



Economic Regulation Authority

Western Australia

**Draft Decision on the Proposed
Revisions to the Access Arrangement for
the Mid-West and South-West Gas
Distribution Systems**

Submitted by

AlintaGas Networks Pty Ltd

28 February 2005

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INTERPRETATION

Definitions

The definitions in the *Gas Pipelines Access (Western Australia) Act 1998 (GPAA)*, including Schedule 1 and Schedule 2 (the *National National Third Party Access Code for Natural Gas Pipeline Systems*) (**Code**) thereto, apply to the terms used in this Draft Decision. In addition, the definitions in the table below apply. Further, where a term has been defined in the proposed revised Access Arrangement, that definition applies in this Draft Decision.

Term	Definition
Authority	The Economic Regulation Authority of Western Australia established pursuant to the <i>Economic Regulation Authority Act 2003</i> .
Capital expenditure	Expenditure on a Covered Pipeline and associated regulated assets that may be incorporated into the Capital Base of that pipeline.
Current Access Arrangement	<i>AlintaGas's Access Arrangement for the Mid-West and South-West Gas Distribution Systems</i> , submitted on 13 July 2000, as approved by the Independent Gas Pipelines Access Regulator in Western Australia with effect from 18 July 2000.
Excursion	A single instance of a User exceeding its Contracted Peak Rate at a Delivery Point.
First Access Arrangement Period	The period commencing 1 January 2000 and ending on 31 December 2004.
Full Retail Contestability	Contestability in all retail markets for gas within Western Australia, effected by the commencement on 31 May 2004 of the Retail Market Scheme, including the Retail Market Rules.
Minister	The Western Australian Minister for Energy.
Non-Reference Service	A Service other than a Reference Service.
Proposed revised Access Arrangement	The proposed revisions to the current Access Arrangement Information submitted by AGN on 31 March 2004 in the form of a proposed revised Access Arrangement.
Retail Market Rules	Rules, established by the Retail Energy Market Company Limited (ACN 103 318 556), that govern the operation of the gas retail markets of South Australia and Western Australia, as amended from time to time.
Retail Market Scheme	The retail market scheme, including the Retail Market Rules, approved under section 11ZOJ of the <i>Energy Coordination Act 1994 (WA)</i> for the purposes of AGN's GDS as amended from time to time.
Second Access Arrangement Period	The period commencing 1 January 2005 and ending on 31 December 2009.

Term	Definition
Submitted Access Arrangement Information	The Access Arrangement Information submitted by AGN on 31 March 2004 with respect to the proposed revisions to the Access Arrangement for the GDS.
Telemetry	The communication equipment used for transmission of data collected from a meter to AGN's central data management system and typically encompasses modems, telecom landline (which may be dedicated or part of the PSTN network) or radio transceivers (which may be in the form of a dedicated radio network, GSM, GPRS or satellite telephony).
Unaccounted for gas	The difference between recorded gas inflows at Receipt Points into the GDS and reported outflows at Delivery Points from the GDS.

Inconsistency of definitions

In the event of any inconsistency, the hierarchy of definitions shall be first, the *GPAA* (including Code) definitions, second the definitions in the table above and third, the definitions in the proposed revised Access Arrangement.

Abbreviations

The following abbreviations are used in this Draft Decision.

Abbreviation	For
AA	Current Access Arrangement
AAI	Submitted Access Arrangement Information
ACCC	Australian Competition and Consumer Commission
ACT	Australian Competition Tribunal
AGN	AlintaGas Networks Pty Ltd
Bp	Basis points – 100 bp equals 1percentage point
CAPM	Capital Asset Pricing Model
CMS	CMS Gas Transmission of Australia
CPI	Consumer Price Index
DBNGP	Dampier to Bunbury Natural Gas Pipeline
DES	Director of Energy Safety
ESCOSA	Essential Services Commission of South Australia
ESC	Essential Services Commission (Victoria)
FRC	Full Retail Contestability
GDS	Mid-West and South-West Gas Distribution Systems
GJ	Gigajoules (10^9 joules)
<i>GPAA</i>	<i>Gas Pipelines Access (Western Australia) Act 1998</i>

Abbreviation	For
GSL	Guaranteed Service Level
ICRC	Independent Competition and Regulatory Commission (ACT)
IPART	Independent Pricing And Regulatory Tribunal (New South Wales)
Kpa	Kilopascals
Mpa	Megapascal
N/A	Not applicable
NPV	Net Present Value
OOE	Office of Energy (Western Australia)
OES	Office of Energy Safety (Western Australia)
ORG	Office of the Regulator General (Victoria)
PC	Productivity Commission (Commonwealth)
PJ	Petajoules (10^{15} joules)
QCA	Queensland Competition Authority
RMR	Retail Market Rules
RMS	Retail Market Scheme
TJ	Terajoules (10^{12} joules)
UAFG	Unaccounted for gas
WA	Western Australia
WACC	Weighted Average Cost of Capital
WPC	Western Power Corporation

DECISION

1. On 31 March 2004, AlintaGas Networks Ltd (**AGN**) submitted proposed revisions to the current Access Arrangement for the Mid-West and South-West Gas Distribution Systems (**GDS**) to the Economic Regulation Authority (**Authority**), in the form of a proposed revised Access Arrangement, for approval under the *National Third Party Access Code for Natural Gas Pipeline Systems (Code)*.
2. The Authority has considered the proposed revisions to the Access Arrangement under the principles set out in the Code.
3. The Authority has considered and weighed the factors in section 2.24 of the Code as fundamental elements in making the overall decision whether to approve the proposed revisions to the Access Arrangement.
4. The Authority is not satisfied that the submitted Access Arrangement Information meets the requirements of section 2.6 and 2.7 of the Code for the reasons set out in this document. The Authority requires changes to the submitted Access Arrangement Information as listed after the reasons (in box format) prior to approving the Access Arrangement.
5. The Authority also does not approve the proposed revisions to the Access Arrangement on the basis that it does not satisfy the principles in sections 3.1 to 3.20 of the Code. The detailed reasons for this decision are also set out in this document. The Authority requires amendments, as listed after the reasons (in box format), in order to approve the revised Access Arrangement.
6. The required changes to the submitted Access Arrangement Information and required amendments to the proposed revised Access Arrangement are listed at the end of this document.

REASONS

Introduction

Access Arrangement Documents

7. AGN submitted its proposed revised Access Arrangement on 31 March 2004. Documentation submitted comprised:
 - a proposed revised Access Arrangement; and
 - an Access Arrangement Information.

8. Copies of these documents are available from the Authority or may be downloaded from the Authority's web site (www.era.wa.gov.au).
9. As part of this assessment, the Authority has considered the issues raised and views expressed in submissions made by interested parties on the proposed revisions to the Access Arrangement.

Requirements of the Code

10. Section 2.24 of the Code provides that:
 - 2.24 The Relevant Regulator may approve a proposed Access Arrangement only if it is satisfied the proposed Access Arrangement contains the elements and satisfies the principles set out in sections 3.1 to 3.20. The Relevant Regulator must not refuse to approve a proposed Access Arrangement solely for the reason that the proposed Access Arrangement does not address a matter that sections 3.1 to 3.20 do not require an Access Arrangement to address. In assessing a proposed Access Arrangement, the Relevant Regulator must take the following into account:
 - (a) the Service Provider's legitimate business interests and investment in the Covered Pipeline;
 - (b) firm and binding contractual obligations of the Service Provider or other persons (or both) already using the Covered Pipeline;
 - (c) the operational and technical requirements necessary for the safe and reliable operation of the Covered Pipeline;
 - (d) the economically efficient operation of the Covered Pipeline;
 - (e) the public interest, including the public interest in having competition in markets (whether or not in Australia);
 - (f) the interests of Users and Prospective Users;
 - (g) any other matters that the Relevant Regulator considers are relevant.
11. The elements of an Access Arrangement, referred to in section 2.24 of the Code comprise:
 - Services to be Offered (Services Policy) (sections 3.1 and 3.2 of the Code);
 - Reference Tariff and Reference Tariff Policy (sections 3.3 to 3.5 of the Code);
 - Terms and Conditions (section 3.6 of the Code);
 - Capacity Management Policy (sections 3.7 and 3.8 of the Code);
 - Trading Policy (sections 3.9 to 3.11 of the Code);
 - Queuing Policy (sections 3.12 to 3.15 of the Code);
 - Extensions/Expansions Policy (section 3.16 of the Code); and

- Review and Expiry of the Access Arrangement (sections 3.17 to 3.20 of the Code).
12. By section 2.29 of the Code, an Access Arrangement as revised by proposed revisions may include any relevant matter but must include at least the elements described in sections 3.1 to 3.20.
 13. In applying the Code to consideration of AGN's proposed revisions to the current Access Arrangement, the Authority has taken into account relevant judicial and other decisions such as those by review bodies relating to the Code.
 14. The remainder of these reasons examine each of the elements of the proposed revisions to the current Access Arrangement.

Services Policy

Code requirements

15. Section 3.1 of the Code requires that an Access Arrangement include a policy on the Service or Services to be offered, known as a Services Policy.
16. Section 3.2 of the Code requires that the Services Policy comply with the following principles:
 - 3.2 (a) The Access Arrangement must include a description of one or more Services that the Service Provider will make available to Users or Prospective Users, including:
 - (i) one or more Services that are likely to be sought by a significant part of the market; and
 - (ii) any Service or Services which in the Relevant Regulator's opinion should be included in the Services Policy.
 - (b) To the extent practicable and reasonable, a User or Prospective User must be able to obtain a Service which includes only those elements that the User or Prospective User wishes to be included in the Service.
 - (c) To the extent practicable and reasonable, a Service Provider must provide a separate Tariff for an element of a Service if this is requested by a User or Prospective User.
17. The Services Policy for an Access Arrangement includes descriptions of a set of Services that the Service Provider will make available. The Service Provider is not obliged to provide a Service unless it is one of the Services specified in the Access Arrangement (or an element of such a Service).
18. A Reference Service is a Service that is specified in an Access Arrangement and for which a Reference Tariff is specified in that Access Arrangement under section 3.3 of the Code:
 - 3.3 An Access Arrangement must include a Reference Tariff for:

- (a) at least one Service that is likely to be sought by a significant part of the market; and
 - (b) each Service that is likely to be sought by a significant part of the market and for which the Relevant Regulator considers a Reference Tariff should be included.
19. Only those Services likely to be sought by a significant part of the market and for which the Authority considers there should be a price need to have a Reference Tariff specified.
20. For other Services included in the Services Policy and therefore offered to Prospective Users by the Service Provider, section 6 of the Code provides a process of arbitration for determining the price and other terms and conditions in the event that contractual negotiations prove to be unsuccessful.
21. In assessing the compliance of the proposed Services Policy with the Code, the Authority is required to consider the Services that a significant part of the market is likely to seek. One or more such Services must be included in the Access Arrangement and must be described. If the Authority forms the opinion that other Services should also be included then they must also be included and described in the Services Policy. Such description must be sufficient to enable a User or Prospective User to know and understand what Services are on offer and to request to acquire any one or more of such Services from AGN.
22. If the Authority concludes that a Service is likely to be sought by a significant part of the market, and therefore must be described in the Services Policy, the further question will arise whether a Reference Tariff is required for the Service. The Code, in section 3.3(b), provides that a Reference Tariff must be included for Services for which the Authority considers a Reference Tariff should be included. Consideration is given below to whether a Reference Tariff is required in respect of each such Service.

Proposed revised Access Arrangement

23. The Services Policy under the proposed revisions to the Access Arrangement describes both Reference Services and Services for which no Reference Tariff is proposed (or Non-Reference Services).
24. In relation to Reference Services, the Services Policy contains five such Services being Reference Services A1, A2, B1, B2 & B3. These Reference Services are for the haulage of gas through the GDS under Haulage Contracts with Users.
25. A description of each proposed Reference Service is set out in clauses 12 to 16 respectively of Part A – “Principal Arrangements” - of the proposed revised Access Arrangement. The Reference Tariff for each is set out in Part B – “Reference Tariffs and Reference Tariff Policy”.

26. In relation to Non-Reference Services, the Services Policy includes a description of an Interconnection Service and makes provision for other Non-Reference Services, but does not provide a more specific description of these other Non-Reference Services.
27. No Reference Tariff has been specified for the Interconnection Service. Rather, AGN proposes that the Interconnection Service and other Non-Reference Services are to be offered on terms to be agreed or as determined in accordance with section 6 of the Code¹. Section 6 of the Code provides a mechanism whereby disputes between Prospective Users and Service Providers about the terms and conditions of access may be arbitrated.
28. The Services Policy is provided in clauses 12 to 30 of Part A – “Principal Arrangements” - of the proposed revised Access Arrangement.
29. The proposed revised Access Arrangement differs in a number of respects from the current Access Arrangement, either by amendment, inclusion or deletion.
30. The proposed Services Policy is set out in clauses under the following subject headings:
 - Reference Services (clauses 12 to 16);
 - Re-allocation of Reference Services (clauses 17 to 20);
 - Interconnection Service (clauses 21 to 23);
 - Services other than Reference Services (clauses 24 and 25);
 - Elements of a Service (clause 26);
 - Obtaining access to services (clause 27);
 - Parties required to enter a Service Agreement (clause 28);
 - Pre-conditions to the provision of Services (clause 29);
 - Obligation to accept and deliver Gas (clause 30).
31. The Authority’s deliberations and views on various clauses of the proposed Services Policy are presented below.

¹ Proposed revised Access Arrangement, Part A, clause 24.

Reference Services

32. The proposed descriptions of Reference Services A1, B2 & B3 in the Services Policy, with minor amendments, correspond to the descriptions of the Haulage Services described as Reference Service A, B2 & B3 of the Services Policy in the current Access Arrangement.
33. The remaining two proposed Reference Services – A2 & B1 – for gas haulage are new. However, they have been created by subdividing Reference Service B1 under the current Access Arrangement into two. In this sense, the five proposed Reference Services provide, in effect, the same market coverage for gas haulage as the previously approved four Reference Services.
34. The subdivision of existing Reference Service B1 into two new Reference Services has been proposed by AGN to address its responsibilities under the Retail Market Scheme (**RMS**) which came into effect from 31 May 2004 as a consequence of Full Retail Contestability (**FRC**) in gas in Western Australia.
35. It is a requirement of the RMS that Users with Delivery Points taking more than 10 TJ of gas per Year have Telemetry installed at the Delivery Point, whereas those taking less than that amount are not so required.
36. The currently approved Reference Service B1 caters for Users taking less than 35 TJ of gas at a Delivery Point in any year of a Haulage Contract, without distinction between those Users taking more or less than 10 TJ of gas per Year.
37. The proposed revised Access Arrangement subdivides the currently approved Reference Service B1 into two, with the proposed new B1 Reference Service catering for Users taking less than 10 TJ of gas per year (without Telemetry installed) and the proposed new Reference Service A2 catering for Users taking more than that amount (with Telemetry installed). Both Reference Services B1 and A2 are only available to Users taking less than a Contracted Peak Rate of 10 GJ of gas per hour at a Delivery Point.

Services likely to be sought by a significant part of the market

38. Section 3.2(a)(i) of the Code requires that the Services Policy includes a description of one or more Services that are likely to be sought by a significant part of the market.

Reference Services for gas haulage

39. No submissions have been received suggesting, nor has the Authority any other reason to believe, that the Reference Services under the existing or proposed Access Arrangements do not provide a description of one or more Services that are likely to be sought by a significant part of the gas haulage market.

40. The Authority is therefore satisfied that the proposed Services Policy for Reference Services, as set out in clauses 12 to 16 of part A, provides a description of Reference Services that meets the requirements of section 3.2(a)(i) of the Code.

Overrun Service for gas haulage

41. The Authority notes that AGN has proposed in respect of Reference Services A1 and A2 an Overrun Service for the haulage of gas in excess of the Contracted Peak Rate. This Overrun Service is described in Schedule 1 of Part C, clause 7, and Schedule 2 of Part C, clause 10 respectively. The Authority considers that the Overrun Service is likely to be sought by a significant part of the market because the Overrun Service is applicable to all Users of Reference Services in respect of any “occasion” on which the User overruns their Contracted Peak Capacity. Therefore, under section 3.2(a) of the Code a description of the Overrun Service must be included in the Access Arrangement. Such a description is provided in the abovementioned clauses of Part C of the proposed revised Access Arrangement.

Ancillary Services

42. Under the current Access Arrangement, the Services Policy in Chapter 2 includes in Division 4 – Listed Ancillary Services – a description of four such services: Disconnection Service (clause 12); Reconnection Service (clause 13); Additional Meter Reading Service (clause 14) and Additional Meter Testing Service (clause 15). AGN’s proposed revisions to the Access Arrangement delete the description of the four Ancillary Services from the Services Policy.
43. It is noted that the definition of Services in section 10.8 of the Code specifically includes services ancillary to haulage and interconnection services.
44. In the submitted Access Arrangement Information, AGN has indicated that it will continue to offer and provide the current range of Services ancillary to the Reference Services as described in the current Access Arrangement. However, AGN has indicated that it intends to do so under the ambit of the RMS. For this reason, AGN submits that it is no longer necessary for such Services to be described in the Access Arrangement.
45. The Authority does not agree with AGN’s reasoning for excluding Ancillary Services from the proposed revisions. The fact that such Services may be subject to the RMS does not remove the Authority’s duty under section 3.2 of the Code to determine whether such Ancillary Services must be included in the Services Policy. If the Services ancillary to the Reference Services are likely to be sought by a significant part of the market, then regardless of whether or not provision is made under the Retail Market Scheme for such Services, the Authority will be obliged not to approve an Access Arrangement which does not describe such Services in its Services Policy.
46. Given the ubiquitous nature of the Ancillary Services described in the current Access Arrangement, and the essential functions that are being performed for Users to

facilitate the effective utilisation of Reference Services, the Authority concludes that the Ancillary Services are likely to be sought by a significant part of the market. No submissions to the contrary were put to the Authority, nor has the Authority any other evidence suggesting to the contrary.

47. The Authority therefore concludes that, subject to any further evidence submitted by AGN or market participants, the proposed revised Access Arrangement should not be approved unless descriptions are included of the Services ancillary to the Reference Services that are likely to be sought by a significant part of the market.
48. Such descriptions may differ from the descriptions in the current Access Arrangement to reflect any changes in the market, including the introduction of the RMS.

Amendment 1

The Services Policy should be amended to include descriptions of the Services ancillary to the Reference Services which are likely to be sought by a significant part of the market.

Requirement for a Reference Tariff

Reference Services

49. Under section 3.3 of the Code an Access Arrangement must include a Reference Tariff for at least one Service that is likely to be sought by a significant part of the market and for each such Service for which the Authority considers that a Reference Tariff should be included.
50. No submissions have been received suggesting that the Reference Services proposed by AGN should not be Reference Services.
51. For the purposes of section 3.3 of the Code, the Authority considers that Reference Tariffs should be included for Reference Services A1, A2, B1, B2 and B3 in the proposed revised Access Arrangement.

Ancillary Services

52. In relation to Ancillary Services, that is Services ancillary to the provision of Services for the haulage of gas, the further question arises whether, under section 3.3(b) of the Code, the Authority considers Reference Tariffs ought to be included for such Services.

53. At the time the current Access Arrangement was approved the Relevant Regulator did not consider it appropriate that Ancillary Services be Reference Services for which a Reference Tariff was required.²
54. Notwithstanding this, under the approved Access Arrangement the specified Ancillary Services were to be made available to Users of Reference Services B2 and B3 under standard terms and conditions and at a set tariff. This reflected concern by the Relevant Regulator to protect small use gas customers. By contrast, Users of Reference Services A and B1 were left to negotiate with AGN regarding the terms and conditions and prices of Ancillary Services.
55. The reasons of the Relevant Regulator for declining to require AGN to specify Reference Tariffs for Ancillary Services under the current Access Arrangement were set out at page 35 of Part B – Supporting Information – of the Final Decision for the current Access Arrangement. Those reasons included:
- the relatively simple and discrete nature of the Services;
 - the history of provision of such Ancillary Services without specific terms and conditions;
 - the availability of resort to arbitration by a User under section 6 of the Code should the services not be provided at a reasonable quality and price;
 - the short period, 21 months, following the introduction of Full Retail Contestability before the Regulator would have to consider amendments to the Access Arrangement, at which time the question could be revisited in light of the provisions introduced under Full Retail Contestability to guard against anti-competitive pricing of Ancillary Services.
56. Since that approval, in late 2002, the Essential Services Commission (Victoria) (**ESC**) has approved revised Access Arrangements for each of the three major gas distribution systems in Victoria, subject to, among other things, the inclusion of Reference Tariffs for Services ancillary to Reference Services. The Independent Pricing and Regulatory Tribunal (**IPART**), in its recent draft decision on revisions to the Access Arrangement for AGL Gas Networks, proposes to approve an arrangement whereby Ancillary Services would effectively form part of the terms and conditions on which AGL Gas Networks will supply its Reference Services under the Access Arrangement.³

² Independent Gas Pipelines Access Regulator Western Australia, 30 June 2000, *Final Decision: Access Arrangement Mid-West and South-West Gas Distribution Systems*, Part B, p 35.

³ IPART, *Draft Decision, Revised Access Arrangement for AGL Gas Network*, December 2004, p 134, 143.

57. In May of 2004, FRC was introduced into the Western Australian gas market. AGN relies upon the regulation of Ancillary Services under the RMS as justifying the conclusion that there is no need for such Services to be Reference Services with their own Reference Tariffs.
58. While the Retail Market Rules (**RMRs**) introduced as part of the RMS contain various provisions in relation to the Ancillary Services, these provisions require AGN to provide Ancillary Services to Users, and set out the arrangements for transfer of customers to facilitate Full Retail Contestability, the RMRs do not set tariffs for such Services. Under AGN's proposal, the charges for Ancillary Services would be unregulated. The Authority therefore concludes that Reference Tariffs and terms and conditions should be specified for the services in question, being Services offered by AGN ancillary to Reference Services offered under the Access Arrangement.

Amendment 2

The proposed revised Access Arrangement should be amended to include Reference Tariffs and terms and conditions for Ancillary Services described in the Services Policy.

Services other than Reference Services

59. The Code defines Services in section 10.8 as follows:
- ‘Service’ means:
- (a) a service provided by means of a Covered Pipeline (or when used in section 1 a service provided by means of a Pipeline) including (without limitation):
 - (i) haulage services (such as firm haulage, interruptible haulage, spot haulage and backhaul); and
 - (ii) the right to interconnect with the Covered Pipeline, and
 - (b) services ancillary to the provision of such services,
- but does not include the production, sale or purchasing of Natural Gas.
60. Therefore, if there are any Services (being haulage or Interconnection Services, or Services ancillary thereto) for which there is likely to be a significant demand in the market, other than haulage services which are proposed by AGN to be Reference Services, these Services would also need to be included in the Services Policy of the Access Arrangement in appropriate terms.
61. Clause 24 of the proposed revised Access Arrangement relating to the Services Policy provides that:

Subject to Part A, clause 25⁴, AGN will make Services other than Reference Services available to Users or Prospective Users as agreed or as determined in accordance with section 6 of the Code.

62. The Services Policy in clause 21, Part A, describes an Interconnection Service, which AGN proposes to offer. However, no Reference Tariff is proposed for the Interconnection Service. The Interconnection Service is therefore within the ambit of clause 24, along with any other Service described in the Services Policy for which no Reference Tariff is proposed.
63. Clause 24 of Part A provides two situations in which AGN will make available Services other than Reference Services. First, where the parties agree that AGN will provide the Service. Second, where the Arbitrator determines that AGN will provide the Service in accordance with section 6 of the Code. In neither situation is AGN required upon request to provide the Service to a User. Rather, the User will only have a right to acquire the Service if, in the first case, AGN agrees, or in the second, the Arbitrator so determines. Further, the Arbitrator has no power to determine the Services that a Service Provider must provide to Users. The Arbitrator's jurisdiction is confined to Services that are required to be provided by the terms of the Access Arrangement. The effect of clause 24 is that there is no obligation on AGN to provide Services other than Reference Services to Users.
64. The Authority does not consider that clause 24 meets the requirements of the Code in relation to a Services Policy. The requirement in the Code for a Services Policy is intended to provide Users or Prospective Users with a description of Services that the Service Provider will make available upon request. The right to acquire the Services described in the Services Policy cannot in the Authority's opinion be qualified in the way it is in clause 24 of Part A of the proposed revised Access Arrangement.
65. The Authority's Draft Decision therefore is that clause 24 of Part A should be deleted before the proposed revised Access Arrangement will be approved. For the same reasons, clause 25 of Part A, to which clause 24 is subject, and which further qualifies the right to acquire Services other than Reference Services described in the Services Policy, should also be deleted.

Amendment 3

Clauses 24 & 25 of Part A of the proposed revised Access Arrangement should be deleted.

⁴ The provisions of clause 25 of Part A to which clause 24 is subject sets out restrictions upon the availability of such other Services in circumstances where a User or a Prospective User is unable to meet the requirements of proposed clause 29(2)(b)(iv) of Part A relating to a requirement for a User to have sufficient firm capacity on an Interconnecting Pipeline in order to qualify for a Reference Service.

Interconnection Service

66. Clause 21(1) of Part A of the proposed revised Access Arrangement describes the Interconnection Service which AGN proposes to offer in the following terms:

An Interconnection Service is a Service provided to a User who is a Pipeline Operator in respect of the interconnection between a Sub-network and a Pipeline which is, or is to become, an Interconnected Pipeline supplying gas to the Sub-network.

67. AGN does not propose that the Interconnection Service be a Reference Service. Thus, the proposed revised Access Arrangement does not include a Reference Tariff for the Interconnection Service. Nor is there a proposed set of terms and conditions in respect of which the Authority may form an opinion for the purpose of section 3.6 of the Code regarding whether or not such terms and conditions are reasonable. It is noted, however, that AGN proposes certain terms and conditions for the Interconnection Service as a “relevant matter” under section 2.29 of the Code. The inclusion of such terms and conditions is discussed at paragraphs 613 to 617 in the section on Terms and Conditions.

Services that should be described in Services Policy

68. The principles with which a valid Services Policy must comply include, in section 3.2(a)(i), that the Access Arrangement must include a description of one or more services that the Service Provider will make available to Users or Prospective Users, including one or more Services that are likely to be sought by a significant part of the market.
69. The Interconnection Services referred to in the definition of Service in the Code refer to a right to interconnect with a Covered Pipeline. This includes both upstream interconnection, for the purpose of delivering gas into the GDS, and downstream interconnection, for the purpose of receiving gas from the GDS for distribution to end-use customers.
70. The description of the Interconnection Service in the proposed revised Access Arrangement refers to interconnection for the purpose of supplying gas to the GDS, that is, upstream interconnection.
71. In relation to upstream interconnection, there are only two pipelines that currently interconnect with the GDS, namely the Dampier to Bunbury Natural Gas Pipeline (**DBNGP**) and the Parmelia Pipeline.
72. There is evidence before the Authority that there will be on-going demand during the second Access Arrangement Period for both the continuance of existing points of interconnection and the establishment of further points of interconnection between the GDS and these pipelines.

73. The Authority is therefore of the view that the right to interconnect with an upstream pipeline is a Service which is likely to be sought by a significant part of the market. On this basis, the Authority concludes that the proposed revised Access Arrangement should include a description of such a Service.
74. In relation to downstream interconnection, no submissions or other evidence is before the Authority of any current or likely demand for such a Service. The Authority, therefore, does not see a requirement for AGN to describe a downstream interconnection service in its proposed Services Policy.

The meaning of “User”

75. As indicated in paragraph 66 above, the Interconnection Service defined in clause 21(1) of the proposed Revised Access Arrangement describes the right of a pipeline operator to interconnect a pipeline for the purposes of delivering gas into the GDS.
76. One difficulty with the interpretation of clause 21(1), however, relates to the term “User” as defined in Schedule 2 – “Definitions and Interpretation” - of Part A of the proposed revised Access Arrangement as follows:

User means a contestable customer (as defined in subsection 91(1) of the Act) who has a current Service Agreement or an entitlement to a Service as a result of an arbitration.

77. The definition of contestable customer referred to in section 91(1) of the *GPAA* refers exclusively to certain persons who are to take delivery of gas for consumption.
78. It is noted that the term “User” as defined in the proposed revised Access Arrangement is inconsistent with the definition of that term in the Code, this document and with the definition of the term “Prospective User” in both the proposed revised Access Arrangement and the Code.
79. The effect of the way in which the term “User” is defined in the proposed revised Access Arrangement and is used in clause 21(1) is to limit the Interconnection Service to contestable customers that are consumers of gas. Persons who are not contestable customers and who only seek to deliver gas into the GDS, including for the purpose of trading and delivering gas to customers, are excluded by this definition.
80. For the proposed revised Access Arrangement and the Services Policy to be consistent with the Code there is a need for the term “User” to be defined as it is in the Code.
81. The Authority therefore considers that for the proposed revised Access Arrangement to be approved, AGN will need to amend the definition of “User” to be the same as that in section 10.8 of the Code as follows:

‘User’ means a person who has a current contract for a Service or an entitlement to a Service as a result of an arbitration.

Amendment 4

The term “User” should be defined as in the Code as “a person who has a current contract for a Service or an entitlement to a Service as a result of an arbitration.”

Description of Interconnection Service

82. A further issue which arises relates to the definition of the Interconnection Service to be made available to Users and Prospective Users under the proposed revised Access Arrangement.
83. Clause 21(1) of Part A, which describes the Interconnection Service, merely provides that the Interconnection Service is a Service supplied by AGN and acquired by a Pipeline Operator, whereby the latter’s Pipeline is interconnected with the GDS for the purpose of delivering gas to the GDS.
84. However, clause 21(1) does not address the manner in which the location of the point of interconnection between the two pipelines is to be determined for the purpose of the owner of the Interconnecting Pipeline exercising the right to interconnect.
85. The Authority recognises that in the case of a Non-Reference Service the Code merely requires a description of the Service to be included in the Services Policy. Given the differing issues and circumstances likely to arise for each proposed interconnection, a description of the arrangements relating to the location of such points may be more appropriately dealt with by the specification of terms and conditions attaching to the Interconnection Service.
86. As a Service Provider and a Prospective User, acting in their own legitimate business interests, may not come to agree on the location of points of interconnection, it is possible that some form of regulatory involvement will be necessary. Under the Code, such regulatory involvement could be by the specification of terms and conditions which would require the Interconnection Service to be specified as a Reference Service. Alternatively, if the Interconnection Service were to be a Non-Reference Service, regulatory involvement in the event that agreement on the location of points of interconnection is not achieved would be through the Arbitration provisions of section 6 of the Code.
87. In order for the Authority to consider requiring terms and conditions to be attached to the Interconnection Service, it would firstly need to require the Service to be specified as a Reference Service. In addition, consideration as to whether the Interconnection Service needs to be specified as a Reference Service is also necessary to finally determine the adequacy of the description of the Service in the revised Access Arrangement. Following is a consideration of whether the Interconnection Service should be required to be a Reference Service.

Requirement for a Reference Tariff

88. The current Access Arrangement does not include a Reference Tariff for the Interconnection Service. Further, AGN has not sought to include a Reference Tariff for the Interconnection Service in the proposed revised Access Arrangement.
89. For the reasons following, the Authority agrees with AGN's proposal to not include a Reference Tariff for the Interconnection Service in the revised Access Arrangement.
90. At the time of the approval of the current Access Arrangement, all of the gas carried through the AGN GDS was delivered from the DBNGP. At the time, there were preliminary proposals for interconnection of the Parmelia Pipeline as an alternative transmission source. However, the vast majority of the gas delivered to the GDS would continue to be delivered from the DBNGP.
91. The owners of the Parmelia Pipeline, after having successfully trialled limited interconnection with the GDS during the first Access Arrangement Period, are seeking to make additional interconnections as well as to increase volumes of gas delivered through existing points of interconnection.
92. There have been negotiations between the owners of the Parmelia Pipeline and AGN in relation to the terms upon which the volumes of gas delivered into the GDS from the Parmelia Pipeline would be increased, including through the establishment of further points of interconnection with the GDS. Such negotiations have, however, been unsuccessful.
93. An issue arises because the gas delivered from the two sources differs in heating value, such that the injection of gas from the Parmelia Pipeline at commercial volumes will cause AGN to incur both capital expenditure and Non Capital Costs in managing such differences in heating value within the distribution system.
94. Therefore, when the owners of the Parmelia Pipeline seek a new interconnection at a particular point on the GDS, the location chosen may not suit AGN, including because the heating value management and other consequential costs incurred by AGN will be greater than otherwise might be the case if a different location was to be chosen.
95. Equally, AGN's preferred location of any new point of interconnection may not suit the owners of the Parmelia Pipeline, because the capital expenditure and Non Capital Costs to the Parmelia Pipeline associated with making and maintaining the interconnection (by running a lateral and connecting with the GDS) may be greater than might otherwise be the case.
96. Therefore, an interconnecting party such as the owners of the Parmelia Pipeline may seek to interconnect at a particular location with adverse cost consequences for the GDS. Indeed, as incremental costs will be passed on to gas consumers, the Authority

considers that there may be sufficient reason under the Code for AGN to justify its refusal to connection at a particular location in favour of some other location.

97. If the provision of Interconnection Services significantly and unnecessarily increases the capital expenditure and Non Capital Costs of the GDS, the development of markets for Services provided through such interconnections could be adversely affected, bearing in mind that the costs will initially be borne by Users and ultimately by gas consumers.
98. The Authority is, therefore, of the view that the location of interconnections within the GDS should be determined taking into account AGN's interest (and the interest of all Users) in minimising the establishment and Non Capital Costs within the GDS whilst also minimising the capital expenditure and Non Capital Costs borne by the owners of the interconnecting pipeline in making and maintaining the connection.
99. AGN's submitted Access Arrangement Information comments in relation to such costs (see section 3.6). In particular, AGN advances the following forecasts:
 - capital expenditure (New Facilities Investment) is likely to be in the range \$0.1 million to \$1.0 million, for equipment to take gas samples from the AGN GDS at predetermined intervals and frequencies; and
 - Non Capital Costs in the range of \$0.1 million to \$1.0 million per annum, to model the network flows under a range of operating conditions, analyse the gas samples supporting the modelling results and report compliance to the Office of Energy.
100. Because negotiations have not been finalised as to price or terms and conditions of new or expanded interconnections, whether these costs will materialise, and if they do whether the forecasts will be accurate, is presently speculative.
101. The following arguments against the costs of the Interconnection Service being recovered through the general Reference Tariffs for the GDS or by a specific Reference Tariff being established for the Interconnection Service have been advanced by AGN⁵:

The implementation of heating value management plans would result in a benefit to those Users and Related Shippers associated with the interconnecting Pipeline at Sub-networks where the interconnection occurs. As the benefits are not available to all Users and all Sub-networks, it is not equitable for the costs to be allocated across the whole AGN GDS. Therefore, these costs could not be recovered via the Reference Tariffs.

