial Capital Base assets

Final Decision (Final Decision Amendment 1)

17. The amended Access Arrangement Information submitted on 27 May 2005 in response to the Draft Decision did not include the approved Depreciation of the assets comprising the Initial Capital Base as set out in Table 3 of the Draft Decision, as had been required by Amendment 13 of the Draft Decision. The Authority, therefore, required in the Final Decision that the amended Access Arrangement Information submitted on 27 May 2005 be amended accordingly before final approval.
18. Final Decision Amendment 1 was as follows:

Final Decision Amendment 1

The Access Arrangement Information should be amended to include the approved Depreciation of the assets comprising the Initial Capital Base as set out in Table 3 of the Draft Decision.

Further Final Decision

19. The amended Access Arrangement Information submitted in response to the Final Decision on 29 July 2005 includes in Table 4.4 the approved Depreciation of the assets comprising the Initial Capital Base as set out in Table 3 of the Draft Decision. Therefore, the Authority is satisfied that AGN has incorporated the amendment required by Final Decision Amendment 1.

New Facilities Investment for first Access Arrangement Period

Final Decision (Final Decision Amendment 2)

20. For the purpose of substantiating AGN’s actual New Facilities Investment during the first Access Arrangement Period, following the Draft Decision the Authority engaged a consultant to conduct an audit of selected categories of New Facilities Investment. The selected categories of capital expenditure were medium pressure mains, meters and service pipes and capital expenditure associated with full retail contestability, which represented approximately 80 percent of AGN’s overall New Facilities Investment during the first Access Arrangement Period.

¹ Section 2.48 of the Code.

21. The audit found certain discrepancies between AGN's accounting records and the information provided to the Authority prior to the Draft Decision as to the amounts expended in the three categories audited. Therefore, there were inconsistencies with the information contained in Table 4.3 of the amended Access Arrangement Information submitted by AGN on 27 May 2005 in response to the Draft Decision. The adjusted values for New Facilities Investment for the first Access Arrangement Period, taking account of the audit findings, were set out in Table 1 of the Final Decision.
22. Therefore, the Authority required an amendment as follows to the Access Arrangement Information to reflect the audit findings, in order for the Authority to give final approval.

Final Decision Amendment 2

Table 4.3 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended to accord with Table 1 of the Final Decision in relation to AGN's New Facilities Investment for the first Access Arrangement Period.

Further Final Decision

23. The amended Access Arrangement Information submitted on 29 July 2005 in response to the Final Decision includes in Table 4.3 the regulatory actual capital costs for 2000-2004 in accordance with Table 1 of the Final Decision. Therefore, the Authority is satisfied that AGN has incorporated the amendments required by Final Decision Amendment 2.

Depreciation of New Facilities Investment for first Access Arrangement Period

Final Decision (Final Decision Amendment 3)

24. The revised Access Arrangement Information submitted on 27 May 2005 in response to the Draft Decision did not include the depreciation of forecast New Facilities Investment for the first Access Arrangement Period as set out in Table 5 of the Draft Decision, as had been required by Amendment 15 of the Draft Decision. The Authority, therefore, required in the Final Decision that the amended Access Arrangement Information submitted on 27 May 2005 be amended accordingly before final approval.
25. The amendment required by the Authority was as follows:

Final Decision Amendment 3

The Access Arrangement Information submitted on 27 May 2005 should be amended to include the depreciation of forecast New Facilities Investment for the first Access Arrangement Period as set out in Table 5 of the Draft Decision.

Further Final Decision

26. The amended Access Arrangement Information submitted in response to the Final Decision on 29 July 2005 includes in Table 4.5 the depreciation of forecast New Facilities Investment for the first Access Arrangement Period as set out in Table 5 of the Draft Decision. Therefore, the Authority is satisfied that AGN has incorporated the amendments required by Final Decision Amendment 3.

Opening value of Capital Base

Final Decision (Final Decision Amendments 4 & 5)

27. In clause 22 of Part B of the proposed revisions to the Access Arrangement submitted by AGN on 10 June 2005, and in compliance with Amendment 17 of the Draft Decision, AGN proposed an opening value for the Capital Base of \$658.4 million (dollars at 31 December 2004). However, the post-Draft Decision audit findings in relation to the actual New Facilities Investment during the first Access Arrangement Period necessitated amendments to inputs to the calculation of the opening value of the Capital Base, which were not reflected in AGN's proposed revised Access Arrangement documentation submitted on 10 June 2005 in response to the Draft Decision.
28. Notwithstanding that AGN had met the requirements of Amendment 17 of the Draft Decision in its proposed opening value of the Capital Base, it was appropriate for the Access Arrangement documentation to be adjusted to reflect the findings of the audit in relation to the New Facilities Investment during the first Access Arrangement Period.
29. In the Final Decision, therefore, the Authority set out in Table 2 its calculation of the opening values for each asset class comprising the Capital Base at the start of the second Access Arrangement Period, adjusted to take account of the audit findings. The following amendments were, therefore, required to both the revised Access Arrangement and Access Arrangement Information prior to approval by the Authority, as follows:

Final Decision Amendment 4

Clause 23 of Part B of the revised Access Arrangement submitted on 10 June 2005 should be amended to provide a value for the opening value of the Capital Base at the commencement of the second Access Arrangement Period of \$658.6 million in accordance with Table 2 of the Final Decision.