The introduction of the Retail Market Scheme means that the relationship between Users and Pipelines is now much more dynamic. Whereas during the First Access Arrangement Period AGN would have been able to predict with some stability which Users were injecting Gas from the

⁵ AAI, p 25.

interconnecting Pipeline and which were not, under the Retail Market Scheme Users' allocation instructions can be changed regularly and at short notice, and in addition Users can acquire swing services from either Pipeline on a day-by-day basis. Thus, it is not practical or efficient for AGN to seek to recover these costs from only those Users who inject Gas out of the relevant Pipeline.

A person named in a User's allocation instruction for the sub-network under the Retail Market Rules is termed a "Related Shipper". AGN cannot seek to recover interconnection costs from the Related Shipper, as AGN does not have a direct contractual relationship with the Related Shipper. However, the Pipeline Operator seeking the Interconnection Service does have a direct contractual relationship with the Related Shippers transporting Gas for a User on that Pipeline and could recover costs from these parties in an efficient manner.

102. AGN says the following at the conclusion of section 3.6 of the Access Arrangement Information:

AGN's preferred mechanism is to seek recovery of the costs it incurs in relation to, or associated with, the Interconnection Service, directly from the Pipeline Operator seeking the Interconnection Service. Given that AGN has a direct contractual relationship with this party, AGN believes that this would be the most efficient recovery mechanism. Similarly, the Pipeline Operator could seek recovery of its costs from the Related Shippers transporting Gas for a User on that Pipeline as part of its contract with the Related Shipper.

103. The Authority has received submissions from a number of parties disputing AGN's proposed approach to the setting of prices for Interconnection Services.
104. In two submissions, the Office of Energy commented that the Authority ought to require amendments to the proposed revised Access Arrangement to specify the allocation of costs for heating value management. The Office of Energy suggests that costs, which AGN may incur as a consequence of interconnection of a pipeline offering an alternative source of supply, should be treated as costs that could be recovered through Reference Tariffs for haulage services from Users of the GDS. Neither of these comments would necessitate that the Interconnection Service be a Reference Service, but rather the costs associated with interconnection be treated as part of AGN's overall cost base to be recovered from Users of the GDS.
105. The Authority also received two submissions, one from a group of potential new gas retailers (Western Power Corporation, Origin Energy, and AGL Gas Trading) and the other from CMS Gas Transmission of Australia (CMS) (the owners of the Parmelia Pipeline). In contrast to other submissions, these submissions contend that the Interconnection Service should be a Reference Service and the Access Arrangement should include a set of terms and conditions, including a tariff, for any new interconnections.
106. The submissions referred to in paragraph 105 contend that AGN's costs within the distribution system of implementing interconnection should not be recoverable by AGN from the owner of an interconnecting pipeline through the Reference Tariff for the Interconnection Service, but rather from Users of the GDS (not users of the Parmelia) through the proposed Reference Tariff for Reference Services. Thus, it was submitted that such costs be treated as a cost to AGN of implementing FRC

recoverable through the mechanisms in place for the recovery of such costs as part of the Reference Tariff for use of the GDS.

107. The submission from CMS also reflected a concern regarding the failure of contractual negotiations to deliver agreed terms and conditions, including tariffs, for new interconnections.
108. On the evidence before the Authority, the issue which appears to have prevented the parties from reaching agreement regarding the terms and conditions, including price, of new interconnections, is the question of how to allocate AGN's capital expenditure and Non Capital Costs associated with interconnection. In particular, these costs are those associated with heating value management of gas of different quality delivered into the GDS from the two interconnected pipelines.
109. The Authority has considered the range of views advanced on whether the Interconnection Service should be a Reference Service. The Authority regards increased competition, diversity and security in the supply of gas through new interconnections as having system-wide benefits. In these circumstances, the costs to AGN of heating value management are therefore appropriately allocated across the whole of the GDS.
110. However, the Authority is not persuaded by the submissions referred to in paragraph 105 above that requiring the Interconnection Service to be a Reference Service is necessary to promote such interconnection. With a mechanism in place for the recovery of the costs to AGN of managing heating values through Reference Tariffs, there is in the Authority's view no basis for the issue of recovery of such costs to arise in negotiations for interconnection contracts.
111. There remains a question whether other issues, which have been or are likely to be the subject of negotiations for interconnection, require a Reference Tariff and terms and conditions approved as reasonable under section 3.6 of the Code.
112. In relation to this question, the evidence before the Authority is as follows:
 - the setting of a generic Reference Tariff and terms and conditions for the Interconnection Service is extremely difficult, because of the unique costs associated with each new interconnection, such that individual tariffs and terms and conditions for each such interconnection are likely to be required;
 - there would be substantial and possibly unsustainable regulatory costs associated with the Authority considering and approving tariffs and terms and conditions for each and every new point of interconnection between the Parmelia Pipeline or the DBNGP and the GDS;
 - AGN, Users or Prospective Users have not submitted to the Authority tariffs or terms and conditions which might be approved by the Authority, or any specific tariff or terms and conditions for any particular proposed interconnection;

- the issues which have been the subject of submissions relate to costs incurred in providing Reference Services and are therefore part of the cost base for the purpose of the setting of Reference Tariffs;
 - a substantial, and largely confidential submission, from Epic Energy (WA) Transmission Pty Ltd (Receivers and Managers Appointed)(Administrators Appointed) on the Interconnection issue;
 - the Authority does not have before it any evidence in relation to any other matter in dispute in negotiations for an Interconnection Service which might form the basis for a conclusion that a Reference Tariff or terms and conditions for the Interconnection Service are required to be specified in the revised Access Arrangement; and
 - the parties have available to them the arbitration provisions in Section 6 of the Code to determine tariffs or terms or conditions for the Interconnection Service, in the event of a dispute.
113. In these circumstances, the Authority considers that, on the evidence before it, and subject to any further comments by Users, Prospective Users, AGN or any other interested party, there is no need for a Reference Tariff for the Interconnection Service in the revised Access Arrangement.
114. Given the Authority's draft decision that the Interconnection Service is not to be a Reference Service the revised Access Arrangement only requires a description of the Service in accordance with section 3.2(a) of the Code.

Points of interconnection and costs

115. In the Draft Decision above in relation to the Services Policy, the Authority has concluded that if and when heating value management costs are incurred, they are costs which should be regarded as incurred in supplying Services for haulage of gas on the GDS, rather than, as AGN had submitted, costs recoverable from the interconnecting Pipeline Owner under the tariff for the Interconnection Service.
116. Therefore, if further interconnection with, or increased volumes of gas from, the Parmelia Pipeline occurs during the second Access Arrangement Period, then consequential heating value management costs may fall within the Code definitions for capital expenditure (New Facilities Investment) or Non Capital Costs recoverable through Reference Tariffs.
117. However, given the presently speculative nature of such increased interconnection activity, there is great difficulty in producing a reliable estimate for the associated costs over the next Access Arrangement Period.

118. The Authority regards the wide range in cost estimates provided by AGN for managing heating value on the GDS with a second interconnected Pipeline as indicating a high degree of uncertainty.
119. The Service Provider has a range of options which it may pursue to recover, through Reference Tariffs, New Facilities Investment and Non Capital Costs for heating value management in the next Access Arrangement Period, such as:
- including projected New Facilities Investment and Non Capital Costs in the forecasts of such costs in the revised Access Arrangement;
 - using the Trigger Event Adjustment Approach, being an Approved Reference Tariff Variation Method under section 8.3(d) of the Code; and
 - recovering by way of an application under section 8.21 of the Code which provides for prior approval by the Authority of New Facilities Investment together with a return on such investment during the second Access Arrangement Period.
120. The Authority considers that in order to provide certainty for the parties in relation to the allocation of costs incurred by AGN for heating value management arising from further interconnection activity, the proposed revisions to the Access Arrangement need to be amended to make provision for the recovery of those costs through Reference Tariffs for gas haulage Services.
121. AGN should, therefore, amend the proposed revised Access Arrangement to include provisions by which Reference Tariffs may recover from all Users of the GDS the costs of heating value management during the second Access Arrangement Period.

Amendment 5

The proposed revised Access Arrangement should be amended to include provisions, in accordance with the Code, by which Reference Tariffs may recover from all Users of the GDS the costs of heating value management during the second Access Arrangement Period.

Conditions in relation to Non-Reference Services

122. The Authority notes that there are provisions in Part B of the proposed revised Access Arrangement which AGN seeks to be included in the revised Access Arrangement which place conditions on negotiations of tariffs for Non-Reference Services. These clauses are clauses 16, 17 and 18 of Part B of the proposed revised Access Arrangement.
123. First, clauses 16 and 17 of Part B of the proposed revised Access Arrangement provide as follows:

- 16 In setting and negotiating Tariffs for a Service which is not a Reference Service, regard must be had to the Tariff structure and Tariff levels contained in the Reference Tariff Policy.
- 17 Without limiting the generality of Part B, clause 16, the Tariff for a Service which is not a Reference Service should to the extent practicable and reasonable be comparable to the Tariff for the Reference Service (if any) which most nearly corresponds to the Service.
124. Similar provisions are contained in clauses 40(2) and (3) of the current Access Arrangement. These were approved by the Relevant Regulator. The current provisions by their terms are confined to haulage services not being Reference Services. Clauses 16 and 17 of the proposed revised Access Arrangement by contrast extend the provisions to any Service as defined in the Code for which a Reference Tariff is not provided.
125. The Code does not require the Authority to approve a tariff for Services other than Reference Services. Disputes between Prospective Users and Service Providers in respect of the terms and conditions, including tariffs, for Services which are not Reference Services are subject to arbitration under Part 6 of the Code. In such arbitrations the Arbitrator is bound under section 6.18(a) of the Code not to make a decision which is inconsistent with the Access Arrangement.
126. If clauses 16 and 17 of Part B were to be approved, then the Arbitrator would be bound to make decisions consistent with them. This would be despite the Services in question not being Reference Services and the Authority not having given consideration to whether or not the provisions of clauses 16 and 17 regarding the tariffs for the relevant Services are reasonable.
127. The Authority concludes that it would be inappropriate to approve clauses 16 and 17 of Part B of the proposed revised Access Arrangement. The reason for this is that such provisions would place conditions on the setting of tariffs for Services which are not Reference Services, and which would fetter the Arbitrator's power to determine such tariffs by arbitration under Section 6 of the Code. The Authority's draft decision is therefore to require those clauses to be deleted from the proposed revised Access Arrangement prior to its approval as set out below.
128. Clause 18 of Part B is a further provision relevant to the setting of tariffs for the Interconnection Service. The proposed clause (of which there is no equivalent in the current Access Arrangement) is as follows:
- In setting and negotiating Tariffs for an Interconnection Service the rate shall be set to recover the capital costs and Non-Capital Costs incurred by AGN of implementing interconnection and facilitating the Interconnection Service in its day-to-day operation, including the cost identified in Part A, clause 62(2).
129. The cost identified in Part A, clause 62(2) is the cost of implementing a heating value blending management plan. The full text of Part A, clause 62, which is headed 'Cost recovery of interconnection costs' is as follows:

- (1) AGN may recover the reasonable capital and Non-Capital Costs it incurs as a result of a Pipeline being interconnected with the AGN GDS from the owner or operator of the Interconnected Pipeline.
 - (2) Without limiting Part A, clause 62(1), if AGN is required or agrees to implement, or is required or agrees to assist in the implementation of, a heating value blending management plan under the Gas Standards Regulations in respect of an Interconnected Pipeline, the owner or Pipeline Operator of the Interconnected Pipeline will be required to reimburse AGN's reasonable capital costs and Non-Capital Costs associated with the measurement, recording, auditing, facilitation or otherwise related to the development, implementation and administration of the heating value blending management plan.
 - (3) If the costs referred to in Part A, clause 62(2) cannot be recovered from the owner or Pipeline Operator of the Interconnected Pipeline, then AGN may suspend the provision of the Interconnection Service to the owner or Pipeline Operator of the Interconnected Pipeline.
130. The effect of clause 18 of Part B read with clause 62 of Part A of the proposed revised Access Arrangement is to require the capital expenditure and Non Capital Costs incurred by AGN in relation to any interconnection with the Parmelia Pipeline to be recovered from the operator of that pipeline. This outcome would be inconsistent with the Authority's draft decision above that any such costs are costs of AGN providing Reference Services recoverable from all Users of the GDS through the revenue allocation mechanisms under the Code. It would also involve the Access Arrangement placing a condition on the setting of a tariff for a Non-Reference Service which as explained above⁶ the Authority considers inappropriate.
131. In the circumstances, it is the Authority's draft decision that clause 18 of Part B and clause 62 of Part A should also be deleted.

Amendment 6

Clauses 16, 17 & 18 of Part B and clause 62 of Part A of the proposed revised Access Arrangement should be deleted.

132. Consistent with its draft decision, a consequential amendment to clause 31(c) of Part A, which refers to the deleted clauses in Part B, is also required.

Amendment 7

Clause 31(c) of Part A of the proposed revised Access Arrangement should be amended to delete the references to clauses 16 to 18 of the proposed revised Access Arrangement.

Elements of a Service

133. Sections 3(2)(b) & (c) of the Code provide:

⁶ See paragraphs 125 to 127.

3.2 The Services Policy must comply with the following principles:

...

- (b) To the extent practicable and reasonable, a User or Prospective User must be able to obtain a service which includes only those elements that the User or Prospective User wishes to be included in a Service.
- (c) To the extent practicable and reasonable, a Service Provider must provide a separate Tariff for an element of a Service if this is requested by a User or Prospective User.

134. The current Access Arrangement includes, in clause 11 of Chapter 2 – Services Policy, provisions that purport to give effect to this requirement in terms that are similar, but not identical, to those in the Code. This approach is continued in clause 26 of Part A of the proposed revised Access Arrangement as follows:

- (1) To the extent that it is practicable and reasonable for AGN, a Prospective User will be able to obtain a Service which consists only of elements of a Reference Service offered by AGN under the Services Policy.
- (2) If requested to do so by a Prospective User, AGN will, to the extent that it is practicable and reasonable to do so, provide a separate Tariff for an element of the Service requested under Part A, subclause 26(1).

135. The proposed clause 26 of Part A is inconsistent with the provisions of the Code particularly in that this clause has been confined to apply to Reference Services and excludes Users.

136. As section 3.2 of the Code requires that a Services Policy must comply with the principles of that section, the Authority requires that clause 26 of Part A be amended to be consistent with sections 3.2(b) and (c) of the Code.

Amendment 8

Clause 26 of Part A of the proposed revised Access Arrangement should be amended to be consistent with sections 3.2(b) and (c) of the Code.

Reference Tariffs and Reference Tariff Policy

Preliminary matters

137. In this part of the Draft Decision the Authority considers the following preliminary matters relevant to AGN's proposed revised Reference Tariff Policy and Reference Tariffs:

- Code requirements;
- Section 38(2) of the *Gas Pipelines Access (Western Australia) Act 1998*;

- Reference Tariff proposal;
- Approach to determining Reference Tariffs;
- Information required under Code;
- General principles;
- Method of calculation of Total Revenue;
- Adjustment for inflation;
- Mid year or end year timing.

Code requirements

138. Section 3.3 of the Code requires that an Access Arrangement must include a Reference Tariff for:
- (a) at least one Service that is likely to be sought by a significant part of the market; and
 - (b) each Service that is likely to be sought by a significant part of the market and for which the Relevant Regulator considers a Reference Tariff should be included.
139. Section 3.4 of the Code specifies circumstances in which Reference Tariffs must comply with the Reference Tariff Principles in section 8 of the Code:
- Unless a Reference Tariff has been determined through a competitive tender process as outlined in sections 3.21 to 3.36, an Access Arrangement and any Reference Tariff included in an Access Arrangement must, in the Relevant Regulator's opinion, comply with the Reference Tariff Principles described in section 8.
140. Section 3.5 of the Code requires that, in addition to a Reference Tariff, an Access Arrangement must include a Reference Tariff Policy:
- An Access Arrangement must also include a policy describing the principles that are to be used to determine a Reference Tariff (a **Reference Tariff Policy**). A Reference Tariff Policy must, in the Relevant Regulator's opinion, comply with the Reference Tariff Principles described in section 8.
141. Section 8.1 of the Code provides that a Reference Tariff and Reference Tariff Policy should be designed with a view to achieving the following objectives:
- (a) providing the Service Provider with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service;
 - (b) replicating the outcome of a competitive market;
 - (c) ensuring the safe and reliable operation of the Pipeline;
 - (d) not distorting investment decisions in Pipeline transportation systems or in upstream and downstream industries;

- (e) efficiency in the level and structure of the Reference Tariff; and
- (f) providing an incentive to the Service Provider to reduce costs and to develop the market for Reference and other Services.

142. Section 8.1 of the Code also provides guidance as to the reconciliation of the objectives set out in this section:

To the extent that any of these objectives conflict in their application to a particular Reference Tariff determination, the Relevant Regulator may determine the manner in which they can best be reconciled or which of them should prevail.

143. In respect of the reconciliation of the objectives of section 8.1 of the Code, “the factors in s 2.24(a) to (g) should guide the Regulator in determining, if necessary, the manner in which the objectives in section 8.1(a) to (f) can best be reconciled or which of them should prevail”.⁷

144. In addition, section 8.2 of the Code requires that the Authority be satisfied about a number of factors in determining whether to approve a Reference Tariff and Reference Tariff Policy:

- (a) the revenue to be generated from the sales (or forecast sales) of all Services over the Access Arrangement Period (the Total Revenue) should be established consistently with the principles and according to one of the methodologies contained in this section 8;
- (b) to the extent that the Covered Pipeline is used to provide a number of Services, that portion of Total Revenue that a Reference Tariff is designed to recover (which may be based on forecasts) is calculated consistently with the principles contained in this section 8;
- (c) a Reference Tariff (which may be based upon forecasts) is designed so that the portion of Total Revenue to be recovered from a Reference Service (referred to in paragraph (b)) is recovered from the Users of that Reference Service consistently with the principles contained in section 8;
- (d) Incentive Mechanisms are incorporated into the Reference Tariff Policy wherever the Relevant Regulator considers appropriate and such Incentive Mechanisms are consistent with the principles contained in this section 8; and
- (e) any forecasts required in setting the Reference Tariff represent best estimates arrived at on a reasonable basis.

145. The application of the principles contained in section 8 of the Code (i.e. sections 8.1 to 8.49) to the Reference Tariffs and the Reference Tariff Policy proposed by AGN are discussed below under the relevant headings.

Section 38 of *Gas Pipelines Access (Western Australia) Act 1998*

146. The *Gas Pipelines Access (Western Australia) Act 1998 (GPAA)*, which implements the Code in Western Australia, differs from the legislation which was enacted in

⁷ *Re: Dr Ken Michael AM; ex parte Epic Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231, Declaratory Order 3.

South Australia and adopted as the national model legislation. One difference is the supplementary provisions of section 38.

147. The text of the relevant provision is as follows:

38 Provision supplementary to the Code

- (1) This section applies where —
 - (a) the Authority is assessing a proposed Access Arrangement to determine whether it should be approved under the Code; and
 - (b) for that purpose is required by the Code to take the public interest into account.
- (2) Where this section applies the Authority is to take into account the fixing of appropriate charges as a means of extending effective competition in the supply of natural gas to residential and small business consumers.
- (3) The reference to appropriate charges is to charges for the use of a pipeline to transport small quantities of natural gas that will enable suppliers to compete for the custom of residential and small business consumers.
- (4) In subsection (3) —

“small quantities” means a quantity for the time being prescribed by the Minister by order published in the *Gazette*, being in every case —

 - (a) less than 1 terajoule in any period of 12 consecutive months; and
 - (b) for transport to a single metered connection to the pipeline concerned.
- (5) An order under subsection (4) may be amended by the Minister by further order published in the *Gazette*.

148. By section 38(1), the section applies in circumstances where the Authority is required to take the public interest into account when assessing an Access Arrangement.

149. Section 2.24(e) of the Code provides that in assessing an Access Arrangement (or proposed revisions) as to compliance with sections 3.1 to 3.20 of the Code, the Authority must take into account the public interest.

150. Therefore, when considering the proposed revised Access Arrangement, the Authority must take into account the fixing of appropriate charges as a means of extending effective competition in the supply of natural gas to residential and small business consumers.

151. The provisions of section 38 of the *GPAA* have been considered by the Authority in assessing the proposed revisions to the Access Arrangement.

Reference Tariff proposal

152. Clause 31 of Part A – “Reference Tariffs and Reference Tariff Policy” - summarises the provisions of AGN’s proposed revised Access Arrangement which deal with Reference Tariff issues⁸:

Reference Tariffs and the Reference Tariff Policy applicable to this Access Arrangement are set out in Part B as follows:

- (a) Part B, clauses 1-11 and Schedules 1-5 describe the Initial Reference Tariffs and the basis for adjustment;
- (b) Part B, clauses 12-14 describe the basis for adjusting Reference Tariffs in accordance with the Trigger Event Adjustment Approach;
- (c) Part B, clauses 15-18 describe the approach to be used for setting Tariffs for Services other than Reference Services;
- (d) Part B also sets out AGN’s Reference Tariff Policy describing the principles used to determine a Reference Tariff. The policy relates to:
 - (i) The calculation of Total Revenue;
 - (ii) New Facilities Investment;
 - (iii) Allocation of revenue between Services and between Users;
 - (iv) The Form of Regulation;
 - (v) Incentive Mechanism.
- (e) Part B, clause 37 describes a range of Fixed Principles that are to apply to the Access Arrangement.

153. The Reference Tariff Policy referred to in Part A, clause 15(d) by reference to which AGN has calculated Reference Tariffs is set out in paragraphs 19 to 37 of Part B of the proposed revised Access Arrangement under the following headings:

- General principles (clauses 19 & 20 – Part B);
- Calculation of Total Revenue (clauses 21 & 22 – Part B);
- Forecast capital expenditure (clause 23 – Part B);
- Calculation of rate of return (clauses 24 & 25 – Part B);
- Depreciation Schedule (clause 26 – Part B);
- Non-capital costs (clause 27 – Part B);

⁸ In paragraphs 122 to 132 above, the Authority has explained why it considers clauses 16 to 18 of Part B, as referred to in clause 31(c) of Part A, should be deleted from the proposed revised Access Arrangement, and has required a consequential amendment to clause 31(c) of Part A (Amendment 7).

- Allocation of revenue between services (clause 28 & 29 – Part B);
- Allocation of revenue between users (clause 30 – Part B);
- Prudent discounts (clause 31 – Part B);
- Form of regulation (clause 32 – Part B);
- Use of incentive mechanisms (clause 33 to 36 – Part B);
- Reference tariff principles not subject to review (clause 37 – Part B).

Approach to determining Reference Tariffs

154. The Reference Tariffs which AGN has proposed for the second Access Arrangement Period, have been determined using a Price Path Approach in accordance with section 8.3(b) of the Code. The adoption of this approach is, under the Code, at the discretion of the Service Provider.
155. Where a Price Path Approach is used, the determination of Reference Tariffs in the context of revisions to an Access Arrangement involves the following steps:
- determination of the Capital Base at the commencement of the revised Access Arrangement, by adjusting the Initial Capital Base by reference to New Facilities Investment and Depreciation during the current Access Arrangement Period;
 - estimation of a forecast Capital Base on an annual basis over the next Access Arrangement Period, based upon the Service Provider's forecast New Facilities Investment, Depreciation and, where appropriate, working capital;
 - estimation of an appropriate Rate of Return on the forecast Capital Base as determined;
 - estimation of Non Capital Costs for the next Access Arrangement Period;
 - determination of Total Revenue to be recovered through Reference Tariffs, being the total of the return on the Capital Base (including, where appropriate, working capital), Depreciation of the Capital Base and forecast Non Capital Costs during the next Access Arrangement Period;
 - assessment of the Service Provider's forecasts of quantities (volumes, daily demand and customer numbers) for the next Access Arrangement Period;
 - allocation of Total Revenue across Services by reference to the quantity forecasts;
 - determination of Reference Tariffs for the first year of the next Access Arrangement Period; and

- determination of an ‘X’ factor to provide a smoothed price path over the next Access Arrangement Period.
156. The proposed revised Access Arrangement also includes the following elements relating to Reference Tariffs during the second Access Arrangement Period:
- the adjustment annually for variation in Regulatory Costs from those forecast;
 - a Reference Tariff Control Formula Approach which would permit adjustment to individual tariff components by reference to the annual revenue obtained from a basket of tariffs;
 - a Trigger Event Adjustment Approach in respect of Non Capital Costs and New Facilities Investment relating to Full Retail Contestability (**FRC**);
 - an Incentive Mechanism; and
 - Fixed Principles.

Information required under Code

157. Section 2.28 of the Code requires the Service Provider to submit proposed revisions to the Access Arrangement, together with the submitted Access Arrangement Information.
158. Section 2.6 of the Code requires that, in the Authority’s opinion, the Access Arrangement Information contains such information as would enable Users and Prospective Users to understand the derivation of the elements in the proposed Access Arrangement and to form an opinion as to the compliance of the Access Arrangement with the provisions of the Code.
159. Section 2.7 of the Code states that the Access Arrangement Information may include any relevant information but must include at least the six categories of information described in Attachment A to the Code. These six categories of information relate to:
- access and pricing principles;
 - capital costs;
 - operations and maintenance;
 - overheads and marketing costs;
 - system capacity and volume assumptions; and
 - key performance indicators.

160. Section 2.30 of the Code provides that if the Authority is not satisfied that the Access Arrangement Information meets the requirements of the Code, it may at any time before a decision is made to approve an Access Arrangement, require the Service Provider to make changes to the Access Arrangement Information in order to comply with sections 2.6 and 2.7.

Information provided by AGN

161. On 31 March 2004 AGN submitted its proposed revisions to the Access Arrangement and submitted Access Arrangement Information as required by the Code. AGN also provided, in confidence, a copy of its model used to calculate the proposed Reference Tariffs.
162. During the assessment process, AGN also provided additional information including confidential information, and information in response to notices under section 41 of Schedule 1 of the *GPAA*.
163. The Authority has identified below amendments to the submitted Access Arrangement Information which it requires AGN to make under section 2.30 of the Code, so that the Access Arrangement Information will comply with section 2.6.

General Principles

164. The first element of the proposed Reference Tariff Policy is a statement by AGN as to the general principles that have been used to determine the Reference Tariffs.
165. Clauses 19 & 20 – “General Principles” – of Part B of the proposed revised Access Arrangement provides as follows:
- 19 The Reference Tariffs have been designed to:
 - (a) achieve the objectives set out in section 8.1 of the Code; and
 - (b) recover:
 - (i) all of the Total Revenue that reflects costs incurred (including capital costs) directly attributable to the Reference Services; and
 - (ii) a share of the Total Revenue that reflects costs incurred (including capital costs) that are attributable to providing the Reference Services.
 - 20 The share referred to in Part B, subparagraph 19(b)(ii) has been determined using a method that meets the objectives in section 8.1 of the Code and is otherwise fair and reasonable.
166. In order to meet the Code requirements these general principles must conform to the Reference Tariff Principles in section 8 of the Code.
167. The Authority is satisfied that the general principles in clause 19 and 20 of the Reference Tariff Policy in the proposed revised Access Arrangement are consistent with the provisions of the Code.

Method of calculation of Total Revenue

168. A further preliminary matter is AGN's choice of method for calculating the Total Revenue to be recovered from Reference Tariffs.
169. The Code gives the Service Provider a choice of three methods – Cost of Service, Internal Rate of Return or Net Present Value – to calculate Total Revenue. The Service Provider's proposed Reference Tariffs must comply with Reference Tariff Principles applicable to the chosen method.
170. The relevant Code provisions are sections 8.4 and 8.5 of the Code:

- 8.4 The Total Revenue (a portion of which will be recovered from sales of Reference Services) should be calculated according to one of the following methodologies:

Cost of Service: The Total Revenue is equal to the cost of providing all Services (some of which may be the forecast of such costs), and with this cost to be calculated on the basis of:

- (a) a return (***Rate of Return***) on the value of the capital assets that form the Covered Pipeline or are otherwise used to provide Services (***Capital Base***);
- (b) depreciation of the Capital Base (***Depreciation***); and
- (c) the operating, maintenance and other non capital costs incurred in providing all Services (***Non Capital Costs***).

IRR: The Total Revenue will provide a forecast Internal Rate of Return (IRR) for the Covered Pipeline that is consistent with the principles in sections 8.30 and 8.31. The IRR should be calculated on the basis of a forecast of all costs to be incurred in providing such Services (including capital costs) during the Access Arrangement Period.

The initial value of the Covered Pipeline in the IRR calculation is to be given by the Capital Base at the commencement of the Access Arrangement Period and the assumed residual value of the Covered Pipeline at the end of the Access Arrangement Period (***Residual Value***) should be calculated consistently with the principles in this section 8.

NPV: The Total Revenue will provide a forecast Net Present Value (NPV) for the Covered Pipeline equal to zero. The NPV should be calculated on the basis of a forecast of all costs to be incurred in providing such Services (including capital costs) during the Access Arrangement Period, and using a discount rate that would provide the Service Provider with a return consistent with the principles in sections 8.30 and 8.31.

The initial value of the Covered Pipeline in the NPV calculation is to be given by the Capital Base at the commencement of the Access Arrangement Period and the assumed Residual Value at the end of the Access Arrangement Period should be calculated consistently with the principles in this section 8.

The methodology used to calculate the Cost of Service, an IRR or NPV should be in accordance with generally accepted industry practice.

However, the methodology used to calculate the Cost of Service, an IRR or NPV may also allow the Service Provider to retain some or all of the benefits arising from efficiency gains under an Incentive Mechanism. The amount of the benefit will be determined by the Relevant Regulator in the range of between 100% and 0% of the total efficiency gains achieved.

- 8.5 Other methodologies may be used provided the resulting Total Revenue can be expressed in terms of one of the methodologies described above.

171. Clause 21 of the proposed Reference Tariff Policy in Part B states that the Total Revenue has been calculated using the Cost of Service method as described in section 8.4 of the Code.
172. The method of calculating Total Revenue is at the discretion of the Service Provider. The Authority's role is to assess compliance with the chosen method.
173. The Authority concludes that clause 21 of the Reference Tariff Policy in Part B complies with the Code, including the provisions relating to Reference Tariff Principles.

Adjustment for inflation

174. Each of the values used in the determination of the Reference Tariffs needs to be adjusted appropriately for the effects of inflation.
175. Section 8.5A of the Code provides discretion for AGN to choose a basis for dealing with inflation. AGN has chosen, as provided for in section 8.5A(b) of the Code, to make the relevant calculations on a real basis. This requires, under section 8.5A(b), that the Capital Base, Depreciation and all other costs and revenues be expressed in constant prices and for a real Rate of Return to apply.
176. Accordingly, each of the values used in the calculation of the Reference Tariffs must be adjusted for inflation at a fixed date. AGN has chosen to present its calculations in dollars as at 30 June 2003.
177. In order for Reference Tariffs to be calculated as at the intended Revisions Commencement Date (i.e. 1 January 2005) it is necessary for AGN's calculations to be adjusted accordingly. The Authority considers that it is more convenient for Reference Tariffs to be calculated as at the Revisions Commencement Date and has adjusted its calculations accordingly.
178. The Authority notes that expressing all values in dollars as at the Revisions Commencement Date is consistent with the approach adopted in respect of most other current Access Arrangements.
179. The Authority proposes to require AGN to amend its Access Arrangement Information to express all relevant values in real terms as at the Revisions Commencement Date. The required amendments to the submitted Access Arrangement Information are discussed below in the context of the Authority's discussion of individual elements of the proposed Reference Tariffs.

Mid year or end year timing

180. AGN's Reference Tariff calculations assume that depreciation of New Facilities Investment for a given year is calculated on the basis of half of the New Facilities

Investment occurring in the middle of the year and the remainder at the end of that year.

181. The Authority in its calculations has assumed that all forecast New Facilities Investment occurs at the end of each relevant year. The effect of this assumption is to align the timing of forecast New Facilities Investment with that of all other costs and revenues, which are assumed to occur at the end of each relevant year.

Capital Base at commencement of second Access Arrangement Period

Overview

182. Under the Cost of Service method, it is necessary to determine an opening value for the Capital Base at the commencement date of the relevant Access Arrangement Period. Where a revised Access Arrangement is being considered, this is done by taking the Capital Base at the commencement date of the immediately preceding Access Arrangement Period, and adjusting it to take account of New Facilities Investment and Depreciation during the immediately preceding Access Arrangement Period.
183. The value of the Initial Capital Base of the GDS at the commencement of the first Access Arrangement Period as set out in the current Access Arrangement was \$535.9 million at 31 December 1999 plus the value of User Specific Delivery Facilities, being \$12.7 million at 31 December 1999⁹.
184. AGN has proposed in Part B, clause 22 of the proposed revised Access Arrangement that the value of the Capital Base as at the Revisions Commencement Date is \$634.4 million expressed in dollars at 30 June 2003. Expressed in dollars at 31 December 2004, the opening value of the Capital Base proposed by AGN is \$657.89 million.
185. For the reasons following, the Authority does not agree that the opening value of the Capital Base as determined by AGN complies with the Code. Rather, the Authority concludes that the opening value for the Capital Base at the commencement of the revised Access Arrangement should be \$658.39 million.

Code provisions

186. Sections 8.8 and 8.9 of the Code set out principles for establishing the Capital Base as follows:
- 8.8 Principles for establishing the Capital Base for the Covered Pipeline when a Reference Tariff is first proposed for a Reference Service (i.e., for the first Access Arrangement Period) are set out in section 8.10 to 8.14.

⁹ Current Access Arrangement, clause 28.