Final Decision Amendment 5

Table 4.1 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended to accord with Table 2 of the Final Decision in relation to the values of the Capital Base during the first Access Arrangement Period by asset class, including the values at the conclusion of the first Access Arrangement Period.

Further Final Decision

30. Clause 19 of Part B of the amended proposed revisions to the Access Arrangement submitted by AGN on 29 July 2005 in response to the Final Decision provides for the opening value of the Capital Base at the commencement of the second Access Arrangement Period to be \$658.6 million. This value accords with Table 2 of the Final Decision and therefore the Authority is satisfied that AGN has incorporated the amendment required by Final Decision Amendment 4.
31. Further, Table 4.1 of the amended Access Arrangement Information submitted on by AGN on 29 July 2005 in response to the Final Decision has been amended to accord with Table 2 of the Final Decision in relation to the values of the Capital Base during the first Access Arrangement Period by asset class, including the values at the conclusion of the first Access Arrangement Period. Therefore, the Authority is satisfied that AGN has incorporated the amendment required by Final Decision Amendment 5.

Forecast Depreciation

Final Decision (Final Decision Amendment 6)

32. AGN's amended Access Arrangement Information submitted on 27 May 2005 included in Table 4.7 revised total Depreciation for the second Access Arrangement Period. In the Final Decision, the Authority was not satisfied that Table 4.7 incorporated the amendment required by Amendment 20 of the Draft Decision in relation to forecast Depreciation.
33. The reason for the difference arose from the audit of AGN's actual New Facilities Investment for the first Access Arrangement Period. The audit found that it would be appropriate for some assets to be re-classified between the meters and services pipes and medium pressure system categories, which categories have different depreciation lives. Further, the audit also identified a small discrepancy in the total of actual New Facilities Investment during the first Access Arrangement Period. The Authority's calculation of total Depreciation for the second Access Arrangement Period was also impacted by the changes identified through the audit.
34. The resulting recalculation by the Authority of total Depreciation, taking account of these factors, was set out in Table 3 of the Final Decision.
35. In the circumstances, the Authority decided that it would be necessary for AGN to amend Table 4.7 of the revised Access Arrangement Information submitted on 27 May 2005 to accord with Table 3 of the Final Decision. The following amendment was required:

Final Decision Amendment 6

Table 4.7 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended to accord with Table 3 of the Final Decision in relation to total Depreciation during the second Access Arrangement Period.

Further Final Decision

36. The amended Access Arrangement Information submitted in response to the Final Decision on 29 July 2005 includes in Table 4.7 total Depreciation during the second Access Arrangement Period which accords with Table 3 of the Final Decision. Therefore, the Authority is satisfied that AGN has incorporated the amendment required by Final Decision Amendment 6.

Capital Base for second Access Arrangement Period

Final Decision (Final Decision Amendment 7)

37. In response to Amendment 21 of the Draft Decision, AGN's amended Access Arrangement Information submitted on 27 May 2005 included in Table 4.5 the value of the Capital Base at the end of each year of the second Access Arrangement Period.
38. However, by reason of remaining differences between AGN and the Authority with respect to inputs to the calculation of the Capital Base at the end of each year of the second Access Arrangement Period, the Authority's calculation of the value of the Capital Base as at the date of the Final Decision differed from AGN's calculation as presented in Table 4.5 of the amended Access Arrangement Information submitted on 27 May 2005.

39. The Authority's alternative calculation of the Capital Base at the end of each year of the second Access Arrangement Period by asset class was set out in Table 4 of the Final Decision.
40. In the circumstances, the Authority decided that it would be necessary for AGN to amend Table 4.5 of the amended Access Arrangement Information submitted on 27 May 2005 to accord with Table 4 of the Final Decision. The following amendment was required:

Final Decision Amendment 7

Table 4.5 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended to accord with Table 4 of the Final Decision in relation to the value of the Capital Base during the second Access Arrangement Period.

Further Final Decision

41. The amended Access Arrangement Information submitted in response to the Final Decision on 29 July 2005 includes in Table 4.5 values for the Capital Base at the end of each year of the second Access Arrangement Period by asset class which accord with Table 4 of the Final Decision. Therefore, the Authority is satisfied that AGN has incorporated the amendments required by Final Decision Amendment 7.

Working Capital

Final Decision (Final Decision Amendment 8)

42. In the Draft Decision, the Authority noted that the Reference Tariff model provided by AGN as additional information assumed 35 days for receipt of revenue and 20 days for payment of capital and operating costs in respect of Reference Services. Further, the Authority noted its approval of AGN's proposal to amend the terms and conditions for the provision of Reference Services in its proposed revised Access Arrangement, by reducing the period for payment of invoices from 15 business days to 10 business days. In these circumstances, in the Draft Decision, the Authority considered that, for the purposes of determining working capital, the assumed period for receivables would be more appropriately set at 20 days, which would also be consistent with AGN's assumed period for the payment of creditors.
43. AGN did not make any submission in response to the matters raised by the Authority in the Draft Decision concerning working capital. Further, in the revised Access Arrangement Information submitted on 27 May 2005 in response to the Final Decision, AGN reflected the position which it had previously taken with respect to working capital, without incorporating the amendment required by the Authority in the Draft Decision.
44. In these circumstances, in the Final Decision, the Authority determined that there was a need for section 4.2.11 of the Access Arrangement Information, which outlines AGN's different approach to calculating the return on working capital, to be amended so that it accurately reflects the manner in which the Authority has determined that working capital would be calculated. The Authority, therefore, required the following amendment:

Final Decision Amendment 8

Section 4.2.11 of the revised Access Arrangement Information submitted on 27 May 2005, concerning the return on working capital, should be amended to accord with the method adopted by the Authority in this Final Decision for determining the return on working capital.

Further Final Decision

45. The Authority is satisfied that the amended Access Arrangement Information submitted in response to the Final Decision on 29 July 2005 includes in section 4.2.11 information which accords with the method adopted by the Authority in this Final Decision for determining the return on working capital. Therefore, the Authority is satisfied that AGN has substantially incorporated the amendments required by Final Decision Amendment 8 or has otherwise substantially addressed to the Authority's satisfaction the matters the Authority identified in the Final Decision.

Non Capital Costs

Final Decision (Final Decision Amendments 9 & 10)

46. The Draft Decision, in Amendment 25, required certain amendments to AGN's forecast Non Capital Cost by expenditure category. AGN's revised forecasts were presented in Table 4.13 of the amended Access Arrangement Information submitted on 27 May 2005.
47. For reasons explained in the Final Decision in relation to individual categories of Non Capital Costs there was a need for Table 4.13 of the amended Access Arrangement Information submitted on 27 May 2005 to be amended to take account of the following adjustments:
- the provision of a productivity improvement of 1 percent per annum in relation to network costs for the final two years of the second Access Arrangement Period;
 - the removal of forecast heating value management costs from the network costs category;
 - the adjustment of unaccounted for gas (**UAFG**) expenditure forecasts to reflect the Authority's Final Decision above;
 - the disaggregation of regulatory costs from the corporate costs category; and
 - the reduction of marketing costs to more accurately reflect the audited actual costs for 2004.
48. For the purpose of its Final Decision, the Authority re-forecast AGN's revised Non Capital Costs to take proper account of the above matters. The Authority's re-forecast was set out in Table 10 of the Final Decision.
49. The Authority decided that the amended Access Arrangement Information as submitted on 27 May 2005 would need to be amended to accord with the forecast Non Capital Cost set out in Table 10 of the Final Decision. The Authority also noted a need for Table 4.15 of the amended Access Arrangement Information as submitted on 27 May 2005 to be further amended to reflect the Authority decision regarding the forecast percentage of UAFG during the second Access Arrangement period.

50. The Authority, therefore, required the following amendments prior to final approval:

Final Decision Amendment 9

Table 4.13 of the revised Access Arrangement Information submitted by AGN on 27 May 2005 should be amended to accord with the values for forecast Non Capital Costs for the second Access Arrangement Period set out in Table 10 of this Final Decision.

Final Decision Amendment 10

Table 4.15 of the revised Access Arrangement Information submitted by AGN on 27 May 2005 should be amended to provide for forecast UAFG of 2.5 percent of gas received over the second Access Arrangement Period.

Further Final Decision

51. The Authority is satisfied that the amended Access Arrangement Information submitted in response to the Final Decision on 29 July 2005 includes in Table 4.13 information which accords with the values for forecast Non Capital Costs for the second Access Arrangement Period set out in Table 10 of this Final Decision and therefore AGN has incorporated the amendments required by Final Decision Amendment 9.
52. The Authority is also satisfied that the amended Access Arrangement Information submitted in response to the Final Decision on 29 July 2005 provides in Table 4.19 for forecast UAFG of 2.5 percent of gas received over the second Access Arrangement Period and therefore AGN has incorporated the amendment required by Final Decision Amendment 10.

Total Revenue

Final Decision (Final Decision Amendments 11 to 14)

53. Under Amendment 26 of the Draft Decision, the Authority had required AGN to amend its Access Arrangement Information as originally submitted, to accord with the Authority's calculation of Total Revenue. The difference in the Total Revenue position of the Authority in the Draft Decision and that of AGN as originally submitted was largely attributable to the difference in the Rate of Return requested and that allowed by the Authority.
54. The Authority, therefore, also required amendments, in the Draft Decision, to the Access Arrangement Information as originally submitted to reflect the Authority's determination of the Rate of Return consistent with sections 8.30 and 8.31 of the Code (Amendments 22 and 23), and the return on the Capital Base calculated using the Rate of Return determined by the Authority (Amendment 24).
55. In response to the Draft Decision, AGN did not accept the Authority's position in relation to the appropriate Rate of Return and, therefore, did not accept the requirement to amend its proposal in accordance with Amendments 22, 23, 24 or 26 of the Draft Decision.
56. With respect to the Rate of Return in the Draft Decision the Authority had determined a pre-tax real WACC of 6.50 percent as the appropriate Rate of Return. In response to the Draft Decision, AGN has proposed a range of appropriate values of between 6.50 and 8.17 percent, and proposed that the Authority use a Rate of Return of 7.75 percent being the 75th percentile of that range. AGN used this Rate of Return in the

amended Access Arrangement Information submitted on 27 May 2005 and the amended proposed Revised Access Arrangement submitted on 10 June 2005, in response to the Draft Decision.