8.9 Sections 8.15 to 8.29 then describe the principles to be applied in adjusting the value of the Capital Base over time as a result of the addition to capital assets that are used to provide Services and as a result of capital assets ceasing to be used for the delivery of Services. Consistently with those principles, the Capital Base at the commencement of each Access Arrangement Period after the first, for the Cost of Service methodology, is determined as:

- (a) the Capital Base at the start of the immediately preceding Access Arrangement Period; plus
- (b) subject to sections 8.16(b) and sections 8.20 and 8.22, the New Facilities Investment or Recoverable Portion (whichever is relevant) in the immediately preceding Access Arrangement Period; less
- (c) Depreciation for the immediately preceding Access Arrangement Period; less
- (d) Redundant Capital identified prior to the commencement of that Access Arrangement Period,

and for the IRR or NPV methodology, is determined as

- (e) subject to sections 8.16(b) and sections 8.20 to 8.22, the Residual Value assumed in the previous Access Arrangement, less
- (f) Redundant Capital identified prior to the commencement of that Access Arrangement period

subject, irrespective of which methodology is applied, to such adjustment for inflation (if any) as is appropriate given the approach to inflation adopted pursuant to section 8.5A.

187. As the Capital Base under the proposed revised Access Arrangement is for revised (as opposed to first) Reference Tariffs, the principles in sections 8.10 to 8.14 have no application, and the principles in section 8.15 to 8.29 apply. These principles relate respectively to:

- New Facilities Investment (sections 8.15 to 8.19);
- Forecast Capital Expenditure (sections 8.20 to 8.22);
- Capital Contributions (sections 8.23 and 8.24);
- Surcharges (sections 8.25 to 8.26); and
- Capital Redundancy (sections 8.27 to 8.29).

Reference Tariff Policy

188. Clause 22 of the Reference Tariff Policy in Part B of the proposed revised Access Arrangement provides as follows:

The Capital Base for the AGN GDS as at 1 January 2005 is \$634.4 million (expressed in \$m as at 30 June 2003).

189. The Authority did not receive any submissions in relation to this matter, other than a general submission from the Office of Energy that the Authority should in its

assessment assure compliance with section 8.16 of the Code in relation to the capital costs incurred by AGN during the first Access Arrangement Period, which are claimed to form part of the Capital Base.

190. The Authority notes that clause 22 of the Reference Tariff Policy, does not, as is required for a Reference Tariff Policy under the Code, describe the principles by which the opening value of the Capital Base is determined. Rather it sets out the result without specifying the principles by which the opening value was determined.
191. The submitted Access Arrangement Information at sections 4.2.1 to 4.2.5 sets out in some detail the manner in which AGN has calculated the opening value of the Capital Base for the second Access Arrangement Period, which AGN has used to calculate the Reference Tariffs.
192. In the current Access Arrangement, the Reference Tariff Policy in relation to the Initial Capital Base included a brief outline of the principles used to determine the Initial Capital Base¹⁰.
193. To comply with section 3.5 of the Code, the Authority considers that clause 22 of the Reference Tariff Policy should be amended to set out the principles used to determine the opening value of the Capital Base.

Amendment 9

Clause 22 of Part B of the Reference Tariff Policy in the proposed revised Access Arrangement should be amended to set out the principles used to determine the opening value of the Capital Base at the commencement of the second Access Arrangement Period.

194. The Reference Tariff Policy in the current Access Arrangement specifies that the value of User Specific Delivery Facilities was excluded from the value of the Initial Capital Base¹¹.
195. AGN's proposed revised Access Arrangement does not indicate whether the value of User Specific Delivery Facilities has been included in the value of actual and forecast New Facilities Investment. The Authority has sought clarification on this matter from AGN.
196. The Authority considers that to avoid any doubt an amendment should be made to the Reference Tariff Policy in the revised Access Arrangement to clarify the approach which AGN has adopted.

¹⁰ Current Access Arrangement, clause 28(2).

¹¹ Current Access Arrangement, clause 28(4).

Amendment 10

Clause 22 of Part B of the Reference Tariff Policy in the proposed revised Access Arrangement should be amended to clarify whether the value of User Specific Delivery Facilities has been included in actual and forecast New Facilities Investment.

Initial asset values

197. Table 1 sets out the values of the assets comprising the Initial Capital Base at 31 December 1999 expressed in dollars at 31 December 2004. The first column shows the values in the submitted Access Arrangement Information converted from dollars at 30 June 2003 to dollars at 31 December 2004¹². The second column shows the values calculated by the Authority from the asset values approved by the Relevant Regulator for the first Access Arrangement Period.
198. The difference between the two sets of figures in Table 1 is explained by a difference in the index value used to adjust for inflation. For the purposes of the Draft Decision, the Authority has used its index value to adjust for inflation.

**Table 1: Initial Capital Base at 31 December 1999
(\$ millions; 31 December 2004)**

Asset class	AGN	Authority
High Pressure Mains	175.729	175.956
Medium Pressure Mains	208.730	208.945
Medium / Low Pressure Mains	113.381	113.515
Low Pressure Mains	32.765	32.808
Regulators	11.432	11.470
Secondary Gate Stations	2.357	2.328
Buildings	2.004	2.054
Meters & Service Pipes	62.230	62.325
Equipment & Vehicles	17.797	17.783
IS (exc FRC)	0.00	0.00
FRC	0.00	0.00

¹² AAI, Table 4.1, p 37.

Asset class	AGN	Authority
Land	5.304	5.277
Total	631.730	632.461

199. The Authority requires the Access Arrangement Information to be amended to show the values for the assets comprising the Initial Capital Base converted to dollars at 31 December 2004 using the appropriate index value to adjust for inflation.

Amendment 11

Table 4.1 of the Access Arrangement Information should be amended to show the values for the assets comprising the Initial Capital Base converted to dollars at 31 December 2004 using the appropriate index value to adjust for inflation.

Asset lives

200. The remaining lives of assets (by class of asset) comprising the Initial Capital Base have been calculated by AGN on an average basis as at 30 June 2003. As foreshadowed in paragraph 179 above, the Authority considers that Reference Tariffs should be calculated as at the Revisions Commencement Date (i.e. 1 January 2005). Accordingly, there is a need for Table 4.4 in the submitted Access Arrangement Information to be amended.
201. Table 2 below shows the economic and remaining lives for the classes of assets comprising the Initial Capital Base with the remaining lives of assets having been re-determined as at 31 December 2004.

**Table 2: Asset lives
(years)**

Asset class	Economic life	Remaining life at 31 December 2004
High Pressure Mains	120	100
Medium Pressure Mains	60	45
Medium / Low Pressure Mains	60	35
Low Pressure Mains	60	27
Regulators	40	22
Secondary Gate Stations	40	19
Buildings	40	18

Asset class	Economic life	Remaining life at 31 December 2004
Meters & Service Pipes	25	5
Equipment & Vehicles	10	0
IS (exc FRC)	5	0
FRC and other IT equipment	5	N/A
Land	N/A	N/A

202. In order to reflect the calculation of remaining asset lives as at 31 December 2004, Table 4.4 of the Access Arrangement Information should be amended accordingly.

Amendment 12

Table 4.4 of the Access Arrangement Information should be amended to set out the remaining lives of assets comprising the Initial Capital Base calculated as at 31 December 2004 as set out in Table 2 of this Draft Decision.

Depreciation

203. The provisions in the Code relevant to Depreciation are sections 10.8, 8.32, 8.33 and 8.35:

10.8 The following definitions apply unless the context otherwise requires:

...

‘Depreciation’ means, in any year and on any asset or group of assets, the amount calculated according to the Depreciation Schedule for that year and for that asset or class of assets.

‘Depreciation Schedule’ has the meaning given in section 8.32.

8.32 The Depreciation Schedule is a set of depreciation schedules (one of which may correspond to each asset or group of assets that form part of the Covered Pipeline) that is the basis upon which the assets that form part of the Capital Base are to be depreciated for the purposes of determining a Reference Tariff (the *Depreciation Schedule*).

8.33 The Depreciation Schedule should be designed:

- (a) so as to result in the Reference Tariff changing over time in a manner that is consistent with the efficient growth of the market for the Services (and which may involve a substantial portion of the depreciation taking place in future periods, particularly where the calculation of the Reference Tariffs has assumed significant market growth and the Pipeline has been sized accordingly);

- (b) so that each asset or group of assets that form part of the Capital Base is depreciated over the economic life of that asset or group of assets;
- (c) so that, to the maximum extent that is reasonable, the depreciation schedule for each asset or group of assets that form part of the Capital Base is adjusted over the life of that asset or group of assets to reflect changes in the expected economic life of that asset or group of assets; and
- (d) subject to section 8.27, so that an asset is depreciated only once (that is, so that the sum of the Depreciation that is attributable to any asset or group of assets over the life of those assets is equivalent to the value of that asset or group of assets at the time at which that asset or group of assets was first include in the Capital Base, subject to such adjustment (if any) as is appropriate given the approach to inflation adopted pursuant to section 8.5A).

8.35 In implementing the principles in section 8.33 or 8.34, regard must be had to the reasonable cash flow needs for Non Capital Costs, financing cost requirements and similar needs of the Service Provider.

204. Depreciation relevant to the opening value of the Capital Base has been dealt with in this Draft Decision in two ways. First, Depreciation of the assets comprising the Initial Capital Base for the first Access Arrangement Period has been calculated, and is discussed immediately below. Secondly, Depreciation of New Facilities Investment during the first Access Arrangement Period has been separately calculated, and is discussed under the heading “Depreciation of New Facilities Investment” below.

Depreciation of Initial Capital Base

205. As a consequence of adjusting the date at which values are to be expressed as discussed in the section headed “Adjustment for inflation” above, there is a need to express the values for Depreciation of the assets comprising the Initial Capital Base values at 31 December 2004. Table 3 below presents the Authority’s calculation of these Depreciation values.

**Table 3: Approved Depreciation of Initial Capital Base
(\$ millions; 31 December 2004)**

Asset class	2000	2001	2002	2003	2004
High Pressure Mains	1.64	1.64	1.64	1.64	1.64
Medium Pressure Mains	4.05	4.05	4.05	4.05	4.05
Medium / Low Pressure Mains	2.87	2.87	2.87	2.87	2.87
Low Pressure Mains	1.03	1.03	1.03	1.03	1.03
Regulators	0.39	0.39	0.39	0.39	0.39
Secondary Gate Stations	0.10	0.10	0.10	0.10	0.10

Asset class	2000	2001	2002	2003	2004
Buildings	0.09	0.09	0.09	0.09	0.09
Meter and Services Pipes	5.32	5.32	5.32	5.32	5.32
Equipment & Vehicles	3.06	3.06	3.06	3.06	3.06
Information Technology	0.00	0.00	0.00	0.00	0.00
FRC	0.00	0.00	0.00	0.00	0.00
Land	N/A	N/A	N/A	N/A	N/A
Total	18.55	18.55	18.55	18.55	18.55

206. In order for the Access Arrangement Information to contain information on the Depreciation to be taken into account in the derivation of Reference Tariffs, an amendment to the Access Arrangement Information is required to include the values set out in Table 3 above.

Amendment 13

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

New Facilities Investment

207. Section 8.16 sets out criteria that must be met by any New Facilities Investment if the actual capital cost of that investment is to be added to the Capital Base. These criteria are:
- (a) Subject to sections 8.16(b) and sections 8.20 to 8.22, the Capital Base may be increased under section 8.15 by the amount of the actual New Facilities Investment in the immediately preceding Access Arrangement Period provided that:
 - (i) that amount does not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of providing Services; and
 - (ii) one of the following conditions is satisfied:
 - (A) the Anticipated Incremental Revenue generated by the New Facility exceeds the New Facilities Investment; or
 - (B) the Service Provider and/or Users satisfy the Relevant Regulator that the New Facility has system-wide benefits that, in the Relevant Regulator's opinion, justify the approval of a higher Reference Tariff for all Users; or
 - (C) the New Facility is necessary to maintain the safety, integrity or Contracted Capacity of Services.

- (b) If pursuant to section 8.20 the Relevant Regulator agrees to Reference Tariffs being determined on the basis of forecast New Facilities Investment, the Capital Base may be increased by the amount of the New Facilities Investment forecast to occur within the new Access Arrangement Period determined in accordance with sections 8.20 and 8.21 and subject to adjustment in accordance with 8.22.
208. Section 8.17 of the Code sets out two factors that the Authority must consider in determining whether Capital Expenditure meets the criteria set out in section 8.16:
- (a) whether the New Facility exhibits economies of scale or scope and the increments in which Capacity can be added; and
 - (b) whether the lowest sustainable cost of delivering Services over a reasonable time frame may require the installation of a New Facility with Capacity sufficient to meet forecast sales of Services over that time frame.
209. The Authority considers that “the amount of the actual New Facilities Investment in the immediately preceding Access Arrangement Period” in section 8.16(a) of the Code refers to the amounts actually outlaid by AGN on New Facilities Investment in the relevant period.
210. The New Facilities Investment claimed by AGN is set out in the Access Arrangement Information¹³ in annual aggregate terms. In total this actual cost over the five years of the current Access Arrangement amounted to \$130.6 million, expressed in dollars at 30 June 2003. By comparison, the amount approved by the Relevant Regulator was \$103.9 million (dollars at 30 June 2003). The difference of \$26.7 million represents additional New Facilities Investment by AGN above forecast.
211. In response to a request for information, AGN provided further details of actual New Facilities Investment during the first Access Arrangement Period. This information, converted by the Authority to dollars at 31 December 2004, is set out in Table 4 below.

¹³ AAI, Table 4.2, p 38.

Table 4: Actual New Facilities Investment during first Access Arrangement Period (\$ millions; 31 December 2004)

Asset class	2000	2001	2002	2003	2004
High Pressure Mains	1.36	1.87	0.00	0.00	0.00
Medium Pressure Mains	5.59	3.27	4.38	4.10	3.56
Medium / Low Pressure Mains	2.16	1.28	0.08	0.00	0.04
Low Pressure Mains	0.00	0.00	0.00	0.00	0.00
Regulators	0.18	0.17	0.01	0.00	0.01
Secondary Gate Stations	0.02	0.01	0.00	0.00	0.00
Buildings	0.00	0.06	0.00	0.00	0.00
Meter and Services Pipes	14.45	11.08	20.28	23.07	18.07
Equipment & Vehicles	1.23	0.26	0.01	0.18	0.08
Information Technology	3.56	0.67	0.38	0.35	0.99
FRC	0.00	0.00	1.82	1.24	9.14
Land	0.27	0.20	0.00	0.00	0.00
Total	28.82	18.88	26.96	28.94	31.87

212. It should be noted that the actual New Facilities Investment presented in Table 4 adds to an amount of \$135.47 million which differs from \$130.6 million referred to in paragraph 210 above for reasons including that the values in the table have been converted to 31 December 2004. An appropriate amendment to the Access Arrangement Information is required.

Amendment 14

Table 4.2 of the Access Arrangement Information should be amended to reflect the values in Table 4 of this Draft Decision.

213. Section 8.16(a) of the Code requires the Regulator to be satisfied that the amount of New Facilities Investment to be added to the Capital Base:
- was actually outlaid by AGN;
 - does not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of providing Services; and

- meets one or more of the conditions set out in section 8.16(a)(ii).
214. The Authority has requested AGN to make available further information to enable the Authority to substantiate that the New Facilities Investment claimed has actually been outlaid.
215. In the Access Arrangement Information AGN has submitted¹⁴ that the Authority would be acting reasonably to infer that all capital expenditure during the first Access Arrangement Period meets the requirement in section 8.16(a)(i) of the Code.
216. AGN has also represented that “the increase in capital expenditure in the first Access Arrangement Period has been incurred due to investment to comply with the introduction of FRC and growth in consumer connections”¹⁵.
217. The Authority has taken into account the following matters in considering whether to accept AGN’s position:
- AGN has provided in confidence copies of its Asset Management Plan (**AMP**) dated October 2003 and, on request, a number of associated documents. Technical assistance has been provided to the Authority by the Director of Energy Safety in reviewing those materials. This review has indicated improvements in asset management planning to ensure compliance with section 8.16(a)(i) for New Facilities Investment.
 - AGN has advised that a substantial portion of its capital expenditure in the first Access Arrangement Period has been made in response to regulatory and licensing obligations. A significant component of this expenditure was in respect of new connections and meters in response to growth of the gas market which AGN, as a licensed gas distributor, is obliged to incur.
 - AGN has provided two consultant reports that provide benchmark comparisons for costs as at mid-2003 and these reports conclude favourably concerning the cost efficiency of capital expenditure by AGN.
 - AGN has advised that during 2004 it has outlaid a significant component of the \$12 million that the Relevant Regulator approved under section 8.21 of the Code by a Notice on 1 November 2003 to establish the information systems and accounting arrangements required to implement FRC.
218. On balance, and having regard to the Code requirements, the Authority is satisfied that, subject to the substantiation as referred to in paragraph 214 above, New

¹⁴ AAI, p 37.

¹⁵ AAI, p 38.

Facilities Investment during the first Access Arrangement Period passes the test in section 8.16(a)(i) of the Code.

219. To comply with the Code, the actual New Facilities Investment must also satisfy at least one of the three conditions set out in section 8.16(a)(ii)(A), (B) or (C).
220. In considering the information provided by AGN and the investigations undertaken, the Authority is satisfied that the claimed actual New Facilities Investment for the first Access Arrangement Period meets at least one of the three tests of section 8.16(a)(ii).

Depreciation of New Facilities Investment

221. AGN's calculation of Depreciation of the New Facilities Investment for the first Access Arrangement Period was provided to the Authority as part of a confidential Reference Tariff model and further information. The approach adopted by AGN was based on the forecast Depreciation of New Facilities Investment as approved by the Relevant Regulator under the current Access Arrangement. An alternative approach might have been to use Depreciation based upon actual New Facilities Investment.
222. The approach by AGN is the same as that adopted in 2002 by the ESC for its approval of revisions to Access Arrangements for the three major Victorian gas distribution systems¹⁶. The approach was also used by the Independent Competition and Regulatory Commission (ACT) (ICRC) for its final decision in October 2004 on the proposed revised Access Arrangement for the ActewAGL system in the ACT¹⁷.
223. The approach adopted by AGN that uses forecast Depreciation of New Facilities Investment ensures that the total value of Depreciation at the end of the asset life-cycle will be equal to the total value of the actual New Facilities Investment undertaken.
224. As a consequence of adjusting the date at which values are to be expressed as discussed in the section headed "Adjustment for inflation" above, there is a need to express the values for Depreciation of the assets comprising the New Facilities Investment at 31 December 2004. Table 5 below presents the Authority's calculation of these Depreciation values.

¹⁶ ESC, October 2002, *Review of Gas Access Arrangements: Final Decision*.

¹⁷ ICRC, October 2004, *Final Decision, Review of Access Arrangement for ActewAGL Natural Gas System in ACT, Queanbeyan and Yarrowlumla*.

Table 5: Depreciation of New Facilities Investment during the first Access Arrangement Period
(\$ millions; 31 December 2004)

Asset class	2000	2001	2002	2003	2004
High Pressure Mains	0.07	0.10	0.13	0.15	0.17
Medium Pressure Mains	0.19	0.27	0.33	0.37	0.39
Medium / Low Pressure Mains	0.00	0.00	0.00	0.00	0.00
Low Pressure Mains	0.02	0.07	0.12	0.16	0.21
Regulators	0.03	0.04	0.05	0.06	0.06
Secondary Gate Stations	0.01	0.02	0.02	0.02	0.02
Buildings	0.00	0.00	0.01	0.01	0.01
Meters & Service Pipes	0.60	0.97	1.32	1.66	1.99
Equipment & Vehicles	0.69	1.25	1.48	1.73	1.97
IS (exc FRC)	0.00	0.00	0.00	0.00	0.00
FRC	0.00	0.00	0.00	0.00	0.00
Land	N/A	N/A	N/A	N/A	N/A
Total	1.62	2.72	3.46	4.17	4.84

225. In order for the Access Arrangement Information to contain information on the Depreciation for New Facilities Investment to be taken into account in the derivation of Reference Tariffs, an amendment to the Access Arrangement Information is required to include the values set out in Table 5 above.

Amendment 15

The Access Arrangement Information should be amended to include the values for Depreciation for New Facilities Investment during the first Access Arrangement Period as set out in Table 5 of this Draft Decision.

Total depreciation for first Access Arrangement Period

226. Table 6 sets out total Depreciation for the first Access Arrangement Period being the sum of the Authority's values for Depreciation of the assets comprising the Initial Capital Base (Table 3) and Depreciation of New Facilities Investment (Table 5).

**Table 6: Total Depreciation for first Access Arrangement Period
(\$ millions; 31 December 2004)**

Asset class	2000	2001	2002	2003	2004
High Pressure Mains	1.70	1.74	1.77	1.79	1.81
Medium Pressure Mains	4.24	4.32	4.38	4.42	4.44
Medium / Low Pressure Mains	2.87	2.88	2.88	2.88	2.88
Low Pressure Mains	1.06	1.10	1.15	1.20	1.25
Regulators	0.42	0.43	0.44	0.44	0.45
Secondary Gate Stations	0.11	0.12	0.12	0.12	0.12
Buildings	0.09	0.09	0.10	0.10	0.10
Meters & Service Pipes	5.92	6.29	6.64	6.98	7.31
Equipment & Vehicles	3.75	4.31	4.54	4.79	5.03
IS (exc FRC)	0.00	0.00	0.00	0.00	0.00
FRC	0.00	0.00	0.00	0.00	0.00
Land	N/A	N/A	N/A	N/A	N/A
Total Depreciation	20.17	21.27	22.01	22.72	23.39

227. In order for the Access Arrangement Information to contain information on the total Depreciation for the first Access Arrangement Period to be taken into account in the derivation of Reference Tariffs, an amendment to the Access Arrangement Information is required to include the values set out in Table 6 above.

Amendment 16

The Access Arrangement Information should be amended to include the values for total Depreciation for the first Access Arrangement Period as set out in Table 6 of this Draft Decision.

Redundant Capital

228. Section 8.9 of the Code provides for the deduction from the value of the Capital Base at the commencement of an Access Arrangement Period of “Redundant Capital identified prior to the commencement of that Access Arrangement Period”. Section 10.8 provides that Redundant Capital has the meaning given in section 8.27. Section 8.27 of the Code refers to Redundant Capital as “assets which cease to contribute in any way to the delivery of Services.”

229. AGN has submitted as follows in relation to this issue ¹⁸:

AGN is not aware of any material assets that have become redundant during the course of the First Access Arrangement Period. The administrative cost associated with the stranding of customer-specific assets, which are generally just the Meter and Service Pipe is unlikely to be of significant value where the costs of removing these assets from the regulatory asset base outweigh the benefit to the community.

230. The Authority has considered AGN's comments in relation to Meters and Service Pipes (i.e. Standard Delivery Facilities). Their value at cost is included in the Capital Base. However, AGN has not provided any substantiation of the value of de-commissioned Meters and Service Pipes. The Authority understands that under FRC, AGN is required to keep records which should enable identification of de-commissioned Meters and Service Pipes, so as to establish the written down value of the assets within this class.

231. AGN will be asked to make available further information to enable the Authority to substantiate that the costs of removing the decommissioned Meters and Service Pipes from the Capital Base outweigh the benefit to the community.

232. In relation to assets other than Meters and Service Pipes, the Authority accepts AGN's assessment that there has been no material redundancy within the GDS. The Authority notes that any redundancy of User Specific Delivery Facilities (i.e. excluding Standard Delivery Facilities such as Meters and Service Pipes) could not affect the value of the Capital Base because AGN has excluded the value of such facilities from the Capital Base.

Opening value of Capital Base

233. The opening value of the Capital Base for the second Access Arrangement Period has been determined by AGN in manner set out in the Access Arrangement Information¹⁹:

For each Year of the First Access Arrangement Period the Initial Capital Base has been adjusted to reflect:

- actual new capital expenditure net of any contribution made by consumers (including a forecast for 2004) meeting the requirements of section 8.16 of the Code has been added to the Initial Capital Base;
- the forecast regulatory Depreciation (Return of Capital) as detailed in the Regulator's final approval of the Access Arrangement, dated 13 July 2000, has been deducted from the Initial Capital Base;

¹⁸ AAI, p 40.

¹⁹ AAI, p 36.

- disposals at the regulatory written down book value has been deducted from the Initial Capital Base value; and
 - changes in the Capital Base as a result of inflation, with adjustments made to bring all asset values to June 2003.
234. With the exception of the final matter (where the Authority has adopted as its preferred approach the use of dollars at 31 December 2004 as the relevant date) the Authority accepts AGN's approach as consistent with the Code requirements (in particular the process outlined in section 8.9 of the Code²⁰).
235. As indicated above (see paragraph 228 and following), the Authority has accepted for the purposes of this Draft Decision that there is no capital to be treated as Redundant Capital. Nor has AGN advised of any disposals of assets. As a consequence no deductions have been made for Redundant Capital or the disposal of assets.
236. In Table 4.1 of the Access Arrangement Information, AGN presented the closing values for the Capital Base grouped by asset class for each year of the first Access Arrangement Period²¹. The Authority has re-calculated these values using as input values those determined by the Authority as set out in Table 1, Table 4 and Table 6 above. The re-calculated values are presented in Table 7 below.

²⁰ See paragraph 186 above.

²¹ AAI, Table 4.1, p 37.

Table 7: Values for assets in Capital Base for first Access Arrangement Period (\$ millions; 31 December 2004)

Asset class	1999	2000	2001	2002	2003	2004
High Pressure Mains	175.96	175.62	175.75	173.99	172.20	170.39
Medium Pressure Mains	208.94	210.30	209.25	209.25	208.93	208.04
Medium / Low Pressure Mains	113.52	112.80	111.20	108.41	105.53	102.69
Low Pressure Mains	32.81	31.75	30.65	29.50	28.30	27.05
Regulators	11.47	11.23	10.97	10.55	10.11	9.67
Secondary Gate Stations	2.33	2.25	2.14	2.03	1.91	1.79
Buildings	2.05	1.96	1.93	1.83	1.73	1.63
Meter and Services Pipes	62.32	70.85	75.65	89.28	105.36	116.12
Equipment & Vehicles	17.78	15.26	11.21	6.68	2.06	-2.89
Information Technology	0.00	3.56	4.23	4.61	4.96	5.95
FRC	0.00	0.00	0.00	1.82	3.07	12.20
Land	5.28	5.54	5.74	5.74	5.74	5.74
Total	632.46	641.12	638.73	643.69	649.90	658.39

237. As set out in Table 7, the opening value for the Capital Base should be \$658.39 million (dollars at 31 December 2004). The value stated in clause 22 of Part B of the proposed revised Access Arrangement, i.e. \$634.4 million (dollars at 30 June 2003), should be amended accordingly.

Amendment 17

Clause 22 of Part B of the proposed revised Access Arrangement should be amended to provide an opening value of the Capital Base of \$658.39 million (dollars at 31 December 2004).

238. As the values in Table 4.1 of the Access Arrangement Information are inconsistent with the values set out in Table 7, the Access Arrangement Information should be amended accordingly.

Capital Base for each year of the second Access Arrangement Period

Forecast New Facilities Investment

239. The relevant provisions of the Code relating to forecast New Facilities Investment are contained sections 8.20 to 8.22 of the Code as follows.

8.20 Consistent with the methodologies described in section 8.4, Reference Tariffs may be determined on the basis of New Facilities Investment that is forecast to occur within the Access Arrangement period provided that the New Facilities Investment is reasonably expected to pass the requirements in section 8.16(a) when the New Facilities Investment is forecast to occur.

8.21 The Relevant Regulator may at any time at its discretion agree (with or without conditions or limitations) that actual New Facilities Investment by a Service Provider meets, or forecast New Facilities Investment proposed by a Service Provider will meet, the requirements of section 8.16(a), the effect of which is to bind the Relevant Regulator's decision when the Relevant Regulator considers revisions to an Access Arrangement submitted by the Service Provider. Before giving any agreement under this section 8.21, the Relevant Regulator must conduct public consultation in accordance with the requirements for a proposed revision to the Access Arrangement submitted under section 2.28. For the avoidance of doubt, if the Relevant Regulator does not agree under this section that the New Facilities Investment meets, or (in the case of forecast New Facilities Investment) will meet, the requirements of section 8.16(a), the Relevant Regulator may consider whether those requirements are met when it considers revisions to an Access Arrangement submitted by the Service Provider.

8.22 For the purposes of calculating the Capital Base at the commencement of the subsequent Access Arrangement Period, either the Reference Tariff Policy should describe or the Relevant Regulator shall determine when the Relevant Regulator considers revisions to an Access Arrangement submitted by a Service Provider, how the New Facilities Investment is to be determined for the purposes of section 8.9. This includes how the Capital Base at the commencement of the next Access Arrangement Period will be adjusted if the actual New Facilities Investment or Recoverable Portion (whichever is relevant) is different from the forecast New Facilities Investment (with this decision to be designed to best meet the objectives in section 8.1).

240. In addition, section 8.16 of the Code, discussed in paragraph 207 above, and section 8.2(e) of the Code, are relevant. Section 8.2(e) of the Code provides:

The factors about which the Relevant Regulator must be satisfied in determining to approve a Reference Tariff and Reference Tariff Policy are that:

...

(e) any forecasts required in setting the Reference Tariff represent best estimates arrived at on a reasonable basis.

241. The submitted Access Arrangement Information provides, in section 4.2.8²², AGN's forecast capital expenditure for the second Access Arrangement Period. Table 4.6 and Table 4.7 provide such expenditure disaggregated by asset class and by type of investment.
242. The investment types presented in the Access Arrangement Information are defined by AGN as follows²³:
- **User Initiated Capital.** This is primarily capital required to connect new end use consumers on behalf of Users.
 - **Renewals (Asset Replacement).** This involves the replacement of aged and obsolete assets, or replacement of assets where the present-value cost of maintaining existing assets exceeds the cost of replacement.
 - **Demand Capital.** This is capital to expand network capacity to cater for the additional load on existing assets from new connections, and also any increase in peak consumption per Delivery Point of existing consumers.
 - **Other Capital.** This category includes miscellaneous capital items such as information technology equipment (including any on-going FRC compliance), vehicles, office furniture etc.
243. In summary, AGN has provided the following forecasts of New Facilities Investment in its Access Arrangement Information:
- In real values (dollars at 30 June 2003), the aggregate New Facilities Investment is forecast by AGN to be \$142.5 million over the 5 years of the second Access Arrangement Period (an average of \$28.5 million p.a.).
 - AGN forecasts that the dominant type of expenditure over the period will be User Initiated Capital (\$97.9 million or 69 percent of the aggregate).
 - The quantum of forecast New Facilities Investment of other types are Renewals at \$17.5 million, Demand Capital at \$13.2 million and Other Capital at \$13.9 million over the period (all dollars at 30 June 2003).
 - Renewals and Other Capital fluctuate somewhat from year to year around their period average, while Demand Capital is forecast to rise substantially in the final two years of the 5-year period.
244. AGN justifies its forecast New Facilities Investment on the basis of an Asset Management Plan (AMP), dated October 2003, which includes both the medium and high-pressure distribution systems for the period from 2004 to 2009. AGN has

²² AAI, pp 43-47.

²³ AAI, p 44.

provided a copy of the AMP to the Authority in confidence. AGN says in its Access Arrangement Information in relation to the AMP²⁴:

The AMP sets out the long term network development requirements from which the capital investments are derived. This long-term approach enables AGN to optimise its investment in network development by taking into account the best enhancement options resulting in maximum system integrity and minimum capital expenditure.

245. AGN has also set out, in its Access Arrangement Information, more specific justifications for the forecasts in relation to each of the investment types:

- In relation to User Initiated Capital and Demand Capital, AGN comments that forecasts of capital expenditure are driven by forecast growth in demand for Reference Services. All work associated with such expenditure is contracted out. The unit rates used for the cost estimates have been calculated from average market rates, and a benchmarking study conducted by GTL Consultants shows that the unit rates chosen compare favourably with comparable activities for UK gas companies²⁵.
- In relation to Renewals (i.e. Asset Replacement), AGN relies upon the AMP as the justification for the capital expenditure meeting Code requirements. The Access Arrangement Information states that:

AGN believes that its integrated approach to renewals and demand capital programmes ensures that capital expenditure is optimised. Further, AGN's approach to asset management is focussed on providing a safe, reliable network, operated and maintained on a cost effective basis, which meets the service, safety and environmental expectations of consumers, regulators and the community²⁶.

- AGN says Other Capital expenditure, some of which is non-discretionary, is justified as meeting the Code requirements. During the first Access Arrangement Period, priority was given to capital expenditure required to meet licence obligations in view of stronger than expected demand for new connections. Therefore, Other Capital expenditure, in particular information technology investments, was deferred. AGN says that such investment cannot be deferred further without unacceptable risk. AGN also says that it needs to undertake substantial Other Capital expenditure in order to meet its FRC-related obligations. AGN says that expenditure forecasts are based on the minimum requirements to support AGN's business and include costs associated with establishing and supporting FRC²⁷.

²⁴ AAI, p 44.

²⁵ AAI, p 45.

²⁶ AAI, p 46.

²⁷ AAI, pp 46-47.

246. AGN has provided information as referred to in the immediately preceding paragraphs in the Access Arrangement Information in support of satisfying the forecast New Facilities Investment requirements in section 8.20 of the Code.²⁸
247. AGN has also provided in confidence to the Authority the following additional information:
- (a) a report commissioned by AlintaGas from the National Institute of Economic and Industry Research (**NIEIR**), *Natural Gas Projections and Customer Number Projections for AlintaGas to 2012 - The Coastal Distribution Region*, dated March 2004 (**NIEIR Report**);
 - (b) Benchmarking studies commissioned by AGN from PA Consulting (**PA Consulting Report**) and from GTL International (**GTL International Report**), both dated March 2004;
 - (c) Network Development Plans from 2004 to 2008 inclusive; and
 - (d) a Maintenance and Construction Services Contract (**MCSC**) under which maintenance and construction work on the network is outsourced to an Associate company.
248. Section 8.20 provides that Reference Tariffs may be determined on the basis of forecast New Facilities Investment that is reasonably expected to pass the requirements of section 8.16(a).
249. In proposing New Facilities Investment totalling \$142.5 million over the 5 years of the second Access Arrangement Period, AGN sought to rely upon benchmarking studies, and the content of internal management plans.
250. In assessing the information provided by AGN, the Authority sought advice from the Director of Energy Safety as provided for under section 37(4) of the *Gas Pipelines Access (Western Australia) Act 1998*. While considering the information for the 2003 year as appearing to be reasonable, the Director of Energy Safety advised that it was difficult to determine whether the forecasts in the Access Arrangement Information (Tables 4.7 and 4.11) for the period 2005 to 2009 were reasonable.
251. Under the circumstances, the Authority considered it appropriate to undertake a more detailed analysis of forecast unit costs and new customer connections in relation to the most significant category, being User Initiated Capital. As total User Initiated Capital costs depend upon both unit costs and growth in customer connections an analysis of both was undertaken.