57. In the Final Decision, the Authority determined that the range of values for the WACC, which the Authority considered would accord with sections 8.30 and 8.31 of the Code in relation to the Rate of Return, would be between 5.55 and 6.78 percent, real pre-tax. The Authority, therefore, decided that AGN's proposed rate of return in response to the Draft Decision, and consequently the proposed return on the Capital Base and Total Revenue, were higher than the appropriate range of values.
58. Section 8.6 of the Code contemplates that it is possible that uncertainties in each of the cost components of Total Revenue, including the Rate of Return, may cause a range of values to be attributed to Total Revenue in which event the Authority is required to determine the value of Total Revenue within this range that is most consistent with the objectives contained in section 8.1.
59. The Authority, therefore, determined in its Final Decision that consideration of a range in values of Total Revenue was necessitated by uncertainty in the value of the Rate of Return and the specification by the Authority for the purposes of the Final Decision of a range of values for the Rate of Return. Further, that having established the relevant range of values of Total Revenue it was necessary for the Authority to determine a single value for Total Revenue in the manner provided for under the Code, and taking into account all relevant considerations under the Code.
60. Having taken into account these considerations, in its Final Decision the Authority was satisfied that a value of Total Revenue that is based on a Rate of Return of 6.60 percent – which would be at the upper end but not the upper limit of the range of values of the Rate of Return that would comply with the Code – would best achieve the relevant Code objectives.
61. Adopting a Rate of Return of 6.60 percent, the Authority determined, and set out in the Final Decision, the appropriate return on the Capital Base (Table 6 of the Final Decision) and the Total Revenue (Table 7 of the Final Decision) for the second Access Arrangement Period in accordance with the Code. The Authority also set out the present value of the Total Revenue for the second Access Arrangement Period, as shown in Table 7, which was \$459.0 million in dollar values at 31 December 2004.
62. The Authority's determinations of the Rate of Return, return on the Capital Base and Total Revenue in the Final Decision differed from those presented by AGN in its revised Access Arrangement Information submitted on 27 May 2005. It was therefore necessary for the following amendments to the Rate of Return, return on Capital Base and Total Revenue prior to approval.

Final Decision Amendment 11

The pre-tax real weighted average cost of capital referred to at page 50 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended from 7.75 percent to 6.60 percent.

Final Decision Amendment 12

Table 4.9 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended to include the values as set out in Table 7 in this Final Decision as the values for determining the Rate of Return for the revised Access Arrangement.

Final Decision Amendment 13

Table 4.10 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended to accord with the values for the return on the Capital Base for the second Access Arrangement Period set out in Table 11 of this Final Decision.

Final Decision Amendment 14

Table 4.16 of the revised Access Arrangement Information submitted on 27 May 2005 should be amended to accord with the values for Total Revenue set out in Table 12 of this Final Decision.

Further Final Decision

Rate of Return

63. AGN's proposed revisions to the Access Arrangement includes Reference Tariffs calculated on the basis of, inter alia, a Rate of Return of 6.78 percent, pre-tax real. AGN has indicated that it considers that it has addressed the matters the Authority identified in its Final Decision as being the reasons for requiring an amendment to the proposed Rate of Return by proposing a Rate of Return of 6.78 percent in the proposed revisions submitted on 29 July 2005, being a Rate of Return that is within the range that the Authority considered would comply with the Code.
64. The Authority notes that the Rate of Return now proposed by AGN is higher than that determined by the Authority in the Final Decision. The Authority accepts, however, that in revising the Reference Tariffs to reflect a Rate of Return of 6.78 percent pre-tax real, AGN has adopted a Rate of Return that the Authority considers is within a range of values that would comply with the Code. The Authority is, therefore, satisfied that, in applying a Rate of Return of 6.78 percent, AGN has addressed the reasons of the Authority for requiring the Reference Tariff to be revised to reflect a Rate of Return that complies with the requirements of the Code.
65. AGN has amended the reference to the Rate of Return in the amended Access Arrangement Information at page 54 to refer to a Rate of Return of 6.78 percent real, pre-tax that has been used to determine Reference Tariffs so as to accord with the Authority's Final Decision. Therefore, the Authority is satisfied that AGN has substantially incorporated or otherwise addressed the amendment required by Final Decision Amendment 11.
66. In relation to Final Decision Amendment 12, AGN included in the amended Access Arrangement Information submitted on 29 July 2005 an amended Table 4.9 that accords with the values as set out in Table 7 in this Final Decision. These values were used to determine the range of 5.50 percent to 6.78 percent adopted by the Authority as the reasonable range of WACC values. Therefore, the Authority is satisfied that AGN has incorporated the amendments required by Final Decision Amendment 12.

Return on Capital Base

67. In the amended Access Arrangement Information submitted on 29 July 2005, AGN has calculated the values for the return on the Capital Base for the second Access Arrangement Period set out in Table 4.14 using the proposed Rate of Return of 6.78 pre-tax, real.
68. The values in Table 4.14 do not accord exactly with the values set out in Table 6 of the Final Decision, so as to comply with Final Decision Amendment 13. However, on

the basis of the Authority's decision to accept the Rate of Return of 6.78 percent as substantially incorporating or otherwise addressing the required amendments to the Rate of Return under the Final Decision, the Authority is also satisfied that the values for the return on the Capital Base set out in Table 4.14, substantially incorporate or otherwise address the amendments required by Final Decision Amendment 13.

Total Revenue

69. Similarly, in the amended Access Arrangement Information submitted on 29 July 2005, AGN has calculated the values for Total Revenue for the second Access Arrangement Period set out in Table 4.20 using the proposed Rate of Return of 6.78 pre-tax, real.
70. The values in Table 4.20 do not accord exactly with the values set out in Table 7 of the Final Decision, so as to comply with Final Decision Amendment 14. However, on the basis of the Authority's decision to accept the Rate of Return of 6.78 percent as substantially incorporating or otherwise addressing the required amendments to the Rate of Return under the Final Decision, the Authority is also satisfied that the values for Total Revenue for the second Access Arrangement Period set out in Table 4.20 substantially incorporate or otherwise address the amendments required by Final Decision Amendment 14.

Initial Reference Tariffs

Final Decision (Final Decision Amendments 14 & 15)

71. In the present case, final approval to the revised Access Arrangement was not achieved by or before the intended Revisions Commencement Date of 1 January 2005. Further, from 1 January 2005 adjusted Reference Tariffs took effect, which continued the price path under the current Access Arrangement. In these circumstances, the Authority considered in its Draft Decision that it would be appropriate if such Reference Tariffs were to continue for the remainder of the first year of the second Access Arrangement Period (i.e. 2005).
72. However, the initial Reference Tariffs originally proposed by AGN differed from the Reference Tariffs operative from 1 January 2005 which the Authority considered ought be the initial Reference Tariffs for the second Access Arrangement Period. In the Draft Decision, therefore, the Authority required AGN to amend the proposed revised Access Arrangement and Access Arrangement Information accordingly (Amendments 28 and 29).
73. In the amended proposed revised Access Arrangement and amended Access Arrangement Information submitted by AGN in response to the Draft Decision, there were differences between the initial Reference Tariffs submitted by AGN and the currently approved Reference Tariffs for 2005. As the Authority considered these differences to be material, the Authority required amendments in the Final Decision as follows:

Final Decision Amendment 15

The Reference Tariffs for Reference Services A1, A2, B1, B2 and B3 in Schedules 1, 2, 3, 4 and 5 of Part B of the proposed revised Access Arrangement submitted on 10 June 2005 should be amended to accord with the approved Reference Tariffs for 2005 as set out in the Variation Report for Variation Year 2005 submitted by AGN and published by the Authority on 9 December 2004.

Final Decision Amendment 16

Tables 3.1 and 3.2 of the revised Access Arrangement Information submitted by AGN on 27 May 2005 should be amended to accord with the approved Reference Tariffs for 2005 as set out in the Variation Report for Variation Year 2005 submitted by AGN and published by the Authority on 9 December 2004.

Further Final Decision

74. The Authority is satisfied that the Reference Tariffs submitted by AGN in response to the Final Decision, contained in Schedules 1, 2, 3, 4 and 5 of Part B of the proposed revised Access Arrangement dated 29 July 2005 and Table 3.1 of the Access Arrangement Information dated 29 July 2005, satisfy the requirements of Final Decision Amendments 15 & 16, in that they accord with the approved Reference Tariffs for 2005 as set out in the Variation Report for Variation Year 2005 submitted by AGN and published by the Authority on 9 December 2004.

Annual volume forecasts***Final Decision (Final Decision Amendment 17)²***

75. In its Final Decision, the Authority considered updated volume forecasts for all customer classes submitted by AGN in response to the Draft Decision which had noted that the forecasts originally submitted in March 2004 appeared out-of-date.
76. In the Final Decision, the Authority noted that it had assessed the forecasts and accepted them for customers paying Reference Tariffs A1, A2, B1 and B2.
77. The Authority noted, however, that this review had raised concerns in relation to volume forecasts for the B3 category, being primarily domestic end use customers representing the vast majority, by number (over 500,000), of connections to the AGN GDS. These revised forecasts for B3 customers were inconsistent with the previous forecast, as well as being inconsistent with historical licence data and actual data provided to the Authority by AGN in relation to calendar year 2004.
78. On this issue, the Authority noted in its Final Decision that actual data relating to volume per B3 customer has been relatively stable over the period 2001-2004. In those circumstances, the Authority considered that the appropriate starting point for the relevant forecast would be the most recent actual data for volume per B3 customer. The Authority therefore proposed to use as the starting point (i.e. the forecast average volume per B3 customer connected for calendar year 2005) the licence data with respect to the 2003-2004 year (adjusted to account for the inclusion of unused connections). In relation to the projected volumes in future years (i.e. 2006-2009), the Authority decided that the previously forecast trend as accepted by the Authority for the purposes of the Draft Decision and defining the average annual movement in volume per B3 customer connected remained an appropriate basis for the forecast, being consistent with all of the data available to the Authority at this time. In the circumstances, the Authority adopted B3 customer volume forecasts taking into account the matters raised in the above discussion of forecasts for the purpose of determining Reference Tariffs for this Final Decision, which were set out in Table 8 of the Final Decision.

² Final Decision, paragraphs 511 to 515, pages 101-102.

79. The Authority required the following amendment:

Final Decision Amendment 17

Table 6.4 of the revised Access Arrangement Information submitted by AGN on 27 May 2005 – Forecast volumes by Service - should be amended by replacing the B3 customer volume forecasts with those in Table 8 of this Final Decision.