²⁸ See AAI, p 43.

252. The purpose of this analysis was to obtain a better understanding movements in costs over the second Access Arrangement Period. In particular, the Authority sought to determine whether any improvements in costs could reasonably be factored into Reference Tariffs over the forecast period.

Unit costs

253. As a starting point, the Authority used forecast User Initiated Capital costs and new connections in the B2 & B3 customer categories in AGN's AMP to derive an indicative forecast of unit costs²⁹. This analysis revealed that unit costs are forecast to remain reasonably constant in real dollar terms over the second Access Arrangement Period.
254. It is noted that the indicative forecast of unit costs has been based on the B2 & B3 customer categories as these categories predominate User Initiated Capital costs. This also recognises that User Specific Delivery Facilities are directly funded through User specific charges in Reference Tariffs A1, A2 and B1 and therefore the costs of such facilities are excluded from User Initiated Capital.
255. On the basis of the information available to the Authority, there are indications that unit costs for capital works are likely to decline in real terms over the forecast period. On this basis, the Authority considers that it is reasonable to assume that unit costs in nominal terms will decline at a rate of 1 percent below the rate of inflation for the purposes of determining Reference Tariffs. To the extent that actual changes in unit costs differ from this assumption, New Facilities Investment will be re-assessed at the end of the second Access Arrangement Period and the Capital Base will be adjusted for any differences at that time.

Customer connections

256. As foreshadowed in paragraph 251 above, the Authority has analysed AGN's forecasts of new customer connections. In doing so, the Authority had regard to the information provided by AGN in the Access Arrangement Information, the AMP and further information listed in paragraph 247 above, and past growth patterns in respect of new customer connections.
257. In comparing the information available from different sources, the Authority notes appreciable differences in anticipated growth rates. On the basis of the information made available, the Authority considers that growth in customer connections indicated in AGN's AMP for the period 2005-2009 would be a suitable basis for projecting User Initiated Capital costs. The growth estimates indicated in AGN's submitted Access Arrangement Information and AMP are set out in Table 8 below.

²⁹ Only B2 and B3 customer categories were used for this analysis as User Initiated Capital costs predominantly reflect investment in these categories. Categories A1, A2 and B1 involve significant amounts of User Specific expenditure not included under the User Initiated Capital category.

Table 8: Forecast growth in B2 and B3 customer connections

	2005	2006	2007	2008	2009
Access Arrangement Information ³⁰		15,044	17,376	16,029	13,902
Asset Management Plan	18,600	15,600	15,600	18,600	18,476

Amended forecasts

258. Having concluded that it would be reasonable to assume for unit costs in nominal terms to change at the rate of 1 percent below the rate of inflation and that the forecast in the growth of new customer connections should be based on AGN's AMP, the Authority has prepared an estimate of New Facilities Investment in the User Initiated Capital category. Both the Authority's estimate and that presented by AGN in Table 4.7 of the Access Arrangement Information (converted to dollars at 31 December 2004) are set out in Table 9 below.

Table 9: Forecast User Initiated Capital (\$ million; 31 December 2004)

	2005	2006	2007	2008	2009
Access Arrangement Information	20.84	19.28	19.08	20.94	21.15
Authority	20.11	16.61	16.35	19.19	18.77

259. The Authority considers that its estimate of forecast User Initiated Capital is reasonable and requires a consequential amendment to Table 4.7 of the Access Arrangement Information, including adjusting all values to dollars at 31 December 2004.

Amendment 18

Table 4.7 of the Access Arrangement Information should be amended to reflect the Authority's calculation of forecast User Initiated Capital as set out in Table 9 of this Draft Decision, and to adjust all other values to dollars at 31 December 2004.

260. Table 4.6 of the Access Arrangement Information also presents the forecast New Facilities Investment by asset class³¹. For the purposes of determining Reference Tariffs in this Draft Decision, there is a need for AGN's forecast of New Facilities

³⁰ See Table 6.5, Access Arrangement Information. Note that no growth estimate for 2005 could be calculated as no estimate of customer connections was readily available for 2004.

³¹ AAI, Table 4.6, p 43.

Investment by asset class to be amended. Table 10 shows the forecasts of New Facilities Investment by asset class re-calculated by the Authority³².

Table 10: Forecast New Facilities Investment by asset class for second Access Arrangement Period
(\$ millions; 31 December 2004)

Asset class	2005	2006	2007	2008	2009
High Pressure Mains	0.66	0.83	0.83	0.74	3.32
Medium Pressure Mains	4.75	4.47	4.52	5.43	4.80
Medium / Low Pressure Mains	1.69	1.57	1.51	1.88	1.82
Low Pressure Mains	0.00	0.00	0.00	0.00	0.00
Regulators	0.08	0.07	0.07	0.09	0.09
Secondary Gate Stations	0.01	0.01	0.01	0.01	0.01
Buildings	0.01	0.01	0.01	0.01	0.01
Meter and Services Pipes	16.15	13.90	12.78	17.41	16.81
Equipment & Vehicles	0.36	0.35	0.33	0.40	0.40
Information Technology	3.30	2.85	2.39	3.46	2.23
FRC	0.00	0.00	0.00	0.00	0.00
Land	0.09	0.09	0.09	0.11	0.11
Total	27.09	24.16	22.53	29.53	29.60

261. The consequence of the amendments to forecast New Facilities Investment is a decline in total forecast expenditure from \$143.56 million to \$132.91 million (dollars at 31 December 2004).
262. Accordingly, a consequential amendment to Table 4.6 of the Access Arrangement Information is required.

Amendment 19

Table 4.6 of the Access Arrangement Information should be amended to reflect the Authority's calculation of forecast New Facilities Investment by asset class as set out in Table 10 of this Draft Decision

³² It should be noted that the Authority's amendments as set out in Table 9 above impact on only two asset classes, namely Medium/Low Pressure Mains and Meter and Service Pipes.

Depreciation

263. The Code provisions relevant to Depreciation in sections 10.8, 8.32, 8.33 and 8.35 are set out in paragraph 203 above.

Depreciation of opening Capital Base

264. AGN did not include its calculation of Depreciation in its Access Arrangement Information. The Authority has however had access to AGN's Reference Tariff model and Depreciation model.

265. In reviewing AGN's Depreciation model, the Authority has noted that certain inconsistencies in the application of asset lives. The Authority has, therefore, adjusted AGN's calculations to address the inconsistencies identified as set out in Table 11 below.

Table 11: Depreciation of assets comprising Capital Base at commencement of second Access Arrangement Period
(\$ millions; 31 December 2004)

Asset class	2005	2006	2007	2008	2009
High Pressure Mains	1.68	1.68	1.68	1.68	1.68
Medium Pressure Mains	4.19	4.19	4.19	4.19	4.19
Medium / Low Pressure Mains	2.83	2.83	2.83	2.83	2.83
Low Pressure Mains	1.00	1.00	1.00	1.00	1.00
Regulators	0.43	0.43	0.43	0.43	0.43
Secondary Gate Stations	0.09	0.09	0.09	0.09	0.09
Buildings	0.09	0.09	0.09	0.09	0.09
Meters & Service Pipes	7.14	7.14	7.14	7.14	7.14
Equipment & Vehicles	0.00	0.00	0.00	0.00	0.00
IS (exc FRC)	0.00	0.00	0.00	0.00	0.00
FRC	0.00	0.00	0.00	0.00	0.00
Land	N/A	N/A	N/A	N/A	N/A
Total Asset Depreciation	17.47	17.47	17.47	17.47	17.47

Depreciation of forecast New Facilities Investment

266. As a consequence of the amendments that have been made to forecast New Facilities Investment³³, end of year timing³⁴ and the adjustment to express values in real terms at 31 December 2004³⁵ there is a need to amend AGN's Depreciation for forecast New Facilities Investment. Table 12 below sets out Depreciation that has been revised to take account of the required adjustments.

Table 12: Forecast Depreciation of New Facilities Investment during second Access Arrangement Period

(\$ millions; 31 December 2004)

Asset class	2005	2006	2007	2008	2009
High Pressure Mains	0.03	0.03	0.04	0.05	0.05
Medium Pressure Mains	0.35	0.43	0.50	0.58	0.67
Medium / Low Pressure Mains	0.06	0.09	0.11	0.14	0.17
Low Pressure Mains	0.00	0.00	0.00	0.00	0.00
Regulators	0.01	0.01	0.01	0.01	0.02
Secondary Gate Stations	0.00	0.00	0.00	0.00	0.00
Buildings	0.00	0.00	0.00	0.00	0.00
Meters & Service Pipes	3.48	4.12	4.68	5.19	5.89
Equipment & Vehicles	0.00	0.00	0.00	0.00	0.00
IS (exc FRC)	1.19	1.85	2.42	2.90	3.59
FRC	2.44	2.44	2.44	2.44	2.44
Land	N/A	N/A	N/A	N/A	N/A
Total	7.55	8.97	10.21	11.31	12.83

Total Depreciation

267. Total Depreciation in each year of the second Access Arrangement Period is the sum of that in presented in Table 11 and Table 12 above. This total Depreciation is presented in Table 13 below by asset class.

³³ As discussed under the heading of "Forecast New Facilities Investment" above.

³⁴ As discussed under the heading of "Mid year or end year timing" above.

³⁵ As discussed under the heading of "Adjustment for inflation" above.

Table 13: Total Depreciation in each year of second Access Arrangement Period (\$ millions; 31 December 2004)

Asset class	2005	2006	2007	2008	2009
High Pressure Mains	1.70	1.71	1.72	1.72	1.73
Medium Pressure Mains	4.54	4.62	4.70	4.77	4.86
Medium / Low Pressure Mains	2.89	2.92	2.95	2.97	3.00
Low Pressure Mains	1.00	1.00	1.00	1.00	1.00
Regulators	0.44	0.44	0.45	0.45	0.45
Secondary Gate Stations	0.09	0.09	0.09	0.10	0.10
Buildings	0.09	0.09	0.09	0.09	0.09
Meters & Service Pipes	10.62	11.27	11.82	12.33	13.03
Equipment & Vehicles	0.00	0.00	0.00	0.00	0.00
IS (exc FRC)	1.19	1.85	2.42	2.90	3.59
FRC	2.44	2.44	2.44	2.44	2.44
Land	N/A	N/A	N/A	N/A	N/A
Total Asset Depreciation	25.02	26.44	27.68	28.78	30.29

268. Total Depreciation for each year of the second Access Arrangement Period is presented by AGN in Table 4.5 of the Access Arrangement Information. As a consequence of amendments sought by the Authority total Depreciation has changed and an amendment to the Access Arrangement Information is required.

Amendment 20

Table 4.5 of the Access Arrangement Information should be amended to reflect the Authority's calculation of total Depreciation for each year of the second Access Arrangement Period as set out in Table 13 of this Draft Decision.

Capital Base for each year of the second Access Arrangement Period

269. Table 14 below sets out the Authority's calculation of the Capital Base for each year of the second Access Arrangement Period. This calculation reflects the Authority's consideration of New Facilities Investment and Depreciation. The table has been adjusted to reflect real values as at 31 December 2004.

Table 14: Capital Base for each year of second Access Arrangement Period (\$ millions; 31 December 2004)

Year ending 31 December	2004	2005	2006	2007	2008	2009
Opening Capital Base		658.39	660.46	658.17	653.02	653.78
New Facilities Investment		27.09	24.16	22.53	29.53	29.60
Depreciation		25.02	26.44	27.68	28.78	30.29
Closing Capital Base	658.39	660.46	658.17	653.02	653.78	653.09

270. Table 4.3 of AGN's Access Arrangement Information provides values of the Capital Base for each year of the second Access Arrangement Period grouped by asset class. In view of the amendments sought by the Authority there is a need for AGN's Table 4.3 to be amended. Table 15 below presents the value of the Capital Base for each year of the second Access Arrangement Period grouped by asset class.

Table 15: Capital Base for each year of the second Access Arrangement Period by asset class (\$ millions; 31 December 2004)

Asset class	2005	2006	2007	2008	2009
High Pressure Mains	169.34	168.46	167.57	166.59	168.18
Medium Pressure Mains	208.26	208.11	207.93	208.59	208.53
Medium / Low Pressure Mains	101.48	100.13	98.69	97.60	96.42
Low Pressure Mains	26.05	25.05	24.04	23.04	22.04
Regulators	9.30	8.93	8.55	8.19	7.83
Secondary Gate Stations	1.71	1.62	1.53	1.45	1.36
Buildings	1.55	1.47	1.39	1.32	1.24
Meters & Service Pipes	121.65	124.28	125.23	130.30	134.09
Equipment & Vehicles	-2.53	-2.19	-1.86	-1.45	-1.05
IS (exc FRC)	8.05	9.06	9.03	9.59	8.23
FRC	9.76	7.32	4.88	2.44	0.00
Land	5.84	5.93	6.02	6.12	6.23
Total	660.46	658.17	653.02	653.78	653.09

Amendment 21

Table 4.3 of the Access Arrangement Information should be amended to reflect the Authority's calculation of the value of the Capital Base for each year of the second Access Arrangement Period grouped by asset class as set out in Table 15 of this Draft Decision.

Working capital

271. In the Access Arrangement Information, AGN notes that an allowance for a return on the working capital employed in providing Reference Services has been included in the Total Revenue from which the Reference Tariffs have been determined. Table 4.14 of the Access Arrangement Information indicates that the annual cost of providing working capital is \$1.0 million. AGN submits that this is consistent with the approach adopted in the current Access Arrangement and the Code requirements to recover the efficient cost of providing Reference Services.³⁶
272. It is noted that the Code does not explicitly address the recovery of a return on working capital through Reference Tariffs. However, the following provisions provide implicit support for the inclusion of a return on working capital in the Total Revenue:
- (a) Section 8.2(a) provides the definition of Total Revenue as “the revenue to be generated from the sales (or forecast sales) of all Services over the Access Arrangement Period”.
 - (b) Section 8.4 provides that Total Revenue should be calculated according to one of several methodologies that include Cost of Service.
 - (c) Section 8.4 specifies that under the Cost of Service methodology, Total Revenue is to be equal to the cost of providing all Services where that cost includes at section 8.4(a) “a return (*Rate of Return*) on the value of the capital assets that form the Covered Pipeline or are otherwise used to provide Services (*Capital Base*)”.
 - (d) Section 8.4 provides that the methodology used to calculate the Cost of Service should be “in accordance with generally accepted industry practice”.
273. On this basis, if a return on working capital is to be included in the calculation of Total Revenue for the determination of Reference Tariffs under a Cost of Service approach, the quantum of working capital may be calculated using a generally accepted industry practice (if such exists) and be added to the Capital Base.

³⁶ AAI, p 54.

274. Handled in this manner, working capital would be a non-depreciable component of the Capital Base, the return on which would be calculated at the weighted average cost of capital (**WACC**).
275. The Authority notes that decisions by the ACCC, ORG (Victoria) and most recently ICRC (ACT)³⁷ have declined to allow a return on working capital as a component of Total Revenue. On the other hand, IPART (NSW)³⁸ and previously the Relevant Regulator in WA have allowed a return on working capital.
276. The Authority recognises that the billing cycle and cash management policies of a Service Provider will impact on the need for working capital. The Authority also notes that:
- a Service Provider may require working capital to fund periodic shortfalls in in-coming revenue streams over out-going costs;
 - working capital may also be required to fund working stock, i.e. line pack, parts and inventories etc.; and
 - the cost to the Service Provider of funds employed as working capital is no different to the cost of funds it uses to invest in the capital assets that form a tangible part of the Covered Pipeline.
277. However, as indicated in paragraph 276 above, the need for working capital is not limited to circumstances involving the billing cycle, but may include the funding of working stock. For example, in the case of the Dampier to Bunbury Natural Gas Pipeline a specific allowance for working capital is provided for non-depreciable assets including for the value of line pack which in that case is quite substantial³⁹.
278. The Authority commissioned the Allen Consulting Group (**ACG**) to report on the manner of dealing with working capital for the AGN GDS. ACG reported in June 2004 (**ACG Working Capital Report**) concluding that:
- given the precedent provided by the ACCC and the ESC (and now more recently the ICRC), the Authority would have some justification in completely disallowing an allowance for working capital; or

³⁷ ACCC, September 2002, *EAPL's application to the NCC for partial revocation of coverage of the Moomba to Sydney Pipeline System*, p 10; ORG, September 2001, *2003 Review of Gas Access Arrangements – Position Paper*, p 47; ICRC, October 2004, *Final Decision, Review of Access Arrangement for ActewAGL Natural Gas System in ACT, Queanbeyan and Yarrowlumla*, p 74.

³⁸ IPART, *Draft Decision, Revised Access Arrangement for AGL Gas Network*, December 2004, pp 96-97.

³⁹ Independent Gas Pipelines Access Regulator Western Australia, 30 December 2003, *Access Arrangement Information for the Dampier to Bunbury Natural Gas Pipeline*, p 12.

- the Authority might accept an allowance for costs of working capital on only the operating and maintenance component utilising AGN's cash cycle assumptions.
279. The ACG Working Capital Report is intended for public release by the Authority at the time of release of the Draft Decision.
280. The Authority has considered the issues relating to working capital, including the matters raised in the ACG Working Capital Report. The Authority accepts, in principle, that an allowance for working capital should be included in the Capital Base upon which a return may be earned through the Reference Tariffs, but working capital would not be subject to depreciation.
281. The allowance in respect of working capital proposed by AGN in its Reference Tariff model is based upon an estimate of its payment and receipt cycles. This is described in the Access Arrangement Information as follows⁴⁰:
- The two significant components of the working capital formula are based on 30 days applied to total revenue applicable to providing the Reference Services and 20 days applied to the payment of both capital and operating costs incurred to provide the Reference Services.
282. The Authority notes however 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.
283. The Authority also notes 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. As indicated in paragraph 690 below the Authority proposes to approve the reduced period for payment of invoices. In these circumstances, the Authority considers that, for the purposes of determining working capital, the assumed period for receivables is more appropriately set at 20 days, which is also consistent with AGN's assumed period for the payment of creditors.
284. The effect of the Authority's approach as discussed in paragraph 283 above is to reduce the return on working capital to approximately \$400,000 p.a. (expressed in dollars of 31 December 2004). This compares to approximately \$1.0 million p.a. (dollars of 30 June 2003) proposed by AGN as set out in its Access Arrangement Information.

⁴⁰ AAI, p 54.

Rate of Return

Overview

285. Under the Cost of Service method, the Total Revenue recoverable through Reference Tariffs includes an allowance for a return on the Capital Base. This allowance recovers the opportunity cost of capital invested including by owners. In determining a Reference Tariff the Rate of Return used should be commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Service.
286. AGN has proposed the continuation of the general approach used to determine the Rate of Return for the current Access Arrangement which was approved by the Relevant Regulator. That is, to determine a real pre-tax Rate of Return using the weighted average of the returns (Weighted Average Cost of Capital or **WACC**) applicable to the assumed levels of equity and debt used to finance the assets which form the GDS. As with the current Access Arrangement, the relevant WACC has been estimated using the Capital Asset Pricing Model (**CAPM**).
287. The Rate of Return proposed by AGN for the proposed revised Access Arrangement is a real pre-tax WACC of 8.5 percent p.a. This compares with the Rate of Return of 7.9 percent p.a. approved for the current Access Arrangement. AGN bases its proposed Rate of Return upon advice provided by KPMG as a consultant to AGN. The advice is contained in a report by KPMG entitled “The Weighted Average Cost of Capital for Gas Distribution”, dated March 2004 (**KPMG Report**), which is Schedule 1 to the submitted Access Arrangement Information.
288. To assist the Authority in considering AGN’s proposed Rate of Return, and the KPMG Report, and in the absence of any other public submissions on the Rate of Return, the Allen Consulting Group (**ACG**) was commissioned to advise on the estimation of WACC. ACG’s advice is set out in a report to the Authority entitled “Allen Consulting Group Analysis of Alinta Network’s Weighted Average Cost of Capital for Gas Distribution in the second Access Arrangement Period”, dated 28 May 2004 (**ACG Rate of Return Report**). The ACG Rate of Return Report is intended for public release by the Authority at the time of release of this Draft Decision.

Code provisions

289. Sections 8.30 and 8.31 of the Code state the principles for establishing the Rate of Return used in determining a Reference Tariff:
- 8.30 The Rate of Return used in determining a Reference Tariff should provide a return which is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Service (as reflected in the terms and conditions on which the Reference Service is offered and any other risk associated with delivering the Reference Service).

8.31 By way of example, the Rate of Return may be set on the basis of a weighted average of the return applicable to each source of funds (equity, debt and any other relevant source of funds). Such returns may be determined on the basis of a well accepted financial model, such as the Capital Asset Pricing Model. In general, the weighted average of the return on funds should be calculated by reference to a financing structure that reflects standard industry structures for a going concern and best practice. However, other approaches may be adopted where the Relevant Regulator is satisfied that to do so would be consistent with the objectives contained in section 8.1.

290. As a general comment AGN submitted that:

Finally, there have been two significant decisions by the Australian Competition Tribunal on the pricing principles applicable under the Code which have a direct bearing on how the Regulators should make Access Arrangement determination [*Application by GasNet Australia (Operations Pty Ltd* [2003] ACompT 6; *Application by Epic Energy South Australia Pty Ltd* [2003] ACompT 5.]

The Australian Competition Tribunal has found that the role of the Regulator is not to determine a correct return, rather it is to decide whether what is being proposed in the Access Arrangement is consistent with the Code:

“Contrary to the submission of the ACCC, it is not the task of the Relevant Regulator under s 8.30 and s 8.31 of the Code to determine a ‘return which is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Service.’ The task of the ACCC is to determine whether the proposed AA in its treatment of Rate of Return is consistent with the provisions of s 8.30 and s 8.31 and that the rate determined falls within the range of rates commensurate with the prevailing market conditions and the relevant risk.”

291. The “return which is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Service” referred to in section 8.30 of the Code cannot be observed but can only be estimated. There is a degree of uncertainty in estimating the cost of capital commensurate with prevailing conditions in the market and the risk associated with delivering the Reference Service.
292. In considering AGN’s proposal on the Rate of Return, the Authority has had regard to the provisions of sections 8.30 and 8.31 of the Code, AGN’s submissions, the findings of the Australian Competition Tribunal referred to in paragraph 290 above and other information referred to in this part of the Draft Decision.
293. It is noted that AGN has proposed a range of values for certain of the parameters used to determine the Rate of Return. The Authority has given consideration to each of these ranges of values, and single point values for other parameters, proposed by AGN in the context of whether these values are consistent with the provisions of sections 8.30 and 8.31 and whether the Rate of Return determined falls within the range of rates commensurate with the prevailing market conditions and the relevant risk.

AGN's Rate of Return proposal

294. Clauses 24 & 25 of the Reference Tariff Policy in Part B of the proposed revised Access Arrangement provide:

24 The Rate of Return has been set on the basis of a weighted average of the returns applicable to equity and debt.

25 The return on equity referred to in Part B, clause 24 has been determined using the Capital Asset Pricing Model.

Capital Asset Pricing Model

295. AGN's general approach is to use the CAPM, being a "well accepted model" referred to in section 8.31 of the Code, to derive a target post-tax WACC, and then make adjustments for the net cost of taxation to derive a pre-tax WACC.

296. This general approach is consistent with that approved under the current Access Arrangement, and which is most commonly used by Service Providers and Relevant Regulators under the Code in Australia.

297. The CAPM is used to estimate the required nominal post-tax return to the equity share of an asset, with the most common formulation of the CAPM for this purpose being:

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

where R_f is the risk-free rate, $(R_m - R_f)$ is the expected risk premium above the risk-free rate for a well-diversified portfolio of equities (R_m), β_e is the measure of the particular equity's relative risk, or its equity beta, and R_e is the required rate of return on that equity.

298. The outcome of this model is an estimate of the required post-tax return to equity. The return required by the other source of financing – debt – can be observed directly from the market for debt finance. The average of these sources of financing (weighted by the respective shares of debt and equity in the financing of the asset) provides an estimate of the WACC for the asset. That is:

$$WACC = R_e \frac{E}{V} + R_d \frac{D}{V}$$

where $\frac{E}{V}$ and $\frac{D}{V}$ are equity and debt as shares of total assets (V), and R_d is the cost of debt.

299. There are a number of different versions of the post-tax WACC that are derived by transferring one or more of the particular costs or benefits from the cash flows to inclusion in the WACC formula. One popular form is the "Officer" nominal post-tax WACC, which AGN has adopted in accordance with the KPMG Report. The Officer

form takes account of corporate income tax and the value of franking credits, and has the following formula:

$$WACC = R_e \cdot \frac{E}{V} \cdot \frac{1-t_c}{(1-t_c(1-\gamma))} + R_d \cdot \frac{D}{V} \cdot (1-t_c)$$

where t_c is the corporate tax rate and γ is the value of franking credits created (as a proportion of their face value).

Input parameter values

300. Under AGN's general approach, the Rate of Return will be sensitive to the values chosen for the input parameters. To determine a Rate of Return which is "commensurate with prevailing conditions in the market for funds and the risk involved in delivering Reference Services", the Authority needs to examine the basis for each estimate by AGN of the value, or range of values, for the input parameters used to determine the pre-tax real Rate of Return of 8.5 percent per annum.
301. Table 16 below summarises information provided by AGN in its Access Arrangement Information, including Table 4.9, and information contained in the KPMG Report.

Table 16: Parameters for the calculation of Rate of Return as recommended by KPMG

Parameter	KPMG value or range (Source: KPMG Report)	KPMG recommendation (Source: Table 4.9, AAI)
Risk free rate (nominal)	5.9%	5.9%
Risk free rate (real)	3.6%	-
Market risk premium	6.0%-8.0%	7.0%
Equity beta	1.0	1.0
Debt beta	0.00 to 0.20	-
Cost of debt margin	1.4%->1.8%	1.4%->1.8%
Corporate tax rate	30%	30%
Franking credit value	30%-50%	30%-50%
Debt to total assets ratio	60%	60%
Expected inflation	2.2%	2.2%

302. The Authority examines below the basis presented by AGN for each of these proposed values, or range of values.

Risk Free Rate and Inflation Rate

303. The risk free rate, both nominal and real, to be used for the relevant calculation is based upon objective market evidence. Expected inflation is related to the difference between the nominal and real risk free rates as specified in the Fischer equation⁴¹.
304. In its proposed revisions to the Access Arrangement, AGN has proposed using the yield to maturity on Commonwealth Government 10-Year Treasury Bonds averaged over the 20 trading days to 9 December 2003, as a measure of the nominal risk-free rate. By this method it estimated the nominal risk free rate at 5.9 percent per annum.
305. AGN also proposed using the estimated yield to maturity on Commonwealth Government Indexed Linked Bonds for an equivalent 10-year term and averaged over the same 20 trading days, to estimate a real risk free rate of 3.6 percent per annum. It has then estimated the rate of inflation at 2.2 percent per annum using the Fischer equation.
306. The approach adopted by AGN is generally consistent with that adopted by Relevant Regulators under the Code.
307. However, the parameters that are the input to the WACC calculation contained in the Access Arrangement Information, which were current at 9 December 2003, are now in need of updating. For example, in the 20 trading days to 31 January 2005, the average yield to maturity on Commonwealth Government 10-Year Treasury Bonds indicates a nominal risk-free rate of 5.34 percent per annum, and the average yield to maturity on Commonwealth Government Indexed Linked Bonds for an equivalent 10-year term indicates a real risk-free rate of 2.72 percent. This implies an inflation rate of 2.55 percent per annum.
308. The Authority adopts the updated values referred to in the previous paragraph for the purpose of determining the Rate of Return to be used to determine Reference Tariffs. However, the relevant values will need to be updated at the time of the Final Decision, so as to be commensurate with prevailing market conditions at that time.

Market Risk Premium

309. In the submitted Access Arrangement Information, AGN has proposed that a market risk premium of 7 percent per annum be used, based upon KPMG's conclusion that there is "strong support for an MRP in the range of 6% to 8%".⁴²

⁴¹ $Real\ WACC = \frac{1 + nominal\ WACC}{1 + i} - 1$, where i is the inflation rate.

⁴² KPMG Report, p 26.

310. In considering the proposals and submissions of AGN, including the KPMG Report, the Authority has taken into account available evidence on the value of the market risk premium, including a detailed consideration of the market risk premium by the ESC of Victoria in 2002⁴³ and detailed references to recent market and academic evidence contained in the December 2004 draft decision of the IPART of New South Wales in relation to revisions to the access arrangements for AGL Gas Networks⁴⁴. This evidence comprises historical measurements of the market risk premium and surveys of expectations of financial practitioners, participants in financial markets and investors. The Authority has also considered the ACG Rate of Return Report.
311. The table below (Table 17) summarises the Australian historical data available to the Authority on the realised historical market risk premium.

Table 17: Historical Realised Market Risk Premium in Australia⁴⁵

Time Period of Estimation	Average Market Risk Premium	Standard Deviation	Standard Error of the Mean
1882-2001	7.19%	16.97%	1.55%
Differing End Point			
1882-1950	8.00%	11.11%	1.34%
1882-1970	8.16%	13.70%	1.45%
1882-1990	7.40%	17.33%	1.66%
Different Beginning Point			
1900-2001	7.14%	17.94%	1.78%
1950-2001	6.51%	22.60%	3.13%
1970-2001	3.37%	24.38%	4.31%

312. The ability to draw conclusions from this historical evidence is limited by large standard errors of the estimates. There is some suggestion from the historical data that more recent estimates of the realised market risk premium are lower than the measurements for earlier periods, suggesting a decline in values over the period since 1882.

⁴³ ESC, October 2002, *Review of Gas Access Arrangements: Final Decision*, p 324, citing unpublished data of Professor Robert Officer and Officer, R., 'Rates of Return to shares, bond yields and inflation rates: An historical perspective', in *Share Markets and Portfolio Theory; Readings and Australian Evidence*, 2nd edition, University of Queensland Press, 1992.

⁴⁴ IPART, December 2004, *Draft Decision, Revised Access Arrangement for AGL Gas Network*, December 2004, pp 80-81.

⁴⁵ ESC, October 2002, *Review of Gas Access Arrangements: Final Decision*, p 324, citing unpublished data of Professor Robert Officer and Officer, R., 'Rates of Return to shares, bond yields and inflation rates: An historical perspective', in *Share Markets and Portfolio Theory; Readings and Australian Evidence*, 2nd edition, University of Queensland Press, 1992.

313. The Authority notes that there are difficulties inherent in inferring the appropriate forward-looking market risk from historical data of stock market returns. The size of the market risk premium is dependent on the absolute level of risk represented by the stock market proxy, which will be influenced by the industrial structure of the stock market's composition. One hundred years ago the Australian stock market was dominated by resources stocks and of a very different composition than in more recent decades, and there is no reason to consider that the market risk premium has remained constant over that period, or will do so into the future.
314. In view of the difficulties in using historical data to predict a market risk premium for the future, the Authority has taken into account the views of financial practitioners and the market participants, including institutional investors, as to the market risk premium to be factored into investment decisions. In this regard, the Authority has taken into account a Jardine Capital Partners survey of views on the market risk premium that indicates an average of market participants' views on the historical market risk premium of 5.87 percent, and expectations about the future market risk premium about 1 percentage point below this level.⁴⁶
315. The Authority also notes the recent IPART Draft Decision on the revised Access Arrangements for AGL's Gas Networks, which provides evidence in support of a market risk premium of 6 percent or below⁴⁷.
316. Taking this information into account along with the positions put by AGN in the submitted Access Arrangement Information and the KPMG and ACG Rate of Return Reports, the Authority is of the view that a value of no more than 6 percent would be commensurate with prevailing conditions in the market for funds and the risk in providing Reference Services.
317. The Authority notes that AGN's proposed value for the market risk premium of 7 percent is inconsistent with all past regulatory decisions under the Code that have approved Access Arrangements and associated Reference Tariffs, all of which have been determined on the basis of a market risk premium of 6 percent or less. A market risk premium of 6 percent is consistent with the most recent regulatory decisions on this issue, namely IPART's December 2004 draft decision on the AGL Gas Networks distribution system in NSW and the ICRC's October 2004 final decision on the ActewAGL gas distribution system in the ACT and neighbouring areas of NSW. IPART accepted a range for the market risk premium of 5.5 percent to 6.5 percent proposed by the Service Provider, and the ICRC considered 6.0 percent as supported by available information following its consideration of empirical evidence and regulatory practice.

⁴⁶ Jardine Fleming Capital Partners Ltd, (September 2001) *The Equity Risk Premium – An Australian Perspective*, Trinity Best Practice Committee.

⁴⁷ IPART, December 2004, *Draft Decision, Revised Access Arrangement for AGL Gas Network*, pp 80-81.

318. Further, the Authority is not aware of any evidence that investment in the gas pipeline industry has been distorted on account of regulated Rates of Return being based on a market risk premium of 6.0 percent or less in approved Access Arrangements under the Code.
319. On balance, the Authority proposes to adopt a market risk premium of 6.0 percent which it considers to be the upper bound of a range complying with section 8.30 and 8.31 of the Code.

Equity Beta

320. The application of the CAPM requires an equity beta, β_e , to be determined for the GDS business. The equity beta value for a business reflects that business' exposure to systematic risk, which relates to that portion of the variance in the return on an asset that arises from market-wide economic factors that affect returns on all assets, and which cannot be avoided by diversifying a portfolio of assets.
321. For its proposed revisions to the Access Arrangement, AGN determined the Rate of Return on the basis of an equity beta value of 1.0, with an assumed gearing (debt to asset ratio) of 60 percent.
322. The Authority is mindful of the cautionary approach adopted recently by other Australian regulators in recognising a relative lack of empirical data on equity beta values for Australian gas pipeline companies, and the volatility of equity beta data, in its consideration as to whether to adopt the proposed equity beta value of 1.0.⁴⁸
323. Taking into account the empirical evidence on beta values for gas transmission and distribution companies, the positions taken by other Australian regulators in the face of this empirical evidence, and the information presented by AGN in the submitted Access Arrangement Information and by KPMG and ACG in their respective reports as referenced above, the Authority takes the view that it is appropriate to determine Reference Tariffs using an equity beta value of 1.0 for an assumed gearing of 60 percent.

Cost of Debt

324. For the revisions to the Access Arrangement, AGN proposed a debt margin of between 1.4 to 1.8 percent (rounded) comprising:

⁴⁸ ESC, October 2002, *Review of Gas Access Arrangements: Final Decision*; ACCC, 13 November 2002, *Final Decision: GasNet Australia Access Arrangement Revisions for the Principal Transmission System*; IPART, December 2004, *Draft Decision, Revised Access Arrangement for AGL Gas Network* (accepted a range of 0.8 to 1.0 as reasonable).