Further Final Decision

80. The Authority is satisfied that in its response to the Final Decision, AGN has submitted in Table 6.4 of the Access Arrangement Information dated 29 July 2005 B3 customer volume forecasts which accord with those in Table 8 of the Final Decision, so as to incorporate the amendments required by Final Decision Amendment 17.

Price path for Reference Tariffs

Final decision (Final Decision Amendment 18)

81. Under the approach to determining Reference Tariffs proposed by AGN, X is a constant which provides a smoothed path for variation in Reference Tariffs beyond the first year of the second Access Arrangement Period, whereby the present value of forecast revenue for Reference Tariffs over the second Access Arrangement Period will equal the present value of Total Revenue.
82. In AGN's proposed revised Access Arrangement dated 10 June 2005 submitted in response to the Draft Decision, AGN's calculation of X, taking into account amendments to the proposed revised Access Arrangement as originally submitted, was negative 2.65 percent. By contrast, the Authority's calculation of X, taking into account the Authority's various determinations for the purpose of the Final Decision, was 2.82 percent.
83. The Authority, therefore, required the following amendment in the Final Decision:

Final Decision Amendment 18

The X factor referred to in clause 8(2) of Part B of the proposed revised Access Arrangement submitted on 10 June 2005 should be amended from -0.0265 to 0.0282.

Further Final decision

84. In response to the Final Decision, AGN has used a Rate of Return of 6.78 percent pre-tax, real, to determine Reference Tariffs for the second Access Arrangement Period. For reasons set out above in this Further Final Decision (see paragraphs 63 to 66), AGN's proposed Rate of Return of 6.78 percent has been accepted by the Authority as appropriate even though it is above the Rate of Return of 6.60 percent specified in the Final Decision.
85. The value for X of 0.0282 specified by the Authority in the Final Decision was based upon a Rate of Return of 6.60 percent pre-tax, real. The value for X based upon a Rate of Return of 6.78 percent as proposed by AGN and accepted by the Authority in this Further Final Decision is 0.0224. Consistent with this, for the purpose of determining Reference Tariffs for the second Access Arrangement Period, AGN has adopted a value for X of 0.0224, as referred to in clauses 6 and 7 of Part B of the proposed revised Access Arrangement submitted by AGN on 29 July 2005. The Authority is satisfied, therefore, that AGN has substantially incorporated or otherwise addressed the amendments required by Final Decision Amendment 18.

Tariff basket form of price control

Final decision (Final Decision Amendments 19 and 20)

86. In the Final Decision, the Authority approved the adoption by AGN of a tariff basket price cap approach for the variation of Reference Tariffs during the second Access Arrangement Period³. Under this approach AGN will have the discretion to vary the structure of Reference Tariffs and tariff components annually during the second Access Arrangement Period within an overall constraint on tariff adjustment in the form $CPI (1-X)$.
87. The proposed tariff basket approach will replace the simple price cap approach under the current Access Arrangement, which precludes increases in individual Reference Tariff Components above the tariff path during the first Access Arrangement Period.
88. AGN's tariff basket proposal represents an application of the Reference Tariff Control Formula Approach for varying Reference Tariffs provided for in section 8.3(c) of the Code. The manner of variation under this method is by notice to the Authority in accordance with section 8.3B of the Code. Under the proposed amendments in clause 11 of Part B, the required notice is in the form of an annual Tariff Variation Report to be given to the Authority for approval under the Code. The annual Tariff Variation Report is proposed to be submitted 30 days prior to the start of the Variation Year, being the calendar year in respect of which the Varied Reference Tariff is being calculated.
89. One issue under both the Draft and Final Decisions in relation to AGN's proposed tariff basket approach concerned the extent of allowable rebalancing of Reference Tariffs. Having regard to relevant considerations, the Authority considered in both decisions that it would be appropriate for the tariff basket provisions to be amended to include a constraint which would limit the extent to which any particular Tariff Component may be increased in a single year.
90. Such a measure would aim at ensuring that rebalanced tariffs reflect an allocation of costs which is fair and reasonable and consistent with the extension of effective competition in the supply of natural gas to residential and small business consumers, while at the same time providing an opportunity for AGN to introduce more efficient Reference Tariff structures.
91. The constraint considered appropriate by the Authority would limit the amount by which any particular Tariff Component may increase in any one year to 2 percent above the price path established by the Reference Tariff adjustment formula. This cap reflected the Authority's analysis of a constraint which would be consistent with the maintenance of a retail margin sufficient to create an environment consistent with the extension of effective competition in the supply of natural gas to residential and small business customers.
92. The suggested formulae submitted by AGN in response to the Draft Decision did not give appropriate effect to the above requirement. In the Final Decision, therefore, the Authority considered amendments to the relevant formulae in Part B which would address these two deficiencies and thus meet the requirements of the Draft Decision and required AGN to amend its Access Arrangement accordingly.

³ Proposed revised Access Arrangement as originally submitted by AGN, 31 March 2004, Part B, clause 4.

93. In relation to the Tariff Component variation formula in clause 7 of Part B of the proposed revised Access Arrangement submitted on 10 June 2005, the Authority required the following amendment:

Final Decision Amendment 19

Clause 7 of Part B of the proposed revised Access Arrangement submitted on 10 June 2005 should be amended to read as follows:

“A Tariff Component variation under Part B, clause 4 must be in accordance with the following

$$P_t \leq P_{t-1} * \frac{SepCPI_{t-1}}{SepCPI_{t-2}} * (1 - X) * (1 + R_t) * (1 + Y)$$

where:

P_t is the value of the Reference Tariff Component for year t ;

X is positive 0.0282;

Y is positive 0.02;

R_t is the regulatory costs factor for calendar Year t and is calculated in accordance with Part B, clause 9;

$SepCPI_{t-1}$ is the September quarter Consumer Price Index for Year $t-1$;

t is calendar year for the Reference Tariff Components that are being calculated (i.e. the following year).”

94. In relation to the Price Basket formula in clause 8(1) of Part B of the proposed revised Access Arrangement submitted on 10 June 2005, the Authority required AGN to amend as follows:

Final Decision Amendment 20

Clause 8(1) of Part B of the proposed revised Access Arrangement submitted on 10 June 2005 should be amended to read as follows:

“AGN must ensure that the ratio B_t , being the ratio calculated in accordance with Part B, Clause 8(2), for all Reference Tariff Components does not exceed:

$$\frac{SepCPI_{t-1}}{SepCPI_{t-2}} (1 - X) (1 + R_t)$$

where:

X is positive 0.0282;

R_t is the regulatory costs factor for calendar Year t and is calculated in accordance with Part B, clause 9;

$SepCPI_{t-1}$ is the September quarter Consumer Price Index for Year $t-1$.”

Further Final decision

95. In response to the Final Decision, AGN has included in the proposed revised Access Arrangements submitted on 29 July 2005 formulae which accord with the formulae referred to in Final Decision Amendment 19 (see clause 6 of Part B) and Final Decision Amendment 20 (see clause 7 of Part B), and the Authority is therefore satisfied that AGN has incorporated amendments as required by Final Decision Amendments 19 and 20.

Incentive Mechanism carry-over period

Final Decision (Final Decision Amendment 21)

96. An issue which arose under the proposed revised Access Arrangement was the length of carry-over of any efficiency gains into future regulatory periods. AGN had originally proposed that efficiency gains be carried over for a full ten years after they have been earned.
97. In the Draft Decision the Authority concluded that the relevant Code provisions are not prescriptive as to the share of efficiency improvements which may be regarded as sufficient to provide a Service Provider with the appropriate incentives, nor as to what sharing as between the Service Provider and Users may be regarded as optimal.
98. In these circumstances, and in particular taking account of the regulatory outcomes as to efficiency sharing arrangements in other jurisdictions, the Authority considered that a five year carry-over period would be appropriate and required AGN's proposed Incentive Mechanism to be amended accordingly (Draft Decision Amendment 37).
99. In response to the Draft Decision, AGN did not accept the requirement to amend, and maintained its position that a ten year carry-over be included in the revised Access Arrangement. In the Final Decision, the Authority did not consider that AGN's further submissions in response to the Draft Decision provided a basis for the Authority to reconsider its Draft Decision in this respect.
100. The Authority therefore required the following amendment:

Final Decision Amendment 21

Clause 35(1)(b) of Part B of the proposed revised Access Arrangement submitted by AGN on 10 June 2005 should be amended to provide for an Incentive Mechanism that provides for a rolling carryover mechanism of no longer than five years.

Further Final Decision

101. In response to the Final Decision, AGN has included in the proposed revised Access Arrangement submitted on 29 July 2005 an Incentive Mechanism amended to provide for a five year carry-over period in accordance with Final Decision Amendment 21 (see clause 32(1) of Part B). The Authority, therefore, is satisfied that AGN has incorporated the requirements of the Final Decision in these respects.

Negative carry-overs for Incentive Mechanism

Final Decision

102. The Authority, in its Draft Decision, had required AGN to amend the proposed Incentive Mechanism to clarify how AGN proposes that net negative efficiency losses at the end of the second Access Arrangement Period are to be treated, including the exercise of any discretion by the Authority in this matter.
103. In response to the Draft Decision, AGN submitted that nothing in AGN's proposed revised Access Arrangement sought to fetter the Authority's discretion regarding the treatment of negative carry-over amounts at subsequent Access Arrangement reviews. Given this consideration, and having regard to the similarity between the Incentive Mechanism provisions approved by the Victorian regulator (under which the Regulator retained discretion) and those proposed by AGN, AGN submitted that

there was no need to further clarify the Incentive Mechanism in accordance with the Authority's Draft Decision.

104. In its Final Decision, the Authority accepted AGN's further submissions on this matter and on the basis that the parties are proceeding on the assumption that the Authority will retain discretion to deal with negative efficiency carryover amounts at the next Access Arrangement review, the Authority did not require AGN to amend its proposed revised Access Arrangement in accordance with the Draft Decision.

Further Final Decision

105. The Authority notes that clause 32(2) of the proposed revised Access Arrangement submitted in response to the Final Decision, confirms the position as understood by the Authority and referred to in the Final Decision, namely that the Authority will retain discretion as to the treatment of net negative efficiency carry-overs at future Access Arrangement reviews. The Authority is satisfied that this provision accords with the Authority's Final Decision in this matter.