- 105 to 116 basis points for the margin on debt funding for the distribution system, based upon CBASpectrum data over 20 days to 9 December 2003 for an investment grade credit rating for AGN of BBB to BBB+ as estimated by KPMG;
 - an allowance of between 20 and 50 basis points for a CPI swap hedging cost margin; and
 - an allowance of 12.5 basis points for debt establishment costs.
325. The particular value for debt margin within the range which was chosen by AGN as an input into the CAPM calculation to arrive at its proposed WACC figure was not identified in the Access Arrangement Information.
326. In relation to AGN's margin on debt funding, the Authority has examined more recent CBASpectrum data. In this regard, the Authority has assumed that the appropriate benchmark is a regulated energy utility with 60 percent gearing and a credit rating of BBB+, consistent with the Standard & Poors standard ratios for transmission and distribution companies.⁴⁹
327. Since the third quarter of 2002, when a number of regulatory decisions allowed debt margins of 1.5 percent to 1.6 percent, the CBASpectrum indicator rate for this benchmark has reduced considerably. At the end of April 2004, the CBASpectrum indicator rate for a BBB+ rated bond was in the order of 105 basis points. More recently the CBASpectrum indicator rate has declined and as at 27 October 2004 the equivalent data for BBB+ rated bonds was 100.7 basis points.⁵⁰
328. The Authority recognises, however, that this indicator of the debt margin should be treated with caution. Rates provided by the CBASpectrum service are not actual market observations, but rather a prediction of yields based on an econometric model, and the market observations upon which the predictions are based are very thin.
329. The Authority has therefore also considered observations in the domestic market for debt bonds, with particular attention to regulated utilities that match their debt exposure to the length of the regulatory cycle.

⁴⁹ As cited in the letter from Nick Wade, Director, Credit Research, UBS Warburg to Jim Lamborn, Treasurer, SPI PowerNet, 28 November 2001, and contained in Appendix F of SPI PowerNet's Revenue Cap Application submitted to the ACCC, 11 April 2002. Standard & Poors indicate that gearing of 55 percent and an interest cover ratio of 3.25 is consistent with an "A" rating, and a gearing of 65 percent and an interest cover ratio of 2.0 is consistent with a "BBB" rating. A "BBB+" rating for a benchmark gearing assumption of 60 percent is derived by interpolation. The Authority has also considered the findings of the ACT in the EAPL Decision in respect of the assumptions made by the ACCC for an assumed credit rating for the Moomba to Sydney Pipeline. The Authority considers that the findings of the Tribunal are specific to the reasoning expressed by the ACCC in its respective decisions and are not determinative of an appropriate assumption in respect of a credit rating for AGN's GDS.

⁵⁰ The Allen Consulting Group, January 2005, Report to the Economic Regulation Authority, *Electricity Networks Access Code: Advance Determination of a WACC Methodology*, p 44.

- On 31 July 2003, GasNet announced a \$150 million, 5-year Medium Term Note (MTN) issue timed for refinancing after the next ACCC regulatory determination in December 2007.⁵¹ It was issued at an interest rate of 6.25 percent. Since the market differential between a 5 and 10-year tenor has recently averaged around 30 to 40 basis points, this implies that a 10-year note could potentially have been issued at an interest rate of around 6.65 percent.
 - In September 2003 the Australian Pipeline Trust completed an issue of US and Australian bonds at an average tenor of 11 years at an “all in” cost of BBSW + 94 basis points.
 - The only long term (9-year) BBB+ rated bond traded in Australia is Snowy Hydro’s 6.5 percent coupon MTN, which at 3 May 2004 was trading at BBSW + 89. This represents a margin of around 80 basis points over the average 10-year bond rate calculated over the 20 business days to 29 April 2004.
330. This market evidence suggests that the values indicated by the CBASpectrum data should be regarded as being at the top of the range. The Authority has therefore adopted for the purposes of this Draft Decision a cost of corporate debt at 100 basis points for corporate bonds issued by the benchmark entity attracting a BBB+ credit rating. The Authority anticipates that the indicator rate will be updated for this benchmark at the time of the Final Decision.
331. In relation to the proposed allowance for CPI swap hedging costs, following the Authority’s consideration of information submitted by AGN in the submitted Access Arrangement Information, and the advice provided to the Authority by ACG in its report, the Authority considers this allowance to be inappropriate for inclusion as a component of the debt margin.
332. In relation to AGN’s proposed allowance for debt raising costs of 12.5 basis points, KPMG advances in its report an indicative range of between 0 and 20 basis points for this allowance, while recognising that a then recent decision by the ACCC in respect of GasNet adopted an allowance of 12.5 basis points⁵².
333. The Authority notes that regulatory practice is to accept that there should be an allowance for debt raising costs, although the amount of that allowance has differed. Recent decisions which have accepted 12.5 basis points are the final decision by the ACCC with respect to GasNet⁵³, ICRC’s final decision in relation to ActewAGL’s

⁵¹ GasNet Australia, 31 July 2003, Press Release: *GasNet closes early A\$150 million medium term note issue due August 2008*.

⁵² KPMG Report, p 39.

⁵³ ACCC, 13 November 2002, *Final Decision: GasNet Australia Access Arrangement Revisions for the Principal Transmission System*.

ACT distribution network⁵⁴, and IPART's draft decision with respect to the revised access arrangements for the AGL Gas Network⁵⁵.

334. On the other hand, the orders giving effect to the Australian Competition Tribunal's decision, in its findings of December 2003 on appeal of the ACCC's GasNet decision, state that 10-year bond rates are appropriate and include increasing the allowance for debt raising costs from 12.5 basis points in the ACCC's final decision to 25 basis points⁵⁶. The Authority notes, however, that the Australian Competition Tribunal's decision was based upon an agreed position reached between the parties without the Tribunal making a determination of an appropriate allowance.
335. In the circumstances, taking into consideration the matters referred to at paragraphs 332 to 335 the Authority concludes that 12.5 basis points is an appropriate upper bound for debt raising costs.
336. Taking into account the Authority's conclusion that a debt margin of 100 basis points should be regarded as an upper bound of a reasonable range, adopting a 12.5 basis points allowance for debt raising costs would produce an upper bound for total debt margin of 1.125 percent.
337. The Authority notes that the range for debt margin proposed by AGN of 1.4 to 1.8 percent is above the upper bound of a range which in the Authority's view complies with section 8.30 and 8.31 of the Code as being commensurate with prevailing conditions in the market for funds and the risk involved in delivering Reference Services.
338. Accordingly, the Authority proposes to adopt for the purposes of this Draft Decision a debt margin for the GDS business of 1.125 percent, which it considers to be the upper bound of a range complying with section 8.30 and 8.31 of the Code. This debt margin is based upon the sum of the debt margin for BBB+ bonds of 100 basis points and an allowance of 12.5 basis points for debt raising costs.

Gearing

339. AGN has proposed a gearing ratio of 60 percent to apply to the proposed revisions to the Access Arrangement.
340. In Australia, regulators under the Code have generally approved Access Arrangements with Reference Tariffs determined using an assumption of gearing of

⁵⁴ ICRC, October 2004, *Final Decision, Review of Access Arrangement for ActewAGL Natural Gas System in ACT, Queanbeyan and Yarrowlumla*.

⁵⁵ IPART, December 2004, *Draft Decision, Revised Access Arrangement for AGL Gas Networks*, p 82.

⁵⁶ *Application by GasNet Australia (Operations) Pty Ltd* [2003] ACompT 6.

60 percent⁵⁷. This assumption has been supported by studies undertaken in 2002 by the Victorian ESC in relation to assessment of revisions to Access Arrangements for the Victorian Distribution Systems.⁵⁸ More recent data for listed Australian companies with ownership of regulated gas pipelines has been obtained from Bloomberg Financial Services and is presented in the table below (Table 18).

Table 18: Australian Gas Pipeline Companies - Total Debt/Enterprise Value

Company	Financial Year				
	2000	2001	2002	2003	May 2004
AGL	36.0%	46.0%	38.7%	28.5%	
Alinta		39.1%	33.8%		22.1%
APT		55.0%	57.6%	51.8%	53.7%
Envestra	84.4%	81.6%	78.0%	72.8%	72.6%
GasNet		73.1%	71.1%		66.7%

341. It is worth noting that the companies that are closer to “pure play” regulated pipeline businesses (Australian Pipeline Trust, GasNet and Envestra) have higher gearing levels than those with a broad mix of regulated and unregulated activities (AGL and Alinta).
342. Based on this evidence, the Authority proposes to adopt the 60 percent level of gearing proposed by AGN for the purpose of determining Reference Tariffs.

Taxation

343. Regulatory practice under the Code to date has typically been to determine Total Revenue on a pre-tax basis, including a pre-tax Rate of Return on the Capital Base. Derivation of a pre-tax Rate of Return requires conversion of the post-tax WACC to a pre-tax WACC.
344. There are two relevant taxation issues: the method that is used to estimate company taxation liabilities associated with the regulated activities, and the value of imputation or franking credits.

Company taxation liabilities

345. It is noted that some Australian regulators have been concerned about the potential for use of a pre-tax real WACC as a Rate of Return in determination of Reference Tariffs to over-compensate the owners of infrastructure assets due to tax benefits that are not

⁵⁷ E.g most recently, IPART, December 2004, *Draft Decision, Revised Access Arrangements for AGL Gas Networks*, p 82.

⁵⁸ ESC, October 2002, *Review of Gas Access Arrangements: Final Decision*.

considered in determination of the pre-tax WACC. The alternative approach is to model the tax effects explicitly in cash flows and apply a post-tax nominal analysis⁵⁹.

346. An alternative to the post-tax nominal analysis, as described in paragraph 345 above, is to use a simple transformation of a nominal post-tax WACC to a real pre-tax WACC, based on one of the following transformation methods:
- forward transformation, involving division of the post-tax nominal WACC by $1 - T$, where T is the statutory taxation rate, and then deducting inflation (using the Fischer equation⁶⁰) to derive the pre-tax real WACC; and
 - reverse transformation, involving first deducting inflation from the post-tax nominal WACC, and then grossing up the real post-tax WACC by one minus the statutory taxation rate.
347. Changes to the company taxation regime in Australia, implemented as of 1 July 2000, are likely to have narrowed the gap between the statutory and effective tax rates for infrastructure firms in Australia. This supports the use of a simple pre-tax transformation and in particular the forward transformation for the calculation of the WACC.
348. For the revised Access Arrangement, AGN has proposed the forward transformation methodology to derive a pre-tax WACC, assuming a corporate tax rate of 30 percent and an implied inflation rate of 2.2 percent.
349. The Authority accepts as consistent with the Code the use of the forward transformation methodology.

Franking credits

350. The second issue in relation to taxation is the assumption that is made about the value ascribed to imputation or franking credits, which may reduce the effective rate of tax on returns to equity.
351. Franking credits, or imputation credits, are an allowance under the Australian taxation system that permit taxation liabilities of shareholders to be offset by the value of company tax already paid on profits from which the dividend payments are made.
352. The approach for reflecting the value of franking credits that has emerged as standard practice is to use a market (equity) risk premium that assumes that Australia has a classical tax system (i.e. no franking credits), then to adjust the WACC or cash-flows directly to reflect the non-cash benefits associated with franking credits. The

⁵⁹ ACG Rate of Return Report, p 10.

⁶⁰ $Real\ WACC = \frac{1 + nominal\ WACC}{1 + i} - 1$, where i is the inflation rate.

mechanism used to achieve this – the gamma or “ γ ” term in the Officer WACC formula as described in paragraph 299 above – can be interpreted as the value of each franking credit that is created by the firm, as a proportion of the face value of that franking credit. A low gamma implies that shareholders do not obtain much relief from corporate taxation through imputation and therefore require a higher pre-tax rate of return to earn the same effective return on investment, and vice versa.

353. AGN has referred in the submitted Access Arrangement Information to the KPMG Report as advancing a “ γ ” within a range of 0.3 to 0.5, although in the conclusion to that report “ γ ” is given as 0.5 in the set of parameter estimates used by KPMG in the estimation of a pre-tax real WACC figure.
354. In Australia, regulators under the Code have generally adopted a “ γ ” value of 0.5, based on the 1999 study by Hathaway and Officer, which estimates gamma at close to 0.5.⁶¹ The Authority takes the view that this assumption is appropriate for the GDS.

Determination of Rate of Return

355. For the reasons set out above, the Authority is not satisfied that the proposed revised Access Arrangement in its treatment of Rate of Return is consistent with the provisions of sections 8.30 and 8.31 of the Code, in that certain of the values used by AGN to determine the Rate of Return are not commensurate with the Authority’s view regarding the bounds of the range of prevailing conditions in the market for funds and the risk involved in delivering the Reference Services.
356. A comparison of the values used by AGN to determine the Rate of Return with those that the Authority considers are commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Services, is set out in Table 19 below.

⁶¹ Hathaway N. and Officer, R., 1999, *The Value of Imputation Tax Credits*, Unpublished manuscript, Graduate School of Management, University of Melbourne.

Table 19: Input Parameters for the Calculation of Rate of Return

Parameter	Column 1 AGN (at 31 March 2004)	Column 2 Authority (at 31 January 2005)
Risk free rate (nominal)*	5.9%	5.34%
Risk free rate (real) *	3.6%	2.72%
Market risk premium	7.0%	6.00%
Equity beta	1.0	1.00
Cost of debt margin*	1.4 -> 1.8%	1.125%
Corporate tax rate	30%	30%
Franking credit value	0.3->0.5	0.50
Debt to total assets ratio	60%	60%
Expected inflation (implied)*	2.2%	2.55%

357. The values marked * in Table 19 will be updated to reflect market conditions at the time of the Final Decision.
358. The WACC using the Authority's values given in Table 19 above is presented in Table 20 below.

Table 20: WACC and Return on Equity for the second Access Arrangement Period (as at 31 January 2005)

WACC and Return on Equity	Nominal	Real
Post-Tax (Officer)	6.45%	3.80%
Pre-tax (forward transformation of Officer WACC)	9.22%	6.50%
After-Tax Return on Equity	11.34%	8.57%

359. The Authority concludes that a real pre-tax WACC of 6.50 percent is commensurate with prevailing conditions in the market for funds and the risk involved in delivering the Reference Services.
360. Accordingly, the following amendments are required.

Amendment 22

The pre-tax weighted average cost of capital referred to at page 49 of the submitted Access Arrangement Information should be amended from 8.5 percent to 6.50 percent.

Amendment 23

The submitted Access Arrangement Information should be amended to include the values as set out in Column 2 of Table 19 in this Draft Decision as the values for determining the Rate of Return for the revised Access Arrangement.

Return on Capital

361. AGN proposes that the return on the Capital Base to be allowed is the product of the real pre-tax Rate of Return and the average of the opening and closing values of the assets comprising the GDS for each year⁶². The proposed return on the Capital Base for each year of the second Access Arrangement Period is set out in Table 4.8 of the submitted Access Arrangement Information.
362. The averaging approach proposed by AGN to determine the return is the same as the approach approved by the Relevant Regulator for the first Access Arrangement Period⁶³.
363. In view of the Authority's draft decision not to accept mid-year timing for Depreciation⁶⁴ it is appropriate to depart from the averaging of opening and closing values. Rather, the Rate of Return should be applied to the opening value of the assets comprising the Capital Base for each year of the second Access Arrangement Period.
364. Table 21 below sets out the Authority's calculation of the return on the Capital Base (excluding working capital) for each year of the second Access Arrangement Period.

Table 21: Return on Capital Base
(\$ millions; 31 December 2004)

	1/1/2005	1/1/2006	1/1/2007	1/1/2008	1/1/2009
Opening value of Capital Base	658.39	660.46	658.17	653.02	653.78
Return on Capital Base	42.79	42.92	42.78	42.44	42.49

365. The values set out in Table 21 above differ from those set out in the Table 4.8 of the submitted Access Arrangement Information. A significant contributing factor is the difference between the Rate of Return proposed by AGN as compared with that used in the Draft Decision. Further, a large part of this difference in the Rate of Return is a

⁶² AAI, p 47.

⁶³ *AlintaGas's Access Arrangement Information for the South-West and Mid-West Gas Distribution Systems*, 13 July 2000, para 3.4.

⁶⁴ See above, paragraph 181.

result of reductions in risk free rates since the date of submission by AGN of the proposed revised Access Arrangement⁶⁵. An amendment to the submitted Access Arrangement Information is required as follows.

Amendment 24

Table 4.8 of the Access Arrangement Information should be amended to reflect the Authority's calculation of the return on the Capital Base for each year of the second Access Arrangement Period as set out in Table 21 of this Draft Decision.

Non Capital Costs

366. Sections 8.36 and 8.37 of the Code provide for the recovery of Non Capital Costs through the Reference Tariff as follows:

8.36 Non Capital Costs are the operating, maintenance and other costs incurred in the delivery of the Reference Service. Non Capital Costs may include, but are not limited to, costs incurred for generic market development activities aimed at increasing long-term demand for the delivery of the Reference Service.

8.37 A Reference Tariff may provide for the recovery of all Non Capital Costs (or forecast Non Capital Costs, as relevant) except for any such costs that would not be incurred by a prudent Service Provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service.

367. In addition, section 8.2(e) of the Code provides:

The factors about which the Relevant Regulator must be satisfied in determining to approve a Reference Tariff and Reference Tariff Policy are that:

...

(e) any forecasts required in setting the Reference Tariff represent best estimates arrived at on a reasonable basis.

368. Clause 27 of Part B of the Reference Tariff Policy in the proposed revised Access Arrangement provides as follows:

(1) The Reference Tariffs provide for the recovery of all forecast Non-Capital Costs to the extent permitted under section 8.37 of the Code.

(2) Without limiting Part B, subclause 27(1) the [Full Retail Contestability] Costs that are incurred, or expected to be incurred, in the delivery of the Reference Services, are included in the Non-Capital Costs.

⁶⁵ To illustrate the impact of the fall in interest rates on the rate of return and total revenue, the Authority estimates that using the interest rates at the time AGN submitted the proposed revisions, the Authority's rate of return would rise to 7.43% which would correspond to additional revenue to AGN amounting to \$26.1 million in present value terms using a 6.5% discount rate.

369. In the submitted Access Arrangement Information, AGN presented a comparison of Non Capital Costs approved for the first Access Arrangement Period with those actually incurred.⁶⁶
370. Based upon this data, AGN submits that it has spent substantially more on operating and maintaining the GDS than was projected for the first Access Arrangement Period⁶⁷. The reasons given for this by AGN are as follows:
- Significant restructuring costs were incurred in addition to [regulatory forecasts]. These restructuring costs have enabled AGN to achieve the level of efficiencies made. Without them, AGN's Non-Capital Costs would likely have remained close to the actual 2000-2001 levels.
- The outcome of this restructuring has seen an underlying cost improvement of \$5.7m from 2000 to 2004 (2004 forecast included \$0.65m for FRC). This compares favourably with the regulatory benchmark improvement of \$2.8m. This improvement in AGN's efficient cost base will be passed onto consumers in the Second Access Arrangement Period⁶⁸.
371. Based upon these comments, AGN has submitted that it is appropriate for the Authority to infer that its actual operating expenditure is efficient because under regulatory arrangements, distributors have a commercial incentive to minimise expenditure levels. It is also submitted that it is important for AGN to demonstrate to all stakeholders that its actual expenditure is efficient⁶⁹. AGN has added that it did not receive, nor will it receive, any compensation for overspending against its benchmarks in the first Access Arrangement Period⁷⁰.
372. The Authority recognises that Service Providers face substantial incentives to be efficient. However, the Authority does not accept that it is appropriate, having regard to its responsibilities under the Code, to infer, simply from the existence of such incentives, that AGN's current operating and maintenance costs are efficient.
373. In the submitted Access Arrangement Information, forecast Non Capital Costs for each year of the second Access Arrangement Period have been grouped into six categories: network costs; unaccounted for gas (**UAFG**); corporate costs; marketing costs; information technology (**IT**) costs; and Full Retail Contestability (**FRC**) costs⁷¹. AGN's forecast Non Capital Costs in these categories are as set out in Table 22.

⁶⁶ AAI, Table 4.10, p 55.

⁶⁷ AAI, p 54.

⁶⁸ AAI, p 55.

⁶⁹ AAI, p 55.

⁷⁰ AAI, p 55.

⁷¹ AAI, Table 4.11, p 56.

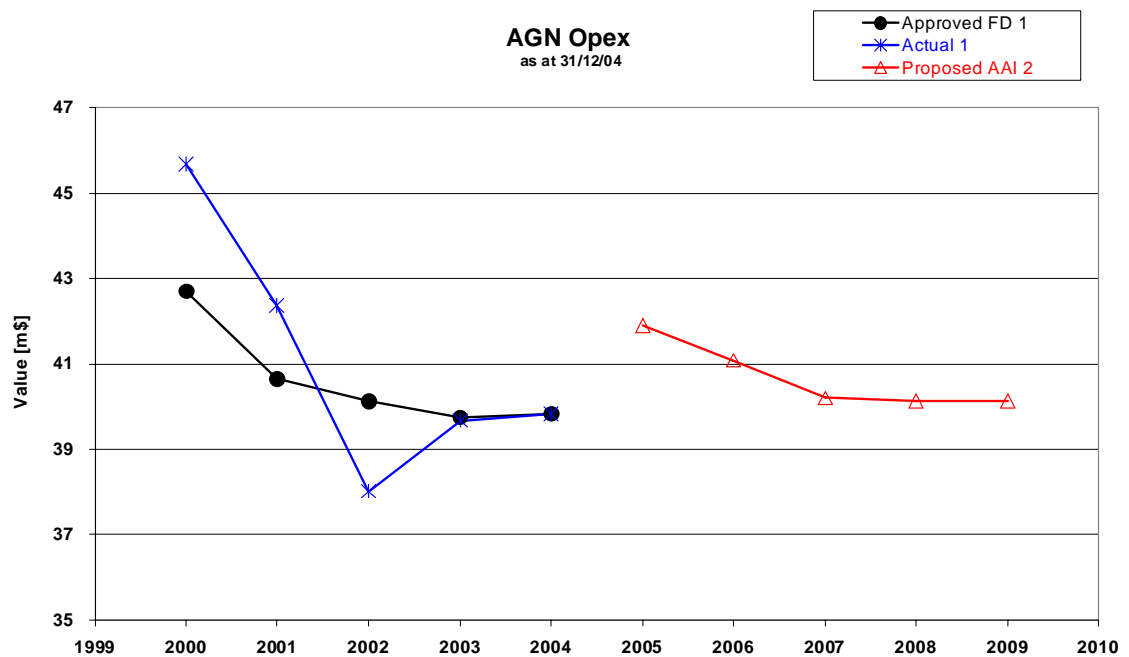
374. The values in Table 22 are the values which were included by AGN in its Access Arrangement Information, which have been converted by the Authority from dollars at 30 June 2003 to dollars at 31 December 2004.

Table 22: AGN's forecast Non Capital Costs for second Access Arrangement Period (\$ millions; 31 December 2004)

	2005	2006	2007	2008	2009
Network	24.52	23.70	22.82	22.75	22.75
Corporate (including Regulatory Costs)	6.53	6.53	6.53	6.53	6.53
IT	5.08	5.08	5.08	5.08	5.08
UAFG	3.11	3.11	3.11	3.11	3.11
Marketing	1.35	1.35	1.35	1.35	1.35
FRC	1.35	1.35	1.35	1.35	1.35
Total	41.94	41.11	40.24	40.17	40.17

375. Figure 1 below illustrates AGN's proposal by charting the approved Non Capital Cost forecasts for the first Access Arrangement Period, the actual Non Capital Costs incurred as reported by AGN during that period and the Non Capital Costs forecast by AGN for the second Access Arrangement Period.

Figure 1: Non Capital Costs for first and second Access Arrangement Periods
(\$ millions; 31 December 2004)



Scope changes in network costs

376. In its submitted Access Arrangement Information, AGN proposes two changes in the scope of its network operations. The impact of these scope changes is to increase network Non Capital Costs by \$1.4 million. The first of these scope changes is the introduction by AGN of a Guaranteed Service Level (GSL) scheme⁷² at a forecast cost of \$0.1 million p.a. The second is a proposed new regulatory requirement for land clearing permits at a forecast cost of \$1.3 million p.a.
377. AGN's estimated cost of land clearing permits of \$1.3 million p.a. was based upon an understanding that each permit would cost \$50, and that a total of 26,000 permits p.a. would be required.⁷³
378. With the new regulatory arrangements having now been put in place, the Authority has been advised by the Environmental Protection Authority that infrastructure service providers such as electricity and gas utilities are able to obtain an activity permit that covers the large bulk of routine clearance activities. While some individual clearance works such as for installation of gas mains through reserves or parklands will require individual permits, these are expected to be few in absolute terms. No precise estimate of the final number and type of permits is yet available,

⁷² The details of the proposed GSL scheme are set out at pp 33-33 of the AAI.

⁷³ AAI, p 57.

but indications are that total permit costs for AGN are unlikely to exceed \$0.01 million.

379. Accordingly, the Authority considers that the allowance made by AGN in respect of the change in scope relating to regulatory arrangements involving land clearing permits should be reduced to reflect the arrangements actually adopted.
380. In relation to the cost of the proposed GSL scheme, given the modest cost of this scope change, and the potential for it to enhance service levels for Users and consumers of gas, the Authority accepts the change in scope.

Forecast Non Capital Costs

381. AGN has forecast that:

- apart from the scope change for GSL and regulatory permits, and an increase in FRC costs, there will be no change in Non Capital Costs for 2005 as compared with actual costs in 2004 (in real terms);
- for years two and three of the second Access Arrangement Period (2006 and 2007), there will be a total fall in Non Capital Costs of \$1.7 million (in real terms); and
- Non Capital Costs, including network costs, will remain constant in real terms for the final two years (2008 and 2009) of the second Access Arrangement Period.

382. AGN submits that two independent benchmarking studies “demonstrate that the company’s proposed operating cost benchmarks for the second Access Arrangement Period meet the requirements of section 8.37 of the Code.”⁷⁴

383. As the benchmarking studies provided by AGN do not address the forecasts of Non Capital Costs the Authority is unable to accept that these studies provide a sufficient basis for the Authority to accept that these costs comply with the Code.

⁷⁴ AAI, p 55. The results of the benchmarking studies are set out in section 4.3.11 at pp 60-61 of the AAI. Details of the studies, which were provided on a confidential basis, are:

- (a) A report by PA Consulting entitled “Review of Operating and Maintenance Costs” and dated 18 March 2004 (**PA Consulting Report**). The PA Consulting Report compared AGN unit cost estimates for 2004 for some of the major categories of Non Capital Costs with unit cost information publicly available for mid-2003 for four of the gas distributors in the eastern states of Australia.
- (b) A report by GTL International is entitled “Study of Alinta Gas Benchmark Data” and dated 25 March 2004 (**GTL Report**). The GTL Report compared AGN unit cost estimates for 2004 for a number of field operations that are involved in the operations and maintenance function and/or in the capital works area, against data available for some gas distributors in the UK.

384. In order to gain a better appreciation of AGN's forecasts of Non Capital Costs, the Authority has had regard to additional evidence as follows:
- confidential data on current unit costs for AGN's operations, maintenance and capital works activities;
 - existing accounting audits of AGN's historic capital and Non Capital Costs;
 - advice and assistance from the Director of Energy Safety (as provided for under section 37(4) of the *GPAA*);
 - audited financial information available to the Authority as the licensor of AGN as a gas distributor; and
 - information on AGN's existing contracts for the supply of operating and maintenance services.
385. On the basis of the information available, and as submitted by AGN, the Authority recognises that the overall decline in Non Capital Costs over the first Access Arrangement Period reflects, at least in part, the achievement of operational efficiencies.
386. The Authority also notes that in its recent draft decision on the revisions to the Access Arrangement for the AGL gas distribution system, IPART referred to a report by the Energy Consulting Group (**ECG**), commissioned by IPART to investigate trends in productivity gains in the gas industry⁷⁵. In relation to ECG's report, IPART noted as follows:
- It concluded that these gains had slowed dramatically, and that the 3 per cent per annum efficiency saving implied in [IPART's] final decision on the current access arrangement could not be sustained. It also considered AGLGN's forecast increase in customer numbers and the productivity gains that might be expected from proposed capital expenditure on renewing mains, increasing residential meter replacement and upgrading IT systems. Based on its findings, ECG reported that AGLGN's proposed real efficiency saving of 1.5 per cent per annum after allowing for growth was reasonable.
387. It is also noted that the ESC in its final decision at the end of 2002 for the three major Victorian gas distribution systems concluded that a general productivity factor of 1 percent would be reasonable for all Non Capital Costs over the final three years (2004-2007) of Access Arrangements in Victoria.
388. The Authority notes that AGN's forecasts significant productivity improvements in Non Capital Costs in the early years of the second Access Arrangement Period (2006-2007). However, on average, productivity improvement over the full five years of the Access Arrangement Period, are much reduced. For example, the average efficiency gains for network costs are 1.4 percent p.a. and for all Non Capital Costs are

⁷⁵ IPART, December 2004, *Draft Decision, Revised Access Arrangement for AGL Gas Networks*, p 91.

0.8 percent p.a. It is also noted that no efficiency gains have been provided for in the final two years of the second Access Arrangement Period (2008-2009).

389. Having regard to all of the information available, the Authority considers that AGN's forecasts of Non Capital Costs comply with section 8.37 of the Code, except in relation to those for the final two years of the second Access Arrangement Period. In respect of these final two years the Authority considers that provision for efficiency gains in network costs of 1 percent p.a. (in real terms) for each of these two years would be consistent with the provisions of section 8.37.

Unaccounted for gas

390. Unaccounted for gas (UAFG) is the difference between recorded gas inflows at receipt points into the GDS and reported outflows at delivery points from the GDS. It includes the effects of metering inaccuracies, metering errors, operational losses from leakage, third party damage, blow-down and purge during maintenance and commissioning, line pack changes, and theft.
391. For the current Access Arrangement, the Relevant Regulator approved a decline in UAFG as a proportion of total gas delivered from the GDS from 2.7 percent to 2.5 percent over the first Access Arrangement Period⁷⁶. AGN has projected the proportion of UAFG for 2005 to be 2.7 percent and 2.8 percent for each of the remaining years of the second Access Arrangement Period (2006-2009)⁷⁷.
392. In considering a best estimate of UAFG arrived at on a reasonable basis as provided for in section 8.2(e) of the Code the Authority has had regard to the following information:
- Table 5.1 of the NIEIR Report (March 2004) provided by AGN to the Authority in confidence presents actual and predicted figures for total gas inflow and the total distribution losses (i.e. UAFG) for the years 1997 to 2012.
 - AGN's gas licence data (Gas Distribution Licence 2, GDL2) for the 2001 to 2004 financial years.
393. On the basis of the information available, the Authority considers that 2.5 percent of gas received is a best estimate of annual UAFG arrived at on a reasonable basis.
394. In translating the annual proportion of UAFG into a monetary value, the Authority has had regard to the PA Consulting Report provided by AGN.

⁷⁶ Independent Gas Pipelines Access Regulator Western Australia, 30 June 2000, *Final decision for the South-West and Mid-West Gas Distribution Systems*, pp 98-99.

⁷⁷ AAI, p 58.

395. On the basis of the information referred to in paragraphs 393 and 394, the Authority estimates that the annual cost of replacing UAFG will be reduced by approximately \$0.3 million per annum (dollars at 31 December 2004) from that forecast in AGN's submitted Access Arrangement Information.

Regulatory Costs

396. Under AGN's proposed revisions, the Authority is required to give consideration to AGN's Regulatory Costs as part of its consideration of a Reference Tariff Control Formula Approach under section 8.3(c), whereby Reference Tariffs are to be adjusted for variations in Regulatory Costs during the second Access Arrangement Period. This matter is considered by the Authority below⁷⁸.
397. During the assessment process, the Authority sought clarification from AGN about forecast Regulatory Costs and was informed that regulatory costs of approximately \$0.7m per annum have been included in forecast Non-Capital Costs in the corporate costs category.
398. The Authority considers that forecast Regulatory Costs should be disaggregated from other categories of Non Capital Costs, so that the costs involved are clearly identified for the purpose of any tariff adjustment mechanism so that the effect of any variation may be readily understood by interested parties.
399. Therefore, an amendment to the Access Arrangement Information is required so that Regulatory Costs are presented separately from other corporate costs. Amendment 25 below addresses this by requiring the relevant Table 4.11 of the submitted Access Arrangement Information to include Regulatory Costs as a separate line item.

Marketing Costs

400. In response to an information request by the Authority, AGN has provided a brief substantiation of its forecast of Non-Capital Costs for marketing. AGN submits that it should be allowed to continue to spend at historical levels on marketing activities that include advertising and sponsorship to promote the efficient use of gas, the promotion of gas appliances, and advice to industry concerning benefits of gas usage and gas appliances.
401. Section 8.36 of the Code expressly provides that Non Capital Costs may include, but are not limited to, costs incurred for generic marketing activities aimed at increasing long-term demand for the delivery of the Reference Service.
402. The Authority concludes that AGN's forecast of Non Capital Costs for marketing, which are consistent with similar amounts committed in previous periods, represent a

⁷⁸ See discussion under the heading "Regulatory Cost pass through" below.

best estimate of anticipated marketing costs during the second Access Arrangement Period.

Corporate and IT Costs

403. The Authority notes that AGN's forecast Non Capital Costs includes forecasts for Corporate and IT Costs. The Authority has considered the forecasts presented by AGN having regard to the relevant Code criteria. The Authority notes that the forecast for Corporate Costs have increased substantially from the forecasts approved for the first Access Arrangement Period. The Authority has no reason to believe that the forecasts presented for these categories of Non Capital Costs do not comply with the relevant provisions of the Code. Therefore, the Authority proposes to accept the forecasts for the purpose of the Draft Decision. However, the Authority requires further substantiation of the forecasts from AGN prior to making the Final Decision.

FRC Costs

404. AGN forecasts FRC Non Capital Costs at a constant \$1.3 million p.a. throughout the second Access Arrangement period. Actual FRC Non Capital Costs incurred during 2003 have been reported by AGN at \$0.6 million⁷⁹. The increased forecast reflects the introduction of FRC on 31 May 2004 and an expectation by AGN of significantly increased operational costs attributable to compliance with FRC.
405. The Non Capital Costs comprising the forecast FRC costs include costs associated with participation as the operator of the GDS in the Retail Market Scheme and interaction with REMCo as required under that scheme and by the Retail Market Rules.
406. The Authority notes that at this early stage of FRC implementation, there is limited actual evidence on which to forecast FRC costs for the second Access Arrangement Period.
407. The Authority also notes that AGN has proposed a Trigger Event Adjustment Approach for the recovery of FRC costs that exceed the costs already factored into Reference Tariffs during the second Access Arrangement Period.
408. In view of the uncertainty relating to the amount of FRC costs, and recognising that such costs are beyond AGN's direct control, the Authority considers that there may be justification for providing a Reference Tariff Variation Method which would enable account to be taken of variance in actual FRC Non Capital Costs from forecast. This matter is considered by the Authority below under the heading "Trigger Event Adjustment for FRC costs".

⁷⁹ AAI, Table 4.12, p 57.

Required amendments

409. Table 23 sets out the Authority's calculation of the forecast Non Capital Costs adjusting AGN's forecasts to take account of the Authority's consideration of forecast Non Capital Costs for the second Access Arrangement Period.

Table 23: Authority's forecast Non Capital Costs for second Access Arrangement Period (\$ millions; 31 December 2004)

	2005	2006	2007	2008	2009
Network	22.43	21.61	20.73	20.31	19.96
Corporate	6.53	6.53	6.53	6.53	6.53
IT	5.08	5.08	5.08	5.08	5.08
UAFG	2.78	2.68	2.68	2.68	2.68
Marketing	1.35	1.35	1.35	1.35	1.35
FRC	1.35	1.35	1.35	1.35	1.35
Regulatory Cost	0.74	0.74	0.74	0.75	0.75
Total	40.27	39.34	38.47	38.05	37.70

410. Consequently, Table 4.11 of the Access Arrangement Information needs to be amended to accord with Table 23 above to reflect the Authority's draft decisions relating to forecast Non Capital Costs.

Amendment 25

Table 4.11 of the Access Arrangement Information should be amended to accord with the forecast Non Capital Costs shown in Table 23 of this Draft Decision.

Calculation of Total Revenue

411. The provisions of section 8.4 of the Code relevant to the calculation of Total Revenue are set out in paragraph 170 above.
412. Section 8.6 of the Code as set out below is also relevant to the determination of Total Revenue.

In view of the manner in which the Rate of Return, Capital Base, Depreciation Schedule and Non Capital Costs may be determined (in each case involving various discretions), it is possible that a range of values may be attributed to the Total Revenue described in section 8.4. In order to determine an appropriate value within this range the Relevant Regulator may have regard to any financial and operational performance indicators it considers relevant in order to

determine the level of costs within the range of feasible outcomes under section 8.4 that is most consistent with the objectives contained in section 8.1.

- 413. If the Authority has considered financial and operational performance indicators for the purposes of section 8.6 of the Code, section 8.7 requires the Authority to identify the indicators and provide an explanation of how they have been taken into account.
- 414. In exercising the discretions conferred on the Authority with respect to Rate of Return, Capital Base, Depreciation Schedule and Non Capital Costs, the Authority has in each case determined a value. In the case of the Rate of Return, the Authority has determined a single value having regard to the range of values that may be attributed to the parameters used in determining an appropriate Rate of Return. As to other values brought to account in determining Total Revenue, there is not a substantial variation between the Authority’s assessment and the values proposed by AGN. In those circumstances there is no range of values that the Authority carries forward into the determination of the Total Revenue and therefore no need to determine an appropriate value within the range of values for total revenue.
- 415. The components of Total Revenue are Non Capital Costs, a return on the Capital Base, Depreciation of the Capital Base and a return on working capital. In each case the Authority has determined values that differ from those submitted by AGN for the reasons explained in relevant paragraphs above.
- 416. The Authority’s revised values for each of the inputs to the calculation of Total Revenue are set out in the following Table 24.

Table 24: Total Revenue
(\$ millions; 31 December 2004)

	2005	2006	2007	2008	2009
Non Capital Costs	40.27	39.34	38.47	38.05	37.70
Depreciation	25.02	26.44	27.68	28.78	30.29
Return on Capital Base	42.79	42.92	42.78	42.44	42.49
Return on working capital	0.41	0.41	0.41	0.41	0.42
Total Revenue	108.48	109.11	109.33	109.67	110.90

- 417. The present value of the Total Revenue determined by the Authority as set out in Table 24 above is \$454.78 million (dollars at 31 December 2004) using a discount rate of 6.50 percent, which is the WACC determined by the Authority in this Draft Decision. This compares with a present value of the Total Revenue proposed by AGN of \$520.01 million (dollars at 31 December 2004) calculated using the same discount rate.

418. AGN's submitted Access Arrangement Information included Total Revenue which differs from that which the Authority has determined. An amendment to the Access Arrangement Information is therefore required.

Amendment 26

Table 4.14 of the Access Arrangement Information should be amended to accord with the Authority's determination of Total Revenue for each year of the second Access Arrangement Period, as set out in Table 24 of this Draft Decision.

Determination of Reference Tariffs

419. AGN has determined proposed Reference Tariffs for the second Access Arrangement Period as follows:

- Total Revenue has been allocated to Reference Services and Users, using the same allocations as under the current Access Arrangement;
- an adjustment to the allocations has been made to take account of prudent discounts under section 8.43 of the Code;
- the Reference Tariffs for the first year of the second Access Arrangement Period, i.e. 2005, have been set by rolling forward the Reference Tariffs which applied in the fifth year of the first Access Arrangement Period, i.e. 2004⁸⁰;
- the Reference Tariffs required to meet the revenue requirement for years two to five of the second Access Arrangement Period, i.e. 2006-2009 have been determined using AGN's demand forecasts;
- a smooth path for recovery of Total Revenue has been determined by adjusting the Reference Tariffs annually after the first year by the formula $CPI \times (1-X)^{81}$ where X is a smoothing factor;
- provision is made for annual variation to the price path under a tariff basket form of price control and/or a Regulatory Cost adjustment, and variation in accordance with a Trigger Event Adjustment Approach for FRC costs.

Revenue allocation

420. Principles for the allocation of revenues are provided in sections 8.38 to 8.43 of the Code.

⁸⁰ AAI, p 62.

⁸¹ 'X' is a smoothing (not productivity) factor which provides for a smoothed path for recovery of forecast revenue from Reference Services equal to Total Revenue in net present value terms for the relevant period.

421. Section 8.38 of the Code requires that Reference Tariffs should be designed to recover only that portion of Total Revenue which includes:
- (a) all of the Total Revenue that reflects costs incurred (including capital costs) that are directly attributable to the Reference Service; and
 - (b) a share of the Total Revenue that reflects costs incurred (including capital costs) that are attributable to providing the Reference Service jointly with other Services, with this share to be determined in accordance with a methodology that meets the objectives set out in section 8.1 of the Code and is otherwise fair and reasonable.
422. Section 8.39 of the Code provides for the Authority to require a different methodology to be used for cost allocation than may have been proposed by a Service Provider in an Access Arrangement pursuant to section 8.38 of the Code. However, if such a requirement is proposed, the Authority must provide a detailed explanation of the methodology that it requires to be used.
423. Section 8.40 of the Code addresses the allocation of revenue between Reference Services and Rebatable Services. Under section 10.8 of the Code, a Rebatable Service is a Service where:
- (a) there is substantial uncertainty regarding expected future revenue from sales of that Service due to the nature of the Service and/or the market for that Service; and
 - (b) the nature of the Service and the market for that Service is substantially different to any Reference Service and the market for that Reference Service.
424. Under section 8.40 of the Code, if a Reference Service is provided jointly with a Rebatable Service, then all or part of the Total Revenue that would have been recovered from the Rebatable Service under section 8.38 of the Code (if that Service was a Reference Service) may be recovered from the Reference Service provided that an appropriate portion of any revenue realised from sales of any such Rebatable Service is rebated to Users of the Reference Service (either through a reduction in the Reference Tariff or through a direct rebate to the relevant User or Users). The structure of such a rebate mechanism should be determined having regard to the following objectives set out in section 8.40 of the Code:
- (a) providing the Service Provider with an incentive to promote the efficient use of capacity, including through the sale of Rebatable Services; and
 - (b) Users of the Reference Service sharing in the gains from additional sales of services, including from sales of Rebatable Services.
425. Section 8.41 provides a Service Provider with discretion to adopt alternative approaches to revenue allocation, subject to any approach adopted having substantially the same effect as the approach outlined in sections 8.38 and 8.40 of the Code.
426. Section 8.42 relates to the allocation of revenue between Users. This section provides that, subject to provisions for prudent discounts in section 8.43 of the Code, the Reference Tariff should be designed such that the proportion of Total Revenue

recovered from actual or forecast sales of a Reference Service to a particular User of that Service is consistent with the principles described in section 8.38 of the Code.

427. Subject to the following, AGN has proposed that the revenue allocations used to determine the Reference Tariffs under the current Access Arrangement will also be used to determine the Reference Tariffs for the second Access Arrangement Period:

- approval of certain User discounts as Prudent Discounts under section 8.43 of the Code; and
- annual variation, at AGN's discretion, to the structure of Reference Tariffs under a proposed tariff basket form of price control.

428. Clause 28 of Part B of AGN's Reference Tariff Policy provides as follows:

The portion of the Total Revenue that each Reference Service has been designed to recover includes, to the maximum extent commercially and technically reasonable:

- (a) all of the Total Revenue that reflects costs incurred (including capital costs) that are directly attributable to each Reference Service
- (b) a share of the Total Revenue that reflects costs incurred (including capital costs) that are attributable to providing each Reference Service jointly with other Services, with this share being determined using a methodology that meets the objectives in section 8.1 of the Code and is otherwise fair and reasonable; and
- (c) a share of the Total Revenue that reflects costs incurred but not recovered from those Users of Reference Services who pay at a prudent discount to the Reference Tariff.

429. Clause 28 of Part B is identical to the current Reference Tariff Policy, with the exception of clause 28(c) which has been added to reflect AGN's proposal for prudent discounts. Consideration by the Authority of AGN's proposal for prudent discounts is given at paragraphs 437 and following below.

430. Clause 31 of Part B is also a new provision in the Reference Tariff Policy relating to prudent discounts which states that "[s]ome Users of Reference Services pay a discount to the Reference Tariff. AGN has structured Tariffs in accordance with section 8.43 of the Code which permits recovery of the revenue foregone in a fair and reasonable manner."

431. AGN has proposed a method of allocating Total Revenue at paragraph 5.1 of the submitted Access Arrangement Information as follows:

The Reference Tariffs applying in 2005 (the first Year of the Second Access Arrangement Period) have been determined based on detailed cost of supply modelling described in the 2000 Access Arrangement Information. The only significant amendment was required to comply with the introduction of FRC and the subsequent introduction of Reference Tariff A2 (and a consequential amendment to Reference Tariff B1).

432. In considering AGN's revenue allocations to Reference Services, the Authority had regard to the Relevant Regulator's assessment of the current Access Arrangement that approved the revenue allocations⁸². In summary, the Relevant Regulator concluded that the allocations complied with the Code for the following reasons:
- capital costs (return on capital and depreciation) and other common costs (marketing costs, corporate costs and the return on working capital) were fully distributed between Users in a manner consistent with the equity and efficiency objectives of the Code; and
 - the bulk of costs allocated to each Reference Service comprised capital costs so that the revenue recovered from each Reference Service would in all probability cover the avoidable cost of providing the Service, regardless of the method of allocating operating and maintenance costs.
433. It is noted, however, that the Relevant Regulator considered operating and maintenance costs to have been allocated in a manner that may have been inconsistent with the efficiency objective of the Code, but that this was likely to have been compensated for in the overall allocation process.
434. In the submitted Access Arrangement Information, AGN has submitted as follows:
- Since the initial Reference Tariffs were set, the price control formula in the First Access Arrangement Period has restricted the Tariff Component relativities from being altered. No new Tariffs or Tariff Components were introduced over that period, and the nature of AGN's distribution business, and the basis of allocating its underlying costs have not changed materially since 2000, with the exception of FRC and growth in new residential connections. To the extent that these result in an increase to the cost base, these have been appropriately allocated to the Reference Services. The costs and revenue relativities remain consistent with those determined by the cost of supply model applied in 2000.
435. The Authority accepts AGN's submission that changes in circumstances relating to FRC and growth in new residential connections have not changed the relativities between costs and revenue of providing Reference Services in a material way.
436. In view of the above, the Authority accepts that the revenue allocations between Reference Services under the current Access Arrangement provide an appropriate basis for allocating revenue for the revised Access Arrangement.

Prudent discounts

437. Section 8.43 of the Code provides for a Service Provider to give prudent discounts on Reference Tariffs or Equivalent Tariffs for Non-Reference Services in particular circumstances. A User receiving a discount would be paying a proportion of Total

⁸² Independent Gas Pipelines Access Regulator Western Australia, 30 June 2000, *Draft decision on the AlintaGas South-West and Mid-West Gas Distribution Systems Access Arrangement*, Part A, pp 22-24; Part B, pp 157-162.

Revenue that is less than the proportion that would be paid by the User under the principles of sections 8.38 and 8.40 of the Code. Section 8.43 of the Code provides for such a discount to be given to a User if:

- (a) the nature of the market in which a User or Prospective User of a Reference Service or some other Service operates, or the price of alternative fuels available to such a User or Prospective User, is such that the Service, if priced at the nearest Reference Tariff (or, if the Service is not a Reference Service, at the Equivalent Tariff) would not be used by that User or Prospective User; and
- (b) a Reference Tariff (or Equivalent Tariff) calculated without regard to revenues from that User or Prospective User would be greater than the Reference Tariff (or Equivalent Tariff) if calculated having regard to revenues received from that User or Prospective User on the basis that it is served at a price less than the Reference Tariff (or Equivalent Tariff).

438. The effect of section 8.43(b) is to require that a discount may only be provided to a User if the incremental revenue from that User exceeds the incremental cost of providing a Service to that User, and the incremental revenue consequently makes some contribution to the joint costs of providing Services provided using the Covered Pipeline. The proportion of Total Revenue that comprises the discount may be recovered from other Users of the Reference Service or some other Service or Services in a manner that the Authority is satisfied is fair and reasonable.
439. Under section 8.43(c) & (d) of the Code, the Authority may only permit recovery of prudent discounts from other Users not receiving the prudent discounts, or from Reference Services or Services generally, in a manner that the Authority is satisfied is fair and reasonable.
440. Under the current Access Arrangement, AGN did not seek approval of any prudent discounts under section 8.43 of the Code. However, under the proposed revised Access Arrangement, AGN has sought approval of certain prudent discounts.
441. In section 5.4 of the submitted Access Arrangement Information⁸³, AGN described the discounts as follows:

Consistent with the Code, a discount to the relevant Reference Tariff is offered where:

- there has been (or will be) a reasonable expectation that:
 - the User can obtain haulage Services from a bypass pipeline at a Tariff lower than the relevant Reference Tariff; or
 - without the discount, the consumer supplied by the User would cease to use Gas delivered from the AGN GDS; and
- continued delivery of Gas from the AGN GDS to the consumer, with the User paying a discounted Reference Tariff, would result in Reference Tariffs which were lower than they would have been if the User were to have obtained haulage Service from a bypass

⁸³ AAI, p 65.

pipeline, or if the consumer supplied by the User had ceased to use Gas delivered from the AGN GDS.

442. During the assessment process, at the Authority's request, AGN provided additional confidential information in relation to AGN's process for approving discounts, and the details of individual discounts which have been offered by AGN.
443. In the submitted Access Arrangement Information, AGN submitted the following further reasons why the Authority should accept the discounts as prudent discounts:

While the Access Arrangement for the First Access Arrangement Period has no stated provision for prudent discounts and thus no mechanism to recover the foregone revenue from discounting, AGN implemented a discount regime during the period based on a rigorous assessment of applications received to ensure that both criteria under the Code are met. As AGN has under recovered from those Users receiving discounts, there has been an extremely powerful incentive to restrict discounts only to those Users who would otherwise not use the system at all. For the Second Access Arrangement Period it is anticipated that those Users who received discounts in the First Access Arrangement Period, and continue to be in the same situation in the Second Access Arrangement Period, will continue to receive prudent discounts.

444. The Authority is satisfied that the principles used by AGN to determine the prudent discounts, and the individual discounts which have been offered by AGN during the first Access Arrangement Period demonstrate that the discounts have been offered in accordance with the provisions in section 8.43(a) of the Code. The Authority also notes AGN's submission that AGN had an incentive during the first Access Arrangement Period to offer only prudent discounts, because there was no mechanism to recover the discounted revenue from other Users under the current Access Arrangement. In the circumstances, the Authority is satisfied that discounts have been offered in accordance with section 8.43(a) of the Code.
445. The Authority is also satisfied that if Users who have been given discounts had ceased to obtain Reference Services from AGN altogether, Reference Tariffs would have been higher than if Reference Tariffs were to have been increased to recover the discounts from other Users. The Authority, therefore, is also satisfied that the discounts offered by AGN comply with section 8.43(b) of the Code.
446. Under section 2.6 of the Code the Access Arrangement Information "must contain such information as in the opinion of the Relevant Regulator would enable Users and Prospective Users to understand the derivation of the elements in the proposed Access Arrangement and to form an opinion as to the compliance of the Access Arrangement with the provisions of the Code". There is, therefore, a need for the submitted Access Arrangement Information to be amended to include information sufficient to provide an understanding of the derivation of Reference Tariffs in the proposed revised Access Arrangement taking account of prudent discounts.
447. Table 25 below sets out information provided by AGN, which the Authority considers should be included in the submitted Access Arrangement Information as sufficient to satisfy the requirements of section 2.6 of the Code in respect of prudent discounts.

Table 25: Prudent discount information

	2005	2006	2007	2008	2009
Forecast volume delivered at prudent discount [GJ p.a.]	9,945,631	9,942,701	9,938,805	9,935,342	9,942,691
Discounted notional tariff [\$/GJ; 31 December 2004]	0.3391	0.3387	0.3382	0.3378	0.3387

Amendment 27

The submitted Access Arrangement Information should be amended to include the information set out in Table 25 of this Draft Decision in relation to prudent discounts.

Initial Reference Tariffs

448. AGN has proposed that the Reference Tariffs for the first year of the second Access Arrangement Period (i.e. 2005) be the Reference Tariffs for the fifth year of the first Access Arrangement Period (i.e. 2004) “rolled forward” from that year.⁸⁴
449. As the intended Revisions Commencement Date under the current Access Arrangement (i.e. 1 January 2005) has passed, AGN sought an adjustment from 1 January 2005 to the Reference Tariffs using the CPI-X% formula approved by the Relevant Regulator for the first Access Arrangement Period with ‘X’ being 2.55 percent⁸⁵. The Authority approved this adjustment with effect from 1 January 2005.
450. In the circumstances, the Authority considers that Reference Tariffs in force under the current Access Arrangement should continue for the remainder of the first year of the second Access Arrangement Period (i.e. 2005).
451. The Reference Tariffs to apply for the first year of the second Access Arrangement Period, determined on the above basis, are set out in Table 26 below. The amounts are shown exclusive of GST.

⁸⁴ AAI, p 62.

⁸⁵ AGN, December 2004, *Access Arrangement for the Mid-West and South-West Gas Distribution System: Variation Report for Variation Year 2005*, published at the Authority web-site: www.era.wa.gov.au.

Table 26: Reference Tariffs for first year of second Access Arrangement Period (\$; 31 December 2004)

A1 Service		
Standing Charge [\$/day]		121.1856
Usage Charge [\$/GJkm]	first 10km	0.0445
Usage Charge [\$/GJkm]	>10km	0.0223
Demand Charge [\$/GJ km/day]	first 10km	0.5003
Demand Charge [\$/GJ km/day]	>10km	0.2501
A2 & B1 Service		
Standing Charge [\$/day]		1.3771
Usage Charge [\$/GJ]	first 5TJ	4.6364
Usage Charge [\$/GJ]	next 5 TJ	4.4091
Usage Charge [\$/GJ]	>10TJ	1.1636
B2 Service		
Standing Charge [\$/day]		0.5508
Usage Charge [\$/GJ]	first 100GJ	5.1273
Usage Charge [\$/GJ]	>100GJ	4.6182
B3 Service		
Standing Charge [\$/day]		0.0688
Usage Charge [\$/GJ]	first 15GJ	8.6000
Usage Charge [\$/GJ]	next 30GJ	6.0091
Usage Charge [\$/GJ]	>45GJ	3.9545

452. As the initial Reference Tariffs set out in Table 26 differ from those referred to in the Access Arrangement Information and the proposed revised Access Arrangement, the following amendments are required.

Amendment 28

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 respectively should be amended to accord with Table 26 of this Draft Decision for the Reference Tariffs to apply for the first year of the second Access Arrangement Period.

Amendment 29

The proposed 2005 Reference Tariffs set out in Tables 3.1 and 3.1A of the submitted Access Arrangement Information should be amended to accord with Table 26 of this Draft Decision.

Quantity forecasts**Annual volume**

453. In section 6.3 of the submitted Access Arrangement Information, AGN states as follows:

AGN engaged the National Institute of Economics and Industry Research (NIEIR) to assist in the preparation of volume forecasts. The model used by NIEIR was developed within a regional economic model of the Western Australian economy.

Temperature is an important factor affecting consumption. Data collection from the Australian Bureau of Meteorology from various Perth based weather stations indicates a strong trend towards warming weather. This has been factored into the “Heating Degree Days” underpinning the volume forecasts.

In addition, average consumption by Small Use Customers for residential purposes is expected to be negatively impacted by two key items.

- the replacement of gas hot water systems by solar hot water systems supported by State and Federal rebate schemes; and
- the extensive use of reverse cycle air conditioners replacing traditional gas heating loads.

Early evidence suggests that these impacts will have the potential to reduce average usage, below that is included (sic) in Table 6.4 and 6.5 for Small Use Customers. This is further reason (sic) why the introduction of the Tariff basket is required to protect AGN’s ongoing investment.

454. The Authority has had regard to the NIEIR Report as referred to in section 6.3 of the submitted Access Arrangement Information, a copy of which was provided in confidence by AGN. In order to gain a better appreciation of AGN’s volume forecasts, the Authority also has had regard to audited financial information available to the Authority as the licensor of AGN as a gas distributor.

455. Based upon the above information, the Authority has noted that the throughput volume for large use customers (A1, B1 and B2) for the year to 30 June 2004 is well above expectations for the year ended 31 December 2004. In the circumstances, the Authority has requested AGN to make available further information to enable the Authority to understand what, if any, changes are necessary to the forecast.

Customers connected

456. In Table 6.4 of the submitted Access Arrangement Information, AGN has presented an estimate of the existing customers connected to the network for each year of the second Access Arrangement Period for each Reference Service. These estimates were also based on forecasts in the NIEIR Report.
457. Based upon the information available to the Authority, it is noted that the forecast number of existing B2 and B3 customers connected at the commencement of the first year of the second Access Arrangement Period (i.e. 2005) were below the actual number of connections as at 30 June 2004. In the circumstances, there is a need for AGN's forecast of existing B2 and B3 customers connected to the network as at 1 January 2005 to be adjusted. Therefore, for the purposes of determining Reference Tariffs in this Draft Decision, the Authority has made its own estimate of the number of B2 and B3 customers connected to the network as at 1 January 2005, reflecting updated information available to the Authority. To reflect the best estimate in determining Reference Tariffs, the Authority will request AGN to confirm the actual number of B2 and B3 customers connected to the network as at 1 January 2005.
458. In relation to likely growth in the number of customers connected to the network, the Authority has noted in paragraph 256 above appreciable differences in anticipated growth rates in new connections for B2 and B3 customers. On the basis of the information available, the Authority concluded that AGN's AMP for the period 2005-2009 represents a suitable basis for estimating anticipated growth.
459. Table 27 below sets out projected numbers of B2 and B3 customers connected to the network at the end of each year of the second Access Arrangement Period after adjusting AGN's projections as discussed above.

Table 27: B2 & B3 customers connected at end of each year of second Access Arrangement Period

Year ending 31 December	2005	2006	2007	2008	2009
B2	5,304	5,580	5,870	6,174	6,487
B3	518,029	533,353	548,663	566,959	585,122
Total B2 & B3	523,333	538,933	554,533	573,133	591,609

460. As the number of customers connected set out in Table 27 differ from those referred to in Table 6.5 of the submitted Access Arrangement Information the following amendment is required.

Amendment 30

The forecast number of B2 and B3 customers connected, as set out in Table 6.5 of the submitted Access Arrangement Information, should be amended to accord with Table 27 of this Draft Decision.

Price path for Reference Tariffs

461. In section 5.2 of the submitted Access Arrangement Information, AGN describes the method proposed for determining Reference Tariffs after the initial year of the second Access Arrangement as follows.

In this Access Arrangement Revision, AGN has proposed a tariff basket form of price control as an appropriate and efficient form of price control, consistent with the requirements of the Code. Under a tariff basket, the limit on allowed increases is expressed in terms of a ratio of “notional revenues”, taking into account all of the components of a Service Provider’s Tariffs:

- the first “notional revenue” is the revenue implied by the quantities of each Tariff Component sold in the previous Year and the Service Provider’s current Tariffs. This becomes the denominator in the price control formula; and
- the second notional revenue is the revenue that would result if the same Quantity was sold at the Service Provider’s proposed (new) prices. This becomes the numerator in the price control formula.

This cap is $(CPI) \times (1-X) \times (1+R)$

Where:

CPI is as defined in Schedule 2 of Part A of the Access Arrangement

X is the X factor

R is the regulatory cost recovery factor as outlined in clause 8 of Part B of the Access Arrangement.

462. Under AGN’s Reference Tariff adjustment formula, $CPI_t \times (1-X_t) \times (1+R_t)^{86}$, X_t is a constant which provides a smoothed path for variation in Reference Tariffs whereby the present value of forecast revenue for Reference Tariffs over the second Access Arrangement Period will equal the present value of Total Revenue.

⁸⁶ Clause 8, Part B of the proposed revised Access Arrangement. X_t is held constant for the full second Access Arrangement Period.

463. The X factor as calculated by AGN is -0.0218 and is referred to in the adjustment formula in clause 8(2) of Part B of the proposed revised Access Arrangement.
464. As the Total Revenue and initial Reference Tariffs as determined by the Authority in this Draft Decision differ from those proposed by AGN, there is a need for the X factor to be re-calculated. The X factor calculated using the values determined by the Authority is 0.0396. The Authority notes that the difference between the X factor as determined by AGN and the Authority respectively is primarily explained by the Total Revenue as determined by the Authority at paragraph 416 above being less than that proposed by AGN.
465. In the circumstances, the following amendment to the proposed revised Access Arrangement is required.

Amendment 31

The X factor referred to in clause 8(2) of Part B of the proposed revised Access Arrangement should be amended from -0.0218 to 0.0396.

Adjustment of Reference Tariffs from price path

466. Section 8.3 of the Code provides for Reference Tariffs to vary within an Access Arrangement Period:
- 8.3 Subject to section 8.3A and to the Relevant Regulator being satisfied that it is consistent with the objectives contained in section 8.1, the manner in which a Reference Tariff may vary within an Access Arrangement Period through the implementation of a Reference Tariff Policy is within the discretion of the Service Provider. For example, the Reference Tariff Policy may specify that Reference Tariffs will vary within an Access Arrangement Period through the implementation of:
- (a) a Cost of Service Approach;
 - (b) a Price Path Approach;
 - (c) a Reference Tariff Control Formula Approach;
 - (d) a Trigger Event Adjustment Approach; or
 - (e) any variation or combination of the above.
467. The different approaches are defined in section 10.8 of the Code as follows.

Cost of Service Approach means a Reference Tariff Variation Method whereby initial Reference Tariffs are set on the basis of the anticipated costs of providing the Reference Services and are adjusted continuously in light of actual outcomes (such as sales volumes and actual costs) to ensure that the Reference Tariffs recover the actual costs of providing the Reference Services.

Reference Tariff Control Formula Approach means a Reference Tariff Variation Method whereby an initial set of Reference Tariffs may vary over the Access Arrangement Period in accordance with a specified formula or process.

Price Path Approach means a Reference Tariff Variation Method whereby Reference Tariffs are determined in advance for the Access Arrangement Period to follow a path or paths over time forecast to deliver a revenue stream, with that price path or paths not being adjusted to account for subsequent events until the commencement of the next Access Arrangement Period.

Trigger Event Adjustment Approach means a Reference Tariff Variation Method whereby Reference Tariffs are varied in the manner specified in a Reference Tariff Policy upon the occurrence of a Specified Event.

468. Sections 8.3A to 8.3H of the Code contain further provisions on implementation of an Approved Reference Tariff Variation Method.

8.3A A Reference Tariff may vary within an Access Arrangement Period only through implementation of the Approved Reference Tariff Variation Method as provided for in sections 8.3B to 8.3H.

8.3B (a) If a Specified Event occurs the Service Provider must, within the time provided for in the Reference Tariff Policy, provide a notice to the Relevant Regulator containing the information set out in section 8.3C.

(b) If the Service Provider otherwise wishes to vary a Reference Tariff in accordance with the Approved Reference Tariff Variation Method, the Service Provider must provide a notice to the Relevant Regulator containing the information set out in section 8.3C.

8.3C The Service Provider's notice under section 8.3B must contain:

(a) the Service Provider's proposed variations to the Reference Tariff and the proposed effective date for those variations; and

(b) an explanation of how the variations proposed are consistent with the Approved Reference Tariff Variation Method contained in the Reference Tariff Policy.

Notwithstanding any other section of the Code, the Relevant Regulator must make public, and must provide the Code Registrar with a copy of, any information provided under paragraphs (a) and (b) above.

8.3D Unless the Relevant Regulator has disallowed the variation under section 8.3E, the Reference Tariff will be varied automatically on and from the later of:

(a) the date specified in a notice from the Service Provider given in accordance with section 8.3B;

(b) (i) if the Reference Tariff Policy specifies a minimum notice period for the variation, the expiry of that period after the date of the notice from the Service Provider given in accordance with section 8.3B; or

(ii) if the Reference Tariff Policy does not specify a minimum notice period for the variation, 35 days after the date of the notice from the Service Provider given in accordance with section 8.3B,

but if, before the end of the relevant period in paragraph (i) or (ii) above, the Relevant Regulator notifies the Service Provider that it requires additional information from the Service Provider, which the Relevant Regulator has reason to believe may assist the Relevant Regulator to determine whether the variations proposed are consistent with the Approved Reference Tariff Variation Method, the relevant period will be extended by the number of days commencing on the day on which the Relevant

Regulator gave notice to the Service Provider and ending on the day on which the Relevant Regulator receives the additional information from the Service Provider.

- 8.3E The Relevant Regulator may, by notice to the Service Provider before the variation is due to come into effect under section 8.3D, disallow a variation of a Reference Tariff. The Relevant Regulator may disallow a variation only if the Relevant Regulator considers, on reasonable grounds, that the proposed variation is inconsistent with, or not permitted under, the Approved Reference Tariff Variation Method. If the Relevant Regulator disallows a variation because it considers that it is inconsistent with, or not permitted under, the Approved Reference Tariff Variation Method, the Relevant Regulator may specify a variation that is consistent with the Approved Reference Tariff Variation Method. Any such variation comes into effect on the date determined in accordance with section 8.3D.
- 8.3F The Relevant Regulator must publish its reasons for:
- (a) allowing a variation of a Reference Tariff (including if the variation is allowed because of the effluxion of time under section 8.3D);
 - (b) disallowing a variation of a Reference Tariff; or
 - (c) specifying any variation specified by the Relevant Regulator under section 8.3E,
- at the time of allowing, disallowing or specifying that variation.
- 8.3G If a Specified Event occurs and the Service Provider does not serve a notice on the Relevant Regulator as required by section 8.3B(a), then the Relevant Regulator may itself vary the Reference Tariff concerned but only in accordance with the Approved Reference Tariff Variation Method. Any such variation comes into effect on the date specified in, or determined in accordance with, the Access Arrangement. The Relevant Regulator must publish its reasons for any variation of the Reference Tariff made under this section 8.3G at the time of making that variation.
- 8.3H The Relevant Regulator may:
- (a) on application by the Service Provider, grant extensions to any time period in sections 8.3B to 8.3G that applies to the Service Provider; and
 - (b) extend any time period in section 8.3G that applies to the Relevant Regulator.

469. Under these provisions, and in particular section 8.3, while the manner in which a Reference Tariff may vary is a matter for the Service Provider’s discretion, such discretion is subject to “the Relevant Regulator being satisfied that it is consistent with the objectives in section 8.1” of the Code. Therefore, the issue for the Authority’s consideration is whether the manner proposed by AGN in which the Reference Tariffs may vary is consistent with the section 8.1 objectives.

Tariff basket form of price control

470. AGN has proposed a tariff basket price cap approach for the variation of Reference Tariffs during the second Access Arrangement Period⁸⁷. Under this approach AGN

⁸⁷ Proposed revised Access Arrangement, Part B, clause 4.

would have the discretion to vary the structure of Reference Tariffs annually during the second Access Arrangement Period within the $CPI \times (1-X)$ constraint on tariff adjustment.

471. The proposed tariff basket approach would replace the simple price cap approach under the current Access Arrangement, which precluded increases in individual Reference Tariff Components during the first Access Arrangement Period.
472. The details of AGN's tariff basket proposal are set out in paragraphs 3 to 11 of Part B of the proposed revised Access Arrangement.
473. 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, 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.
474. AGN's arguments in support of the adoption of the tariff basket approach are summarised in section 5.2 of the submitted Access Arrangement Information as follows:

AGN has adopted a tariff basket price-cap approach to Reference Tariff variation on the grounds of economic efficiency and compliance with the Code.

Section 8 of the Code sets out the principles to be followed in Tariff variation and section 8.3 provides that as long as a variation policy is consistent with the objectives contained in section 8.1, then this falls within "the discretion of the Service Provider". AGN believes a tariff basket approach is consistent with section 8.1 and notes that such an approach has been both advocated by regulators and applied in other jurisdictions.

There are also strong efficiency arguments for a tariff basket approach which are directly applicable to the section 8.1 criteria:

- **Risk.** AGN faces significant risk in forecasting volumes, with issues such as weather and competition from other energy sources meaning that outcomes may vary considerably from those forecast. Given that revenues are a function of volume and Tariffs, this creates a commercial risk. The tariff basket approach allows this risk to be managed in the most efficient way, by allowing revenues to shift between Reference Services, subject to an overall cap to ensure that AGN is not earning more than its allowable revenue as a result.
- **Variations in Costs.** The cost of providing Reference Services may also vary within an access period. The tariff basket approach allows for Tariff variation to meet these cost changes so that the cost of providing Services continues to track the revenues from those Services. A scenario where costs and revenues diverge is a recipe for inefficiency and runs counter to the principles in section 8.1.

- **Efficient Behaviour by Service Provider.** A tariff basket approach promotes efficient behaviour by AGN in that it does not encourage restrictions or increases to output when it is not efficient to do so.
- **Reduced Cost of Tariff Variation.** It has been suggested that an alternative to a tariff basket approach is that a Service Provider can trigger a revision at any time and that therefore Tariff variation can be dealt with in this way should they be necessary. However, this ignores the very significant costs involved in a reset – costs which ultimately are borne by Users. AGN believes that the tariff basket approach provides a much more cost-effective approach to Tariff variation.

475. The Authority notes that the forms of price control adopted by regulators for gas and electricity distribution businesses throughout Australia include the tariff basket approach.

476. The tariff basket form of price control has a number of incentive properties that constitute advantages over other approaches, such as simple price caps and the “average yield” form of price control which is another form of rebalancing.

477. The incentive properties of the tariff basket approach were discussed by the Victorian Office of the Regulator General, Victoria, in its *Consultation Paper No. 5, Tariff Basket Form of Price Control: Detailed Proposal*, December 1999.

478. As well as its incentive properties, the Authority notes that the tariff basket form of price control is also regarded as having additional advantages over other forms of price control, including the following:

- Minimisation of complexity – absence of forecasts and correction factors

The constraint on tariff changes under the tariff basket is based on information which is known at the time the tariff basket formula is applied, i.e. tariffs proposed for the coming year, current tariffs and the quantities sold in the year previous to the coming year. There is no need to use forecast quantities, and to apply a correction factor to account for the difference between the forecast and realised quantities (as is necessary under the revenue yield form of price control). The absence of forecasts minimises the complexity of the formula and the workload associated with verifying compliance. It also limits the scope and the incentive for strategic behaviour on the part of the Service Provider, in terms of the under and over-statement of forecasts in order to increase total allowed revenue. Because the weights in the tariff basket approach are determined by realised sales in a past year, there is no uncertainty for the industry or the regulatory agency as to whether or not a proposed set of prices satisfy the constraint⁸⁸.

⁸⁸ Bradley, I. and Price, C., 1988, “The economic regulation of private industries by price constraints”, *Journal of Industrial Economics*, 37(1): 99-106.

There is a concomitant low administrative burden on the Relevant Regulator, limited to verifying known information, and auditing the application of the tariff basket form of control.

- Ease of introducing new tariffs and new tariff components.

New tariffs and tariff components can be readily introduced into the tariff basket control mechanism by making estimates of quantities that would have been sold under the new tariff or tariff components in the base year (for which quantities sold comprise the weights in the tariff basket control formula) if the tariff had been offered to customers.

479. The Authority has also noted a number of potential concerns arising from the adoption of the tariff basket approach.

- Restructuring or rebalancing tariffs in a manner that does not reflect costs and without regulatory review.

To date, no regulator under the Code has made a rigorous assessment of the efficiency of a Reference Tariff by a Service Provider. Regulators have tended simply to satisfy themselves that Reference Tariffs are in excess of the avoidable costs of Service provision and less than stand alone costs. The reasons for this level of assessment by regulators has no doubt included that a determination of efficient price structures requires knowledge of demand elasticities and cost functions – information that is generally not available. Concern that a Service Provider may restructure or rebalance prices without regulatory scrutiny as to whether objectives of cost-reflectivity and efficiency are met should therefore be considered in the context that it is very unlikely that a regulator would or could exercise such scrutiny.

It is for reason of the limited ability of regulators to assess the efficiency of regulated prices that attention has been given to forms of price control such as the tariff basket. The regulatory objective is to provide a means for the Service Provider to itself find and establish an efficient tariff structure.

- Restructuring or rebalancing tariffs for the purposes of “ratcheting” revenue above the level of regulated revenue.

There may be a concern that under the tariff basket form of price control, AGN may rebalance tariffs in such a way as to increase the tariff (or tariff component) for the Service (or component of a Service) for which demand in the forthcoming period is forecast to increase over demand in the base period (i.e. the period for which actual quantities sold are used as the weights in the calculation of weighted average tariffs). The concern applies generally to the potential incentive of the Service Provider to rebalance the tariff so as to increase the tariff or tariff component for which a significant increase in demand is expected.

However, the Service Provider also faces an incentive to raise prices of those service outputs with inelastic demand and lower prices for those Services with more elastic demands. This incentive may or may not coincide with that to increase prices for the Service with the greatest forecast increase in demand. Further, for the Service Provider to increase prices for the Service with the greatest forecast increase in demand, the Service Provider will also need to bear in mind the consequences of the corresponding reduction in the price of another Service. The Service Provider may additionally be exposed to profit risk if any price reduction for another Service results in the price of that Service falling below marginal cost.

- Restructuring or rebalancing tariffs in a manner that is contrary to the enhancement of competition in the supply of gas to small use customers.

In the determination of Reference Tariffs, the Authority has a specific obligation under section 38(2) of the *GPAA* to take into account the fixing of appropriate charges as a means of extending effective competition in the supply of natural gas to residential and small business consumers. The lessening of the estimated retail margins in supply of gas to small business and residential customers (comprising the margins between AGN's associate, AlintaGas Sales, current retail prices of gas and all other costs of gas supply including gas distribution under Reference Services B2 and B3) may be contrary to the extension of effective competition in the supply of gas to these customers. If AGN was to increase Reference Tariffs B2 and B3 substantially then it could, potentially, reduce retail margins available to gas retailers and make entry of gas retailers uneconomic in this section of the market.

Considerations relating to engaging in predatory conduct are very complex. Such considerations include whether or not it would be profitable for AGN to increase Reference Tariffs B2 and B3 at the expense of reductions in other Reference Tariffs, which would depend upon the nature of demand in the different sectors of the market and any potential benefits from engaging in predatory conduct.

- Price uncertainty for Users of the distribution systems and for end-users of gas.

A potential concern with the tariff basket approach may be that the ability of AGN to restructure and rebalance tariffs will create pricing uncertainty for Users and for end-users of gas. This uncertainty may increase transaction costs in contracts for gas supplies and increase commercial risks for gas retailers, possibly resulting in a reduction in growth of gas markets and gas consumption.

Empirical studies of the outcomes of the tariff basket and other forms of price control that allow tariff rebalancing indicates that regulated businesses do not tend to engage in substantial variation of tariffs from year to year. A survey of firms subject to tariff basket price caps in the USA and United Kingdom has found that despite the short term profit incentives for regulated business to do so, price

rebalancing has occurred only to a limited extent. This has been attributed to the influences of other elements of regulatory regimes and more complex government agendas, including distributional concerns over equity in pricing.⁸⁹

480. On balance, the Authority is satisfied that the adoption of the tariff basket form of price control as proposed by AGN is consistent with the efficiency objectives in section 8.1 of the Code.
481. However, the Authority notes that the Code also requires that the portion of AGN's Total Revenue that a Reference Tariff is designed to recover should include a share of costs attributable to providing the Reference Services jointly with other Services in accordance with a methodology that meets the objectives in section 8.1 and is "otherwise fair and reasonable".⁹⁰ The Authority is also mindful of the statutory requirements under section 38(2) of the *GPAA*. Where the form of price control would permit unconstrained rebalancing of Reference Tariffs or adding or removing Tariff Components during the life of an Access Arrangement the Relevant Regulator must, therefore, ensure that any consequential tariff increases reflect an allocation of costs which is "fair and reasonable", and that rebalanced charges are consistent with the extension of effective competition in the supply of natural gas to residential and small business consumers.
482. In relation to rebalancing, the Authority considers it appropriate that the tariff basket provisions be amended to include a constraint which would limit the extent to which any particular Tariff Component may be varied in a single year. 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. The Authority considers that an appropriate constraint would be to limit the amount by which any particular Tariff Component may increase in any one year to 2 percent above the price path for any Tariff Component established by the Reference Tariff adjustment formula. As AGN did not propose any constraint on rebalancing, the proposed revised Access Arrangement did not include any formula for determining the Varied Tariff Components within the constraint which the Authority requires. An appropriate formula for determining the Varied Tariff Components within the constraint may be as follows:

$$TC_t = TC_{t-1} \times CPI_t \times (1-X) \times (1+R_t) \times (1+Y)/(1+R_{t-1})$$

where

⁸⁹ Giulietti, M. and Waddams Price, C., 2004, *Incentive regulation and efficient pricing*, unpublished paper, Aston Business School and University of East Anglia.

⁹⁰ Sections 8.38 and 8.42 of the Code. While these provisions refer to the share of AGN's Reference Tariff revenue between Users (that is retailers or very large customers), whether that share would be considered 'fair and reasonable' will depend at least in part upon the implications for the ultimate end-users.

TC_t – Tariff component for year t

TC_{t-1} – Tariff component for year $t-1$

CPI_t – As defined in clause 9 of Part B of the proposed Access Arrangement

X – Reference Tariff smoothing factor

R_t – Regulatory cost factor for year t

R_{t-1} – Regulatory cost factor for year $t-1$

Y – Variable up to a cap of 2%

483. In relation to adding or removing Tariff Components, the Authority notes that clause 5(b) of Part B of the proposed revised Access Arrangement provides that AGN may “in its discretion...vary the structure of a Tariff by adding or removing one or more Tariff Components (for example without limitation by adding or removing volume bands, or introducing or removing peak and off-peak bands)”. The Authority considers that such discretion has the potential to result in an allocation of costs which may not be “fair and reasonable”, or tariffs which may be inconsistent with the extension of effective competition in the supply of natural gas to residential and small business consumers. The Authority, therefore, proposes not to approve clause 5(b) of Part B.
484. The Authority notes that retailers or prospective retailers in the residential and small business markets, in order to plan effectively to compete in these markets, will require information in relation to any likely material variation in Reference Tariffs under the tariff basket form of price control. The Authority, therefore, considers that the requirements of section 38(2) of the *GPAA* support a requirement that AGN provide in advance information about likely material variations in the structure of Reference Tariffs under the tariff basket approach. To address this issue the Authority requires the proposed revised Access Arrangement to be amended to require AGN to submit, at the time it submits annual Variation Report under clause 11 of Part B of the proposed revised Access Arrangement, a forecast of Tariff Components of Reference Tariffs for 3 years or to the end of the second Access Arrangement Period whichever is the sooner.

Amendment 32

Clause 8 of Part B of the proposed revised Access Arrangement should be amended to include a constraint which would limit the amount by which any particular Tariff Component may increase in any one year to 2 percent above the price path for any Tariff Component established by the Reference Tariff adjustment formula.

Amendment 33

Clause 5(b) of Part B of the proposed revised Access Arrangement, providing AGN with a discretion to add or remove one or more Tariff Components, should be deleted.

Amendment 34

Clause 11 of Part B of the proposed revised Access Arrangement should be amended to include a requirement that, at the time it submits the annual Variation Report, AGN also submits a forecast of Tariff Components of Reference Tariffs for 3 years or to the end of the second Access Arrangement Period whichever is the sooner.

Regulatory Cost pass through

485. Section 8.3(c) of the Code provides a mechanism, the Reference Tariff Control Formula Approach, whereby an initial set of Reference Tariffs may vary over the Access Arrangement Period in accordance with a specified formula or process.
486. AGN has included forecast Regulatory Costs of \$0.7 million p.a. in its forecast Non Capital Costs, in respect of which it proposes a pass through mechanism under which the Reference Tariff price path will be adjusted each year according to variances from forecast.
487. The Regulatory Costs that are to be subject to the pass through mechanism are defined in Schedule 2 to Part A of the proposed revised Access Arrangement:
- Regulatory Costs** means a cost connected or associated with:
- (a) the submission and approval of this Access Arrangement; and
 - (b) AGN's compliance with the Act, the Code, its Distribution Licences, the Energy Coordination Act 1994, the Gas Standards Act 1972, the Energy Operators (Powers) Act 1979, Environmental Protection Act 1986 and all other applicable Laws.
488. Under the proposed amendments in clause 11, Part B, notice of any variation in the form of an annual Tariff Variation Report must be given to the Authority for approval, 30 days prior to the end of each calendar year of the revised Access Arrangement.
489. It is noted that AGN's ability to control the level of Regulatory Costs is limited as they may be affected by regulatory events outside of AGN's direct control.
490. AGN proposes, in Part B clause 8, a Reference Tariff adjustment formula referred to in paragraph 462 above, which is intended to adjust the Reference Tariff for Regulatory Cost variations by inclusion of a Regulatory Cost factor, R. The formula proposed by AGN for determining the R factor is summarised as follows:

$$R_t = \frac{1 + \frac{rc_t}{SR_t}}{1 + \frac{rc_{t-1} * (1 + WACC)}{SR_{t-1}}} - 1$$

where

R_t – Regulatory cost factor for year t

rc_t – Estimated regulatory cost for year t

rc_{t-1} – Estimated regulatory cost for year $t - 1$

WACC – Real pre - tax WACC

SR_t – Escalated approved regulatory revenue for year t

SR_{t-1} – Escalated approved regulatory revenue for year $t - 1$

and

$$SR_t = SREV_t * Inf_t$$

where

$SREV_t$ – Approved regulatory revenue for year t

Inf_t – Accumulated September quarter inflation

491. When modelled by the Authority, AGN’s proposed Reference Tariff adjustment formula, $CPI_t \times (1 - X_t) \times (1 + R_t)$, and the formula for determining the R factor, do not appear to achieve their intended purpose and may require reformulation. AGN was requested to provide additional clarification, however, the response to this request did not resolve the Authority’s concerns.
492. An alternative formulation of the Reference Tariff adjustment formula that might address the Authority’s concerns is as follows:

$$CPI_t \times (1 - X_t) \times (1 + R_t) / (1 + R_{t-1})$$

493. An alternative formulation of the R factor which might address the Authority’s concerns is as follows⁹¹:

$$R_t = (rc_t - frc_t) \times (1 + WACC) / SR_t$$

⁹¹ Costs and revenue in this formula are expressed in dollars at 31 December 2004.

where

R_t – Regulatory cost factor for year t

rc_t – Estimated regulatory cost for year t

frc_t – Approved forecast regulatory cost for year t

WACC – Real pre - tax WACC

SR_t – Approved regulatory revenue for year t

494. In view of the above, the Authority requires the following amendment to the proposed revised Access Arrangement.

Amendment 35

The Reference Tariff adjustment formula, $CPI_t \times (1 - X_t) \times (1 + R_t)$, and the formula for determining the R factor in clause 8 of Part B of the proposed revised Access Arrangement, should be amended so that the formulae achieve their intended purposes.

Trigger Event Adjustment for FRC costs

495. Section 8.3(d) of the Code provides a mechanism, the Trigger Event Adjustment Approach, whereby Reference Tariffs are varied in the manner specified in a Reference Tariff Policy upon occurrence of a Specified Event.
496. AGN has proposed in clause 66 of Part A, a Trigger Event Adjustment Approach that is designed to ensure that AGN can recover unforeseen FRC costs. AGN has included a forecast for FRC costs (\$1.3 million p.a.) in its forecast Non Capital Costs. Capital expenditure associated with FRC is included in the Other Capital category of forecast New Facilities Investment.
497. AGN has proposed that, subject to the Authority deeming that certain criteria have been complied with, Reference Tariffs may be adjusted or a Charge imposed. These criteria are set out in Part B, clause 12(1) in relation to Non Capital Costs incurred by AGN associated with FRC, and in Part B, clause 12(2) in relation to New Facilities Investment associated with FRC.
498. Part B, clause 14 provides that any actual or forecast New Facilities Investment that the Authority deems to comply with the criteria of clause 12(2) shall be considered to meet the requirements of section 8.16 and will be added to the Capital Base at the commencement of the next Access Arrangement Period.
499. It is noted that AGN's ability to control the level of FRC Costs and FRC New Facilities Investment is limited as they may be affected by regulatory events outside of AGN's direct control. However, in considering AGN's proposed Trigger Event Adjustment Approach, the Authority has the following concerns:

- The proposal only provides for a Reference Tariff variation to be triggered in circumstances where FRC Costs and/or FRC New Facilities Investment exceeds forecast. There is no provision for a Reference Tariff variation where such expenditure is less than forecast. The approach proposed by AGN is, therefore, asymmetrical and would be inconsistent with the objectives of sections 8.1(a), (b) and (e) of the Code.
 - The proposal, in clause 14 of Part B, provides for the Authority to make a binding determination that actual or forecast FRC New Facilities Investment will be considered to meet the requirements of section 8.16 of the Code. However, under section 8.21 of the Code, the Authority only has power, during the life of an Access Arrangement, to make a binding determination in relation to this matter, after a public consultation process has been conducted in accordance with the Code. AGN's proposal therefore appears to exceed the Authority's ability to make a binding determination, because it does not make provision for public consultation.
 - The proposed Trigger Event Adjustment Approach gives no recognition to the Regulatory Costs recoverable from Users that may be incurred in triggering a review of Reference Tariffs under this adjustment approach. There is therefore justification for considering a cost threshold below which the Trigger Event Adjustment Approach could not be invoked. The inclusion of an appropriate threshold would be consistent with section 8.1(a), (b) and (e) of the Code.
500. The Authority notes that under section 8.3 of the Code, other Reference Tariff Variation Methods are available, including a Reference Tariff Control Formula approach, which AGN otherwise has proposed be used to adjust for variations in Regulatory Costs from forecast. The Authority notes, further, that under section 8.3 of the Code the manner in which a Reference Tariff may vary within an Access Arrangement Period is a matter for the Service Provider's discretion (subject to the Authority being satisfied that it is consistent with the objectives in section 8.1). An alternative approach, therefore, which AGN may consider to address this issue would be to incorporate FRC cost variations by a similar mechanism to that proposed for addressing variations in Regulatory Costs.
501. In order for the Authority to be satisfied that AGN's proposed Reference Tariff Variation Method is consistent with sections 8.1 and 8.21 of the Code there is a need for clause 66 of Part A, and clauses 12 to 14 of Part B of the proposed revised Access Arrangement to be amended.

Amendment 36

Clause 66 of Part A, and clauses 12 to 14 of Part B of the proposed revised Access Arrangement should be amended to provide for a Reference Tariff Variation Method under section 8.3 of the Code, in relation to FRC Costs and FRC New Facilities Investment, that is consistent with sections 8.1 and 8.21 of the Code.

Use of Incentive Mechanisms

502. Sections 8.44 to 8.46 of the Code make provision for the Service Provider to establish an Incentive Mechanism within the Reference Tariff Policy as follows:

8.44 The Reference Tariff Policy should, wherever the Relevant Regulator considers appropriate, contain a mechanism (an *Incentive Mechanism*) that permits the Service Provider to retain all, or any share of, any returns to the Service Provider from the sale of the Reference Service:

- (a) during an Access Arrangement Period, that exceed the level of returns expected for that Access Arrangement Period, that exceed the level of returns expected for that Access Arrangement Period; or
- (b) during a period (commencing at the start of an Access Arrangement and including two or more Access Arrangement Periods) approved by the Relevant Regulator, that exceed the level of returns expected for that period,

particularly where the Relevant Regulator is of the view that the additional returns are attributable (at least in part), to the efforts of the Service Provider. Such additional returns may result, amongst other things, from lower Non Capital Costs or greater sales of Services than forecast.

8.45 An incentive mechanism may include (but is not limited to) the following:

- (a) specifying the Reference Tariff that will apply during each year of the Access Arrangement Period based on forecasts of all relevant variables (and which may assume that the Service Provider can achieve defined efficiency gains) regardless of the realised values for those variables;
- (b) specifying a target for revenue from the sale of all Services provided by means of the Covered Pipeline, and specifying that a certain proportion of any revenue received in excess of that target shall be retained by the Service Provider and that the remainder must be used to reduce the Tariffs for all Services provided by means of the Covered Pipeline (or to provide a rebate to Users of the Covered Pipeline); and
- (c) a rebate mechanism for Rebatable Services pursuant to section 8.40 that provides for less than a full rebate of revenues from the Rebatable Services to the Users of the Reference Service.

8.46 An Incentive Mechanism should be designed with a view to achieving the following objectives:

- (a) to provide the Service Provider with an incentive to increase the volume of sales of all Services, but to avoid providing an artificial incentive to favour the sale of one Service over another;
- (b) to provide the Service Provider with an incentive to minimise the overall costs attributable to providing those Services, consistent with the safe and reliable provision of such Services;
- (c) to provide the Service Provider with an incentive to develop new Services in response to the needs of the market for Services;
- (d) to provide the Service Provider with an incentive to undertake only prudent New Facilities Investment and to incur only prudent Non Capital Costs, and for this incentive to be taken into account when determining the prudence of

New Facilities Investment and Non Capital Costs for the purposes of sections 8.16(a) and 8.37; and

- (e) to ensure that Users and Prospective Users gain from increased efficiency, innovation and volume of sales (but not necessarily in the Access Arrangement Period during which such increased efficiency, innovation or volume of sales occur).
503. The current Access Arrangement does not make any specific provision for the retention of cost-related efficiency gains beyond the end of the first Access Arrangement Period. AGN has proposed that the revised Access Arrangement should introduce a rolling carry-over mechanism under which cost-related efficiency gains may be retained by AGN for 10 years.
504. AGN's proposal reflects the amendments to section 8.44(b) of the Code which took effect in November 2001, and which expressly provided, for the first time, carry-forward of efficiency gains into future Access Arrangement Periods.
505. The Authority acknowledges that an efficiency carry-over mechanism as contemplated by the amendments to the Code is likely to have superior incentive properties to the approach under the current Access Arrangement. The reasons for this have been outlined by the Office of the Regulator-General, Victoria (**ORG**), as follows:

[O]ne of the benefits of establishing clear incentives for distributors to minimise cost is that it enables the [regulator] to infer that the levels of capital and operating expenditure actually incurred by distributors are efficient. This avoids the need to undertake a detailed assessment of the distributors' expenditure decisions.

The price cap regime applied to Victorian gas distributors automatically rewards distributors for any cost-related efficiency gains within the regulatory period. That is, as prices are fixed for the period, any reductions in expenditure imply higher profits.

However, if the benefits from all efficiency gains are passed on to customers in full at the end of the regulatory period, then the benefit to distributors from an efficiency gain falls throughout the regulatory period. This is because the length of time over which the distributor is able to retain the additional profits associated with that efficiency gain falls. In some instances, distributors may even have an incentive to spend more towards the end of the regulatory period. Hence, a primary issue is to ensure that distributors have a continuing incentive to make efficiency gains throughout the regulatory period, and avoid any perverse incentives.

...[I]n the absence of any offsetting measures, providing distributors with strong incentives to minimise cost may also provide them with a disincentive to expand their distribution systems to meet efficient market growth. This is because where a reward is received for reducing expenditure, it necessarily follows that a penalty is incurred where expenditure is increased, even if that expenditure was undertaken to meet efficient market growth.

To avoid this anomalous outcome...distributors should receive a *reward* for meeting market growth that operated symmetrically to the reward for reducing costs. The combination of the

rewards ensures that distributors always have an incentive to minimise costs (even on projects to meet new demand) and to meet market growth where it is efficient to do so.⁹²

506. Section 3.8 of the submitted Access Arrangement Information describes AGN's proposed Incentive Mechanism in general terms as follows.

A "price path approach" is the Incentive Mechanism nominated in AGN's current Access Arrangement. In AGN's view this approach suffers from a number of deficiencies as an Incentive Mechanism, particularly the low level of incentives it provides for AGN and therefore, reduced User benefit. In Part B of its Access Arrangement, AGN proposes a new Incentive Mechanism to take effect from the Commencement Date.

The key features of this Incentive Mechanism are:

- **Multi-period Incentive Mechanism.** Consistent with the amendments to the Code in November 2001, the proposed Incentive Mechanism will operate for a period of ten years or nominally two Access Arrangement Periods. This ten Year period equates to a 50:50 benefit sharing ratio between Users and AGN, when assessed on a net present value basis and, AGN believes, maximises total User benefit by providing the optimal combination of efficiency incentives and benefit sharing.
- **Rolling Incentive Mechanism.** Efficiency gains made will be retained for the full ten Years, regardless of when in the incentive period they are made. This means AGN will face the same efficiency incentives at the end of the incentive period as at the start. This contrasts with the current situation where, with a static mechanism, incentives are continually eroded with the passage of time. Being able to keep efficiency benefits for ten Years regardless of when they are made clearly establishes different incentives to a static mechanism when only one or two Years efficiencies will be captured if they occur close to the end of the period.

AGN believes this revised Incentive Mechanism is consistent with the Code and with regulatory developments as outlined in section 2.

AGN is proposing this revised Incentive Mechanism on a prospective basis, to operate from the start of the Second Access Arrangement Period. The current Incentive Mechanism contains no provisions for carrying over efficiency benefits to the next Access Arrangement Period. Despite having made significant efficiency gains during the First Access Arrangement Period, AGN at this stage is making no provision for an Incentive Mechanism amount in its Second Access Arrangement financials.

507. More specifically, AGN's proposal is set out in clauses 33 to 36 of Part B of the proposed revised Access Arrangement. The proposal is modelled closely upon the Incentive Mechanism approved by the ESC for the three major Victorian gas distributors in 2002, with the major exception that the carry-over period approved by the ESC was 5 years, whereas AGN has proposed 10 years.

⁹² Office of Regulator-General, Victoria, September 2001, *2003 Review of Gas Access Arrangements – Position Paper*, p 71.

508. The key features of AGN's proposal are as follows:

- the carry-over of efficiency gains made in the second Access Arrangement Period in relation to both capital and Non Capital Costs for 10 years: clause 34(1)(b);
- no express provision for negative carry-overs (i.e. carry-over of net efficiency losses as opposed to net efficiency gains into future regulatory periods);
- no claw-back of gains made or losses incurred by AGN during the second Access Arrangement Period: clause 34(2);
- for Non Capital Costs, the efficiency gain or loss in any year is related to movements in the level of Non Capital Costs and assumed productivity gains as reflected in forecasts of Non Capital Costs: clauses 34(4) and (5);
- for capital expenditure (New Facilities Investment), the efficiency gain or loss in any year is related to movements in financing costs and benchmark assumptions for capital expenditure: clauses 34(3) and (6);
- a mechanism to address the unavailability in the last year of the second Access Arrangement Period of information about actual expenditure in that year for the purposes of calculating the carry-forward amount to apply for the third Access Arrangement Period: clauses 35(1) and (2); and
- the calculation of efficiency gains to be carried forward into future regulatory periods after adjustments to reflect differences between actual and forecast growth, and any changes in the scope of AGN's obligations: clauses 35(3)(a) to (c).

Length of carry-over period

509. An important issue is the length of any carry-over of any efficiency gains into future regulatory periods. AGN has proposed that efficiency gains be carried over for 10 years after they have been earned. The Authority has not received any submissions in relation to AGN's Incentive Mechanism proposal, including the proposed 10-year carry-over period.

510. On 17 May 2004, the Authority released a discussion paper, *Incentive Mechanisms for Code Regulated Pipeline Systems*, prepared by Farrant Consultancy Pty Ltd (**Farrant Discussion Paper**). The Farrant Discussion Paper provided support for the adoption of a 5-year rolling carry-over mechanism confined to efficiencies achieved in relation to Non Capital Costs. The Farrant Discussion Paper raised a number of issues in respect of any carry-forward of efficiencies in relation to capital expenditure.

511. The Authority received five submissions on the Farrant Discussion Paper. In respect of the length of the carry-over period:

- AGN supported a 10-year carry-over and that gains or losses would not be carried forward unless “adjustments are made to account for scope changes” and are related “principally to factors within the control of the company”; and
- Western Mining Corporation supported a 5-year carry-forward period for savings in only Non Capital Costs that are attributable to the actions of the Service Provider, but suggested that the Relevant Regulator should have flexibility to award carry-over for 10 or more years for exemplary performance.

512. The Authority notes the following regulatory outcomes in respect of the use of Incentive Mechanisms under the Code⁹³:

- The ESC has approved a five-year rolling efficiency carry-over mechanism in its October 2002 final decision for the three major Victorian gas distribution systems for both capital and Non Capital Costs.
- AGL’s Central West System in New South Wales and the Amadeus Basin to Darwin System both have 10-year Access Arrangement Periods with retention of benefits only to the end of the period.
- Envestra’s SA Distribution System has a 5-year Access Arrangement Period with retention of variances beyond the end of the first period but to cut off at the end of the second 5-year period.

513. The length of the period of carry-over adopted will affect the proportion of the efficiency gains for AGN and Users respectively. AGN has suggested in section 3.6 of the submitted Access Arrangement Information that a 10-year carry-over period will result in a 50:50 benefit sharing ratio between Users and AGN.

514. The Authority notes the comments of the ESC in relation to this issue as follows⁹⁴:

[T]he Commission has previously noted that the trade-off inherent in designing the efficiency carryover mechanism is one between the size of the efficiency gain achieved, and the proportion (and timing) of that gain which is passed through to consumers. There is no pre-determined ‘optimal’ sharing of gains, and the design of the carryover mechanism must therefore be partly a matter of judgment. However, under reasonable assumptions, 50 per cent would be the *maximum* share consistent with providing optimal incentives, and there are reasonable grounds for thinking that the optimal sharing ratio would be less than this, not least the recognition of the allocative efficiency implications associated with the carryover mechanism.

⁹³ Farrant Discussion Paper, p 40.

⁹⁴ Essential Services Commission, July 2002, *Review of Gas Access Arrangements: Draft Decision*, p. 118.

515. The Authority considers that the Code provisions of section 8.44 to 8.46 are consistent with the approach outlined by the ESC referred to in paragraph 514 above. In particular, section 8.44 of the Code provides that the Authority may, where it considers “appropriate”, approve an Incentive Mechanism that permits the Service Provider to retain “all, or any share of,” any returns that exceed the level of returns expected. Further, section 8.46 of the Code provides that an Incentive Mechanism should be designed with a view to achieving objectives as follows:
- providing the Service Provider with “an incentive” to engage in certain conduct consistent with the efficiency objectives of the Code: sections 8.46(a) to (d); and
 - ensuring that Users and Prospective Users gain from increased efficiency: section 8.46(e).
516. The Code provisions, therefore, 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.
517. Taking into account all of the above, and in particular the regulatory outcomes as to efficiency sharing arrangements in other jurisdictions, the Authority considers that a 5-year carry-over period is appropriate. The Authority therefore requires the proposed Incentive Mechanism to be amended accordingly.

Treatment of negative carry-overs

518. Clause 34(1)(b) of Part B of the proposed revised Access Arrangement provides for a carry-over under which AGN will retain “the reward” associated with efficiency gains during the second Access Arrangement Period. The Authority considers that it is unclear whether provision is being made for the carry-over of any net efficiency losses which may have accrued at the end of the second Access Arrangement Period.
519. AGN’s proposal with respect to carry-over at the end of the relevant Access Arrangement Period is worded consistently with the Access Arrangements approved in 2002 by the ESC for the three major gas distribution companies. In that review, while noting that negative carry-over is permitted under the Code the ESC accepted the gas distributors’ proposal that there not be an automatic carry-over of net efficiency losses into the next period. Accordingly, the ESC approved the gas distributors’ proposals on the condition that the ESC would retain discretion in determining the treatment of any accrued negative carryover amount at the end of future access arrangement periods.
520. The Authority regards the ESC’s approach as an appropriate means of addressing the possibility of an accrued net efficiency loss at the end of the second Access Arrangement Period. The Authority requires 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.

Activities covered by Incentive Mechanism

521. A further issue relevant to the design of an “appropriate” Incentive Mechanism is which activities should be covered by the efficiency carryover mechanism.

522. The only activities which AGN has sought to exclude from the efficiency carryover mechanism are those related to FRC. Clause 13 of Part B of the proposed revised Access Arrangement provides:

The impact of the FRC Costs and FRC New Facilities Investment under Part B, clause 12 shall not be taken into consideration when determining AGN’s performance in relation to any efficiency or incentive mechanisms.

523. Further, as Regulatory Costs are proposed to be the subject of annual variation under section 8.3 of the Code, there should not be any variations in costs to be carried over.

524. The Authority notes that the Farrant Discussion Paper at section 6.1.3 explored issues in relation to allowing carry-forward of efficiency gains/losses for capital expenditure as well as for Non Capital Costs. The Farrant Discussion Paper stated at Conclusion 6.17 that:

A price path Incentive Mechanism that provides in the calculation of Total Revenue for carry-forward of variances to return for the Service Provider arising from non capital expenditure is likely to be an enhancement beneficial to all stakeholders, compared to a simple price path Incentive Mechanism with no carry-forward. It is less clear that introducing a carry-forward arising from capital expenditure will ultimately be beneficial to all stakeholders.

525. In relation to the carry-forward of efficiency gains relating to capital costs the Authority notes that:

- There may not be suitable benchmarks to establish adjustments based upon changes in scope of capital works other than for consumer-driven core business activities such as connections at the small use customer end of the market (which activities are provided for by AGN under the User Initiated Capital category of New Facilities Investment). In relation to this matter, the ESC found that for the three major gas distribution systems the connection activity is customer-driven and an essentially continuous and routine activity for which the timing of expenditure should not become an issue and for which reasonably reliable cost benchmarks (on a unit connection basis) should be feasible⁹⁵.
- The application of an Incentive Mechanism is complicated by the process by which New Facilities Investment is carried forward to a new Access Arrangement

⁹⁵ Essential Services Commission, July 2002, *Review of Gas Access Arrangements: Final Decision*.

Period through the Capital Base carry-forward process under the Code. The difficulties of this process are that it has the potential to create perverse incentives.

526. In relation to Non Capital Costs, as AGN has a limited ability to control FRC and Regulatory Costs it is not clear that such costs are appropriately included as part of an Incentive Mechanism.
527. On balance, the Authority considers it appropriate to include in the efficiency carry-over mechanism all Non Capital Costs, excluding FRC and Regulatory Costs, and only New Facilities Investment in the User Initiated Capital category, to the extent that appropriate benchmark unit costs for this category are provided as an amendment to the submitted Access Arrangement Information.

Treatment of efficiency gains or losses in the last year of the second Access Arrangement Period

528. Clauses 35(1) and (2) of Part B of the proposed revised Access Arrangement seeks to address the practical problem of how to calculate the amounts (if any) to be carried forward into the third Access Arrangement Period during the last year of the second Access Arrangement Period, when the actual expenditure for the last year will not yet be known.
529. Clauses 35(1) and (2) as proposed by AGN are identical to the provisions approved by the ESC for the three major Victorian gas distributors which were intended to address this practical problem. The mechanism as approved by the ESC is intended to operate as follows:

As information on the expenditure in the last year of the current regulatory period would not be available when new price controls are determined, the combination of the carryover and the new expenditure benchmarks would be designed to place the distributors in the same situation as if the [regulator] had information about those expenditures.⁹⁶

530. The precise mechanism proposed by AGN (and the mechanism approved by the ESC) provides for an assumption to be made that AGN makes no efficiency gain or loss relative to forecast in the final year of the second Access Arrangement Period, and that the relevant expenditure benchmark for any carryover mechanism that is to apply in the third Access Arrangement Period are to be adjusted to reflect the actual efficiency gain or loss in the final year of the second Access Arrangement Period. Through this mechanism it is said in clause 34 of Part B that AGN will be provided with “precisely the same reward” as if the last year’s expenditure was known.
531. The Authority has considered the proposed adjustment mechanism. The Authority notes that AGN has not provided in the proposed revised Access Arrangement or in the submitted Access Arrangement Information any illustration of how the mechanism is intended to work, and therefore how the mechanism will operate in

⁹⁶ ORG, September 2001, *2003 Review of Gas Access Arrangements: Position Paper*, p 73.

practice to ensure that AGN will be provided with “precisely the same reward” as if the last year’s expenditure was known. In particular, the Authority considers that it is unclear precisely how the adjustment to the expenditure benchmarks for the third Access Arrangement Period is intended to be made (e.g. whether the adjustment is intended to apply both to the forecasts for Non Capital Costs as well as for calculating the efficiency carry-over; whether the adjustment is to apply for each year of the third Access Arrangement Period). The Authority also notes that the adjustment mechanism for the last of the Access Arrangement Period appears only to apply to gains and not to losses, unlike other years.

532. In the circumstances, the Authority is not satisfied that the proposed adjustment mechanism is appropriate for inclusion in an Incentive Mechanism under section 8.44 of the Code. The Authority therefore requires amendments which will provide an appropriate mechanism, which should expressly apply to both efficiency gains or losses, for determining the efficiency carry-over for the final year of the second Access Arrangement Period. Such amendments could include:

- to propose a mechanism which would enable the use of estimated efficiency gains or losses for the final year of the revised Access Arrangement, that may be updated prior to the Final Decision for the third Access Arrangement Period, so as to provide a best estimate; or
- to clarify how the proposed adjustment mechanism is intended to operate, including to illustrate how the mechanism will operate to ensure that AGN will be provided with “precisely the same reward” as if the last year’s expenditure was known.

Required amendments

533. In order for the Authority to be satisfied that AGN’s proposed Incentive Mechanism is an appropriate mechanism for the purposes of sections 8.44 to 8.46 of the Code there is a need for clauses 33 to 36 of Part B of the proposed revised Access Arrangement to be amended.

Amendment 37

Clauses 35 of Part B of the proposed revised Access Arrangement should be amended to provide for an Incentive Mechanism that provides for a rolling carry-over mechanism of no longer than five years.

Amendment 38

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended 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.

Amendment 39

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended to confine the carry-over mechanism for New Facilities Investment to User Initiated Capital and amends the submitted Access Arrangement Information to include appropriate benchmark unit costs for this category.

Amendment 40

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended to provide for an Incentive Mechanism that excludes from the carry-over mechanism those FRC and Regulatory Costs over which AGN has limited or no control.

Amendment 41

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended to provide for an Incentive Mechanism that provides an appropriate mechanism, which should expressly apply to both efficiency gains or losses, for determining the efficiency carry-over for the final year of the second Access Arrangement Period.

*Other charges for Reference Services*User Specific Delivery Facilities

534. User Specific Delivery Facilities are defined in Schedule 2 of Part A of the proposed revised Access Arrangement as follows:

User Specific Delivery Facilities means:

- (a) a Meter which is not a Standard 6 m³/hr Meter or a Standard 12 m³/hr Meter;
- (b) Service Pipe from the main to the Delivery Point;
- (c) a User Specific Pressure Regulator;
- (d) any ancillary pipes and equipment; or
- (e) in the case of Reference Services A1 and A2, also includes Telemetry;

being the facility or facilities which are the most appropriate for that User, as determined by AGN as a reasonable person.

535. Reference Tariffs A1 and A2 each include a User specific charge which “reflects the costs to AGN of providing the User Specific Delivery Facilities under the Haulage

Contract.”⁹⁷ The cost of providing User Specific Delivery Facilities are therefore recovered directly from the User, rather than being included in Reference Tariffs for all Users. For this reason, AGN has excluded the cost of User Specific Delivery Facilities from the value of the Capital Base.

536. The capital costs which AGN may recover from Users under the User specific charge in Reference Tariffs A1 and A2 are costs calculated “using the pre-Tax nominal weighted average cost of capital specified in the Access Arrangement Information as amended from time to time” (see clause Clause (3)(d)(ii) of Schedule 1 and clause (3)(c)(ii) of Schedule 2 of Part B of the proposed revised Access Arrangement).
537. It is noted that the Authority has required in Amendment 22 that the submitted Access Arrangement Information should be amended to accord with the Authority’s Draft Decision regarding the Rate of Return. Accordingly, the appropriate WACC for calculating the User specific charge will be included in the revised Access Arrangement Information.

Pro-rating of User Specific and Usage Charges

538. WPC has submitted that the proposed revised Access Arrangement at clause (4), Part B of Schedule 1 does not make it clear what the financial impact is of pro-rating the User specific charge across a lesser period than one year.
539. Clause (3)(d) sets out the manner in which the User specific charge for User Specific Delivery Facilities is to be calculated, and provides for the charge to be an amount per day. The reference to determination on a per day basis would therefore appear to resolve any uncertainty as to the manner in which the charge will be pro-rated and its financial impact.

Pro-rating for Reference Tariffs A2 and B1

540. WPC has submitted that the Reference Tariffs for A2, B1 and B2 customers at Part B, Schedules 2, 3 and 4 of the proposed revised Access Arrangement are too vague “[p]articularly when attempting to understand what constitutes gas flow through a customer meter”.
541. AGN’s proposed Reference Tariffs A2 and B1 contain a provision under which a User must at the commencement of the Haulage Contract elect whether pro-rating is to be based on 5, 6 or 7 days of gas flow per week. The proposed Reference Tariffs then provide that “the Haulage Contract may specify the basis of the pro-rating and any necessary end-of-Year reconciliations.” The proposed Reference Tariffs for B2 customers do not contain such a provision.

⁹⁷ For Reference Tariff A1, see Schedule 1 of Part B of the proposed revised Access Arrangement, clause (3)(d), and for Reference Tariff A2, see Schedule 2 of Part B of the proposed revised Access Arrangement, clause (3)(c).

542. WPC's concern appears to be that there is potential for discrimination because the basis upon which any "end-of-Year reconciliation" under Reference Tariffs A2 and B1 is to occur is not specified in the proposed revised Access Arrangement but is a matter to be dealt with under the Haulage Contract.
543. As AGN is seeking to place conditions on Reference Tariffs A2 and B1 the Authority considers that any such conditions need to be specified in the revised Access Arrangement so that the Authority may consider whether or not such conditions are reasonable for the purposes of section 3.6 of the Code. Accordingly, the following amendment is required.

Amendment 42

Clause (5) of Schedule 1 and clause (5) of Schedule 2 of Part B of the proposed revised Access Arrangement should be amended to specify the basis of the pro-rating under Reference Tariffs A2 and B1, and the basis of any necessary end-of-year reconciliation.

544. WPC has also commented that if the proposed provisions requiring Users of Reference Services A2 and B1 to elect whether pro-rating is to be based upon 5, 6 or 7 days of gas flow per week are to remain, then AGN must provide historical information about a customer's days of operation to retailers at the outset of the Haulage Contract. However, the information held by AGN about its customer base has commercial value for its customers and the Authority concludes, for the purpose of this Draft Decision, that it is unreasonable to expect this information to be shared by AGN with any other party.
545. It would be reasonable to expect a gas retailer to secure information on future usage rates and continuity of demand from the particular gas consumer. In addition, the gas retailer may address any risk concerning the reliability of forecasts and consequently of the Usage charges to which the retailer might become exposed, in its commercial dealings with that consumer.
546. It is also noted that under FRC the matter of information release concerning consumer usage is now more relevant to information held by REMCo than to that held by AGN. There would appear to be no specific barrier to the particular gas consumer asking REMCo to release historical usage pattern information in relation to itself to a retailer if the consumer saw a need for this in a commercial negotiation with a potential gas retailer.

Delivery Point costs

547. WPC has submitted that "it appears that when consumption reduces to the extent that another tariff may be more suitable, the high fixed costs relating to the original tariff remain." WPC submits that "customers and retailers should not remain responsible for ongoing delivery point costs when a customer ceases to take, or reduces their gas

consumption, by for example, the moving of premises, closure of the business or choosing another retailer.” In view of these comments, WPC proposes that “[a]t the very least there should be an allowance for a range of circumstances, that should they occur, then customers and retailers are released from any obligation to pay any ongoing delivery point costs.”

548. The fixed costs referred to by WPC are the User specific charges for the provision of User Specific Delivery Facilities under proposed Reference Tariffs A1, A2 and B1. Under the proposed revised Access Arrangement AGN’s costs of providing User Specific Delivery Facilities are to be recovered through a monthly charge amortised over the lesser of the duration of the Haulage Contract and the economic life of the User Specific Delivery Facilities.
549. The effect of this proposed provision is to expose the User to a commercial risk in the event that one of the circumstances referred to WPC arises after a Haulage Contract has been entered into and User Delivery Specific Facilities have been installed. As this commercial risk can be managed by the User through contractual arrangements with the gas consumer the Authority is not convinced that any particular amendment to the proposed revised Access Arrangement is required.

Overrun Service and Overrun Charge

550. AGN’s proposed revised Access Arrangement includes a description of a new Overrun Service and Overrun Charge being available to Users of Reference Services A1 and A2. This Service and associated charges apply where a User’s Instantaneous Flow Rate exceeds its Contracted Peak Rate for a Delivery Point.
551. It is noted that while Reference Tariff A1 includes a demand charge applicable to the Contracted Peak Rate, Reference Tariff A2 does not include such a charge.
552. Under the proposed arrangements in Schedules 1 & 2 of Part C, Users of Reference Services A1 and A2 are charged for Overrun Services. AGN proposes Overrun Charges calculated as follows:

$$OC = OSR \times Q_{\text{Overrun}}$$

where:

- OC = the Overrun Charge payable by the User to AGN for the Delivery Point for the month;
- OSR = the “Overrun Service Rate” which is calculated by multiplying the average Reference Tariff applicable under the Haulage Contract for the month by 2; and
- Q_{Overrun} = the total for the month of each gigajoule or part of a gigajoule of Gas that was delivered to the User at the Delivery Point during a period of time in which the User’s Instantaneous Flow Rate exceeded its Contracted Peak Rate.

553. WPC submitted that the introduction of the Overrun Service and Overrun Charge is inappropriate and any overruns “should be managed by the application of an appropriate curtailment policy”.
554. The definition of the Overrun Charge as set out in paragraph 552 above is unclear as to the gigajoules of gas to which the Overrun Service Rate of twice the Reference Tariff is to apply.
555. WPC have commented as follows:
- [W]hen customers exceed their Contracted Peak Rate they usually do so whilst remaining within the capacity of their current metering equipment, for which the customer pays the full value. The customer also pays a standing charge and a demand charge, which we understand covers the cost of Alinta’s fixed assets. For these reasons we are of the opinion that the adoption of an Overrun Service and Charges appears equivalent to “double dipping”. To avoid doubt, the concept of overrun requires further investigation to assess both appropriateness and financial implications.
556. In the case of Reference Tariff A1, which includes a demand charge, an Overrun Charge can provide an appropriate balance of commercial interests between a User and AGN in that a User who contracts for, and pays a demand charge at, a lower peak rate risks incurring overrun charges. On the other hand, for Reference Tariff A2, which does not include a demand charge, the introduction of an Overrun Charge would provide Users with an incentive to over-estimate their Contracted Peak Rate.
557. While the excursion of a single end use customer may have no detrimental impact on the network as a whole, without an effective sanction there is the potential for inefficiency to develop in the system. A suitably structured Overrun Charge has the potential to encourage economically efficient capacity reservation.
558. However, in relation to the Overrun Charge for Reference Tariff A2, the incentive to over-estimate Contracted Peak Rate raises a question as to the appropriateness of this charge. On the other hand, the notification of frequent overruns and a requirement to install a flow control device may nonetheless be appropriate in the case of Reference Tariff A2.
559. AGN proposes in Part C, that for Users of Reference Services A1 and A2, it may in the event of three or more “occasions” per 30 day period or of eight or more per year, notify the User of this fact. If notification is given and an increase in Contracted Peak Rate would not breach the Queuing Policy, the User must elect either to increase its Contracted Peak Rate or have AGN install at the User’s expense a flow control device, and if the User does not so elect within 10 Business Days, AGN may elect on the User’s behalf. Further, if notification is given and an increase in Contracted Peak Rate would breach the Queuing Policy, AGN has a discretion to install at the User’s expense a flow control device.
560. One issue which arises is whether the notification to be given by AGN to a User should be mandatory or discretionary. AGN has proposed that notification be

discretionary. The ability of a User to increase its Contracted Peak Rate or have flow control installed is, however, contingent on AGN exercising its discretion to notify the User. Where overruns are occurring, increasing a User's Contracted Peak Rate or having flow control installed may be more efficient regardless of whether AGN chooses to notify. This raises the question whether a User who is incurring Overrun Charges should have the right to nominate an increase in its Contracted Peak Rate (subject to Queuing Policy) or have flow control installed. This question may be addressed by AGN's proposal being amended by either making notification mandatory in defined circumstances, or conferring a right upon a User who is incurring Overrun Charges to nominate an increased Contracted Peak Rate or having flow control installed.

561. An issue arising from the above concerns the meaning of the word "occasion" which triggers AGN's discretion to notify a User. The word "occasion" could, for example, mean each single instantaneous excursion, or a day in which one or more excursions occur. There is also a need for clarification in relation to the circumstances in which an excursion would count as being an "occasion" such as in the case of where an overrun is out of the control of the User, gas consumer or both. It would also seem appropriate for AGN to provide additional information to the Authority substantiating its choice of "three or more occasions during any 30 day period" and "8 or more occasions during a year" prior to notifying a User.
562. The application of Overrun Charges will generate revenue from Users of Reference Services A1 and A2. It is noted that AGN has not provided any estimates of this revenue stream. An important purpose of Overrun Charges is to encourage economically efficient capacity reservation as distinct from providing an additional revenue source for AGN.
563. Section 10.8 of the Code provides a definition of a Rebatable Service as follows:
- 'Rebatable Service'** is a Service where:
- (a) there is substantial uncertainty regarding expected future revenue from sales of that Service due to the nature of the Service and/or the market for that Service; and
 - (b) the nature of the Service and the market for that Service is substantially different to any Reference Service and the market for that Reference Service.
564. In the circumstances, the Authority considers that the Overrun Service should be provided as a Rebatable Service under the Code and, therefore, the revenue from Overrun Charges exceeding the reasonable cost of providing the Overrun Service should be rebatable in accordance with the provisions of 8.40 of the Code.
565. It is noted that an important purpose of the Overrun Service is to provide the system-wide benefit of encouraging economically efficient capacity reservation. Further, the costs involved in the provision of the Reference Services to which the Overrun Service applies are borne as part of Total Revenue by all Users of Reference

Services. Given these considerations, the Authority considers that under any rebate mechanism it would be appropriate for the net revenue from Overrun Charges to be rebated across all Users of all Reference Services.

566. In relation to the Overrun Service and considering all of the above there is a need for AGN to amend its proposed revised Access Arrangement as specified in the following amendments, in order for the revisions to the Access Arrangement to be approved.

Amendment 43

The definition of the Overrun Charge applicable to clauses 7 to 9 of Schedule 1, and clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement should be amended to clarify the gigajoules of gas to which the Overrun Service Rate of twice the Reference Tariff is to apply.

Amendment 44

The Overrun Charge in relation to Reference Service A2, in clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement, should be deleted.

Amendment 45

The provisions regarding notification of overruns in clauses 7 to 9 of Schedule 1, and clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement should be amended either to make notification mandatory in defined circumstances, or to confer a right upon a User who is incurring Overrun Charges to nominate an increased Contracted Peak Rate (subject to the Queuing Policy) or to have flow control installed.

Amendment 46

The provisions regarding notification of overruns in clauses 7 to 9 of Schedule 1, and clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement should be amended to clarify the circumstances in which an excursion would count as being an “occasion”.

Amendment 47

The proposed revised Access Arrangement should be amended to include a mechanism which complies with section 8.40 of the Code by which revenue from Overrun Charges exceeding the reasonable cost of providing the Overrun Service will be rebated across all Users of Reference Services.

Fixed principles

567. Section 8.47 of the Code provides as follows:

8.47 The Reference Tariff Policy may provide that certain principles are fixed for a specified period and not subject to change when a Service Provider submits reviews to an Access Arrangement without the agreement of the Service Provider. A Fixed Principle is an element of the Reference Tariff Policy that can not be changed without the agreement of the Service Provider (***Fixed Principle***). The period during which the Fixed Principle may not be changed is the Fixed Period (***Fixed Period***).

568. Section 8.48 of the Code provides as follows:

8.48 A Fixed Principle may include any Structural Element, but in assessing whether any Structural Element may be a Fixed Principle regard must be had to the interests of the Service Provider and the interests of Users and Prospective Users. A Market Variable Element can not be a Fixed Principle. The Fixed Period may be for also or part of the duration of an Access Arrangement, but in determining a Fixed Period regard must be had to the interests of the Service Provider and the interests of Users and Prospective Users.

569. Section 10.8 of the Code provides the following relevant definitions:

‘Market Variable Element’ means a factor that has a value assumed in the calculation of a Reference Tariff, where the value of that factor will vary with changing market conditions during the Access Arrangement Period or in future Access Arrangement Periods, and includes the sales or forecast sales of Services, any index used to estimate the general price level, real interest rates, Non Capital Cost and any costs in the nature of capital costs.

‘Structural Element’ means any principle or methodology that is used in the calculation of a Reference Tariff where that principle or methodology is not a Market Variable Element and has been structured for Reference Tariff making purposes over a longer period than a single Access Arrangement Period, and includes the Depreciation Schedule, the financing structure that is assumed for the purposes of section 8.30, and that part of the Rate of Return (calculated pursuant to section 8.30) that exceeds the return that could be earned on an asset that does not bear any market risk.

570. Clause 37 of the Reference Tariff Policy in Part B of the proposed revised Access Arrangement provides as follows:

- (1) In accordance with sections 8.47 and 8.48 of the Code, the following provisions are Fixed Principles:
 - (a) the method of calculation of the Total Revenue as described in Part B, clause 21;
 - (b) the method of forecasting New Facilities Investment under Part B, clause 23;
 - (c) the financing structure that has been assumed for the purposes of determining the Rate of Return in accordance with section 8.30 of the Code;
 - (d) the Depreciation Schedule referred to in Part B, clause 26;
 - (e) the inclusion of FRC costs in Non-capital costs as described in Part B, clause 27(2)(a);

- (f) the method of allocating revenue between Services as described in Part B, clause 28; and (sic)
 - (g) the form of regulation as described in Part B, clause 32; and
 - (h) the incentive mechanism described in Part B, clauses 33-36.
- (2) The Fixed Period is a period of 10 years commencing from the start of the Second Access Arrangement Period.
571. AGN is proposing to vary some Fixed Principles that were part of the Reference Tariff Policy approved under the current Access Arrangement. The Fixed Period set for those Fixed Principles was a period of 10 years from the commencement date of the current Access Arrangement (i.e. 1 January 2000). This proposed revision is being assessed before the expiry of that Fixed Period.
572. It is permissible under the section 8.47 of the Code for AGN to propose as part of the proposed revised Access Arrangement a Reference Tariff Policy which varies or deletes one or more of the existing Fixed Principles that are still within their respective Fixed Period or which adds one or more principles as Fixed Principles.
573. Under section 8.48 of the Code, the Authority has power to approve Fixed Principles which include Structural Elements, but a Market Variable Element may not be a Fixed Principle.
574. In addition, section 8.48 of the Code requires that in assessing whether any Structural Element may be a Fixed Principle the Authority must have regard to the interests of the Service Provider and the interests of Users and Prospective Users.
575. The Authority notes that in relation to certain of the elements of the Reference Tariff Policy which AGN proposes be Fixed Principles the Authority has required amendments as set out in this Draft Decision, for example the Incentive Mechanism at clauses 33-36 of Part B. The Authority's acceptance of Fixed Principles will be subject to AGN proposing relevant amendments that are approved by the Authority.
576. Further, the Authority notes the following aspects of the proposed Fixed Principles which should be addressed by amendments:
- The meaning of the Fixed Principle in clause 37(1)(b) of Part B is unclear because it refers to a method of forecasting New Facilities Investment under Part B, clause 23 when that clause does not include a method of forecasting.
 - The financing structure assumed for the purposes of determining the Rate of Return referred to in clause 37(1)(c) of Part B is not specified.
 - The meaning of the Fixed Principle in clause 37(1)(d) of Part B is unclear because it refers to a Depreciation Schedule under Part B, clause 26 when the content of that clause (as opposed to the heading) does not refer to a Depreciation Schedule, but rather a method of depreciation.

- There is a typographical error in the Fixed Principle in clause 37(1)(e) relating to FRC costs. Further, the intent of the proposed Fixed Principle in relation to FRC costs is unclear, for example is the intent:
 - To refer only to FRC Costs as defined, or is the intent to be wider than this.
 - To recognise FRC Costs as a component of Non Capital Costs, or is the intent that the amount of FRC Costs will be accepted as Non Capital Costs for the third Access Arrangement Period.
- The Authority has accepted, for the first time, the tariff basket form of price control to apply for the second Access Arrangement Period. Until AGN and Users have some experience with this form of price control, the Authority does not regard it as being in their interests to make this form of price control a Fixed Principle beyond the second Access Arrangement Period, as proposed by AGN in clause 37(1)(g) of Part B.

Amendment 48

Clause 37(1)(b) of Part B of the proposed revised Access Arrangement should be amended to clarify the method of forecasting New Facilities Investment to which reference is being made.

Amendment 49

Clause 37(1)(c) of Part B of the proposed revised Access Arrangement should be amended to specify the financing structure assumed for the purposes of determining the Rate of Return.

Amendment 50

Clause 37(1)(d) of Part B of the proposed revised Access Arrangement should be amended to clarify the Fixed Principle that is intended in relation to depreciation.

Amendment 51

Clause 37(1)(e) of Part B of the proposed revised Access Arrangement should be amended to correct a typographical error by amending “Part B, clause 27(2)(a)” to read “Part B, clause 27(2)”, and to clarify the Fixed Principle that is intended in relation to FRC costs.

Amendment 52

Clause 37(1)(g) of Part B of the proposed revised Access Arrangement relating to the tariff basket form of price control should be deleted.

Terms and Conditions

Requirements of the Code

577. Section 3.6 of the Code requires that:

- 3.6 An Access Arrangement must include the terms and conditions on which the Service Provider will supply each Reference Service. The terms and conditions included must, in the Relevant Regulator's opinion, be reasonable.

Access Arrangement proposal

578. Clause 32 of Part A provides that the Terms and Conditions on which AGN will supply each Reference Service are set out in Part C and the Schedules to Part C. However, the Authority considers that terms and conditions upon which it is proposed by AGN that Reference Services will be supplied also include certain of the provisions contained in Part A of the proposed revised Access Arrangement.

579. To satisfy itself that the terms and conditions of proposed Reference Services are reasonable for the purposes of section 3.6 of the Code, the Authority has given consideration to:

- the effect of each of the relevant terms and conditions;
- the submissions on the proposed terms and conditions; and
- the factors set out in section 2.24 of the Code so far as they are applicable.

Continuing terms and conditions

580. In a number of cases, the terms and conditions proposed by AGN upon which Reference Services are to be supplied are either unchanged, or are proposed to be changed in only inconsequential respects, from the terms and conditions approved as reasonable by the Relevant Regulator under the current Access Arrangement.

581. The clauses of the proposed revised Access Arrangement which specify terms and conditions that the Authority considers are reasonable on the basis referred to in paragraph 580 are as follows:

Part A

- Clause 35 – Obtaining details of Medium Pressure/Low Pressure system

Part C

- Clause 5 – Receipt and delivery of Gas
- Clause 6 – Duration

- Clause 9 – Contracted Peak Rate
- Clause 10 – User Specific Delivery Facilities
- Clause 11 – Title to Gas
- Clause 12 – Only user may take, delivery, title and possession of Gas from AGN
- Clause 13 – User’s entitlement to receive Gas is contractual
- Clause 14 – Change in title not to trigger a GST event
- Clause 15 – Gas Quality
- Clause 18 – Commingling permitted
- Clause 19 – Gas losses and Gas consumed by AGN
- Clause 20 – Emergencies
- Clause 21 – AGN to minimise curtailment
- Clause 22 – Curtailment - except clauses 22(1)(a)(vi) & (vii)
- Clause 29 – Use of Gas quality data from other locations
- Clause 30 – Invoicing
- Clause 34 – Pricing if agreement continues beyond end of second Access Arrangement Period
- Clause 37 – Force majeure
- Clause 38 – Default by a party
- Clause 39 – Restructuring or sale of AGN not a default
- Clause 40 – Notice of default
- Clause 41 – When a party may exercise remedy
- Clause 42 – Curtailment for the User’s default
- Clause 43 – Termination
- Clause 45 – Effect of termination

- Clause 47 – No assignment except as provided for in Trading Policy
- Clause 48 – Liability for negligence and default limited to Direct Damage
- Clause 49 – Liability for fraud
- Clause 50 – No liability for indirect damage
- Clause 52 – No liability arising out of any approval by AGN
- Clause 53 – Saving of contractual payments
- Clause 54 – Each limitation separate
- Clauses 60(1) to (3) – Representations and warranties
- Clause 61 – Insurances
- Clause 65 – Confidentiality
- Schedule 1 – Terms and conditions of Reference Service A1 (except the provisions relating to the Overrun Service)
- Schedule 2 – Terms and conditions of Reference Service A2 (except the provisions relating to the Overrun Service)
- Schedule 3 – Terms and conditions of Reference Service B1
- Schedule 4 – Terms and conditions of Reference Service B2 and Reference Service B3
- Schedule 5 – Gas specification table.

Retail Market Rules

582. The Retail Market Rules (**RMRs**) are a set of rules which have been agreed to by industry participants, as part of a Retail Market Scheme (**RMS**), to facilitate the fair and efficient introduction of Full Retail Contestability (**FRC**) for gas customers in Western Australia. As the RMRs and approved Access Arrangements both impact on the relations between Service Providers and Users they may overlap and, therefore, could be inconsistent.
583. Under the proposed revisions to the Access Arrangement, AGN has included a number of terms and conditions which seek to cross-reference RMRs in the Access Arrangement, so as to make those RMRs terms and conditions of the Access Arrangement. In clause 3.9 of the submitted Access Arrangement Information, AGN

has indicated that these proposed revisions are intended to avoid inconsistency between the Access Arrangement and the RMRs in areas of overlap.

584. The terms and conditions of Reference Services in the proposed revisions in Part C which seek to cross-reference RMRs in the Access Arrangement are as follows:
- Sub-clause 16(1) – Gas balancing
 - Clause 26 – Meter Readings
 - Clause 27 – Provision of data
 - Sub-clause 32(1) – Disputed invoices
 - Sub-clause 36(3) – Information exchange
 - Clause 58 – Dispute not a default
 - Clause 64 – Notices and addresses for notices
585. Under section 3.6 of the Code the Authority must be satisfied that these terms or conditions of Reference Services under the proposed revisions to the Access Arrangement are reasonable.
586. The Authority notes that the RMRs have been adopted by agreement by the industry, after lengthy consultation, to govern the introduction of FRC and have statutory recognition under the *Energy Co-ordination Act 1994*. Further, the RMRs are enforceable as between participants, including between Service Providers and Users, in accordance with an agreed compliance regime under the RMRs.
587. One consequence of the RMRs being cross-referenced in an Access Arrangement would be to provide remedies for breach of the Haulage Contract in addition to those remedies which the industry has determined under the RMRs as being appropriate for the enforcement of the RMRs.
588. The Authority is concerned that it could be unreasonable for parties who have agreed to participate in and be bound by an industry process for determining a set of RMRs to find themselves subject to further regulation, through the Access Arrangement, of matters already dealt with reasonably under the RMRs.
589. A further matter of concern for the Authority with respect to the reasonableness of proposed terms and conditions whereby RMRs would be cross-referenced in the revised Access Arrangement arises from the RMRs being subject to an amendment process during the life of an Access Arrangement.
590. The Authority is not satisfied that changes to cross-referenced RMRs during the life of the revised Access Arrangement could, in accordance with the provisions of the

Code, automatically flow on to the Access Arrangement as envisaged by AGN. This is because, under section 2.49 of the Code, the only way to vary terms and conditions of Reference Services contained in an approved Access Arrangement is through the review process provided under section 2 of the Code. The Authority has no power to vary such terms and conditions in any other way.

591. Consequently, whenever cross-referenced RMRs change during the life of the revised Access Arrangement, the effect of section 2.49 of the Code would be to retain application of the RMR that applied as at the date the Access Arrangement came into effect. This consequence would result in uncertainty, at least until the Access Arrangement is amended or revised to clarify that the amended RMR applies. The Authority considers that such uncertainty could result in an unreasonable outcome.
592. The Authority recognises that it will from 31 May 2005, take over from the relevant Minister formal responsibilities with respect to the approval of amendments to the RMRs⁹⁸. In this role the Authority will have some capacity to monitor and enforce the reasonableness of RMRs affecting the Service Provider-User relationship.
593. However, the Authority does not consider that this addresses its concerns about the reasonableness of terms and conditions cross-referenced to the RMRs, because the Authority will be fulfilling a different statutory function in relation to the RMRs, guided by different statutory objectives. For example, it may not be appropriate for the Authority to veto a proposed change to a cross-referenced RMR on the basis that the changed RMR may not be reasonable in the context of the Access Arrangement, having regard to the different statutory objectives under the Code and the *Energy Co-ordination Act 1994*.
594. For all of the above reasons, the Authority is not satisfied that it is reasonable for an Access Arrangement to cross-reference RMRs so as to make the RMRs a term or condition of the Access Arrangement, where the RMRs are subject to separate amendment from time to time. The Authority, therefore, does not propose to approve the revisions to the clauses of the Access Arrangement proposed by AGN which cross-reference RMRs, unless the cross-references are removed.
595. The Authority notes that one way in which AGN could seek to address this draft decision may be to submit proposals for the revisions to the Access Arrangement to include the text as a term or condition of the Access Arrangement, rather than by cross-referencing to the RMRs. Under any such proposal the Authority would have to satisfy itself that the provision is reasonable. If, however, the Authority was to be satisfied that the provision would be reasonable, then the provision would operate regardless of changes in the RMRs. The operation of the Access Arrangement in this way is supported by Rule 403 of the RMRs which provides that in the event of

⁹⁸ See sections 17 to 19 of the *Energy Legislation Amendment Act 2003*.

inconsistency between the Access Arrangement and an RMR, the Access Arrangement takes precedence.

596. Finally, the Authority notes that the difficulties with respect to the inter-relationship between the RMRs and terms and conditions in the Access Arrangement appear to have arisen because the Code was written well before the advent of FRC and RMRs regulating the conduct of market participants in a contestable retail market. Further, other aspects of Access Arrangements, in particular Trading Policy, may be impacted by the advent of the RMS. To overcome the difficulties discussed in this Draft Decision, the Authority notes that Code amendments might be considered in order to better harmonise the RMS and the access regime.
597. The amendments to the proposed revised Access Arrangement required to give effect to the Authority's draft decision are as follows.

Amendment 53

Clauses 16(1), 26, 27, 32(1), 36(3), 58 and 64 of Part C, of the proposed revisions should be amended to remove cross-referencing to the RMS or the RMRs.

Services other than Reference Services

598. The inclusion in AGN's proposed revised Access Arrangement of terms and conditions of the provision of Services other than Reference Services makes it necessary for the Authority to form a view regarding whether an approved Access Arrangement may include such terms and conditions.
599. Section 3.6 of the Code only requires the Authority to form an opinion as to the reasonableness of terms and conditions upon which Reference Services are to be provided.
600. In the present case, AGN has sought to include in the approved Access Arrangement terms and conditions for Services other than Reference Services. Clause 34 of Part A provides:
- The Terms and Conditions on which AGN will supply each Service other than a Reference Service are set out in Part C as a relevant matter in accordance with section 2.29 of the Code.
601. Section 2.29 of the Code provides:
- The Access Arrangement as revised by the proposed revisions may include any relevant matter but must include at least the elements described in section 3.1 to 3.20.
602. The Authority does not accept that terms and conditions of Services which are not Reference Services can be included in an approved Access Arrangement as a relevant matter under section 2.29 of the Code for the following reasons.

603. The Code, in section 3.3, draws a distinction between Services for which a Reference Tariff is required and those for which it is not. Section 3.6 of the Code requires an Access Arrangement to include terms and conditions for Reference Services which the Authority must be satisfied are reasonable.
604. The Code is not, however, explicit about whether an Access Arrangement may include terms and conditions upon which Non-Reference Services are to be provided. AGN takes the view that such terms and conditions may be included in the Access Arrangement as a relevant matter under section 2.29 of the Code. However, unlike Reference Services, the Authority is given no role in assessing the reasonableness of terms and conditions for Non-Reference Services⁹⁹.
605. If AGN's approach is to be accepted, terms and conditions would be included in an Access Arrangement that have not been subject to a reasonableness assessment by the Authority. This outcome is not considered by the Authority as intended under the Code.
606. In particular, section 6 of the Code provides a mechanism for the arbitration of disputes between Prospective Users and Service Providers with respect to the terms and conditions of the provision of Services. This mechanism is put in place should contractual negotiations not result in an agreement.
607. However, in cases where terms and conditions are contained in an approved Access Arrangement, the Arbitrator is bound to apply those terms and conditions in determining the dispute by virtue of section 6.18 of the Code which provides:

Subject to sections 6.19 and 6.20 and to the Queuing Policy contained in the Access Arrangement, the Arbitrator must not make a decision that:

- (a) subject to paragraphs (b), (c) and