Expenditure benchmarks for Incentive Mechanism

Final Decision (Final Decision Amendment 22)

106. A further issue relevant to the design of an appropriate Incentive Mechanism under the Code is which activities should be covered by the efficiency carryover mechanism, and the expenditure benchmarks to be used as the basis for calculating the carryover amount in respect of efficiencies achieved for included activities.
107. In relation to capital expenditure, AGN had originally proposed that all capital expenditure was to be included in the Incentive Mechanism. However, in both the Draft and Final Decisions, the Authority did not accept this approach, in view of the Authority's view that certain categories of capital expenditure were not of a sufficiently homogenous nature and, therefore, would be difficult to benchmark meaningfully for the purpose of determining relative efficiencies.
108. In both the Draft and Final Decisions, the Authority, therefore, required AGN to amend its proposed Incentive Mechanism in relation to the categories of capital expenditure to be included, and the relevant benchmarks for such included categories of capital expenditure. The required amendment in the Final Decision was as follows:

Final Decision Amendment 22

Clauses 34 to 38 of Part B of the proposed revised Access Arrangement submitted by AGN on 10 June 2005 should be amended to confine the carryover mechanism for New Facilities Investment to User Initiated Capital and the revised Access Arrangement Information submitted on 27 May 2005 should be amended to include appropriate benchmark unit costs for this category.

Further Final Decision

109. In response to the Final Decision, AGN has included in clause 35(c) of the proposed revised Access Arrangement submitted on 29 July 2005 an amendment which confines the carryover mechanism in respect of capital expenditure to capital expenditure in the User Initiated Capital category, as well as in the Glossary in Schedule 2 of Part A to provide an appropriate definition of that category of capital expenditure. Further, AGN has included in Table 3.2 of the amended Access

Arrangement Information submitted on 29 July 2005 expenditure benchmarks on a unit connection basis for the User Initiated Capital category, which the Authority is satisfied represent appropriate benchmarks for the purpose of calculating any efficiency gains or losses in this category of capital expenditure during the second Access Arrangement Period.

110. The Authority is satisfied, therefore, that AGN has incorporated the amendments required by Final Decision Amendment 22.
111. The Authority notes also that in respect of Non Capital Costs that are impacted by changes from forecast connection numbers and that are subject to the carryover provisions of the Incentive Mechanism, it is necessary for there to be appropriate expenditure benchmarks in the applicable Access Arrangement Information, similar to User Initiated Capital. This is necessary to facilitate the calculation of any efficiency gains or losses arising from variation in Non Capital Costs at the end of the second Access Arrangement Period. In Table 4.17 of the amended Access Arrangement Information submitted by AGN on 29 July 2005, AGN has included expenditure by various categories for Non Capital Costs and in Table 6.6 has also included the corresponding forecast annual average numbers for the various classes of connection. The Authority is satisfied that the information in these two tables taken together represents a basis for constructing appropriate benchmarks for the purpose of calculating in respect of the impact of variation in connection numbers any efficiency gains or losses in the various categories of Non Capital Costs during the second Access Arrangement Period.

Review and Expiry of Access Arrangement

Trigger event mechanism for tax or regulatory changes

Final Decision (Final Decision Amendment 23)

112. The current Access Arrangement provides that in the event of certain tax or regulatory changes which result in AGN's forecast total costs for any year of the second Access Arrangement Period being less than 97.5 percent of approved forecast total costs for that year, then AGN is obliged to submit revisions prior to the Revisions Submission Date.
113. AGN has proposed continuing this trigger event mechanism for the second Access Arrangement Period. However, prior to the Final Decision, because AGN did not accept the Total Revenue determined by the Authority, the forecast total costs set out in the proposed revised Access Arrangements for the trigger event provisions did not accord with the Authority's determination of such costs.
114. Therefore, in the Final Decision, the Authority required AGN to amend the proposed revised Access Arrangement in the following terms:

Final Decision Amendment 23

The values in Schedule 1, clause 2(1)(b) of Part A of the proposed revised Access Arrangement submitted on 10 June 2005 for the forecast total costs for providing Reference Services should be amended to accord with the values for Total Revenue set out in Table 12 of this Final Decision.

Further Final Decision

115. In response to the Final Decision, AGN has accepted the Authority's determination of Total Revenue and, in accordance with Final Decision Amendment 23, has included the appropriate forecast total costs in Schedule 1 of Part A of the proposed revised Access Arrangement in relation to the trigger event mechanism for tax and regulatory changes. The Authority, therefore, is satisfied that AGN has incorporated the requirements of the Final Decision in this respect.

Typographical Corrections

Final Decision (Final Decision Amendment 24)

116. In the Final Decision the Authority noted certain typographical errors in the proposed revised Access Arrangement submitted on 10 June 2005 which should be corrected before final approval. The Authority required the following amendment:

Final Decision Amendment 24

The following typographical errors in the proposed revised Access Arrangement submitted on 10 June 2005 should be corrected prior to final approval:

- (a) The term "90 to 10⁰C" in clause 24(2) of Part A should be amended to read "0⁰ to 10⁰C";
- (b) Clauses 24(2) and (3) of Part A should be re-numbered 25(1) and 25(2) and the subsequent clauses of Part A should be re-numbered accordingly;
- (c) The opening words of clause 5 of Part B "AGN will vary Tariff Components annually in accordance with Part B, clauses 3-12 (the price path)" should be re-numbered Part B, clause 4.

Further Final Decision

117. The Authority is satisfied that the typographical errors identified in Final Decision Amendment 24 have been addressed in the proposed revised Access Arrangement submitted for final approval by AGN on 29 July 2005 in response to the Final Decision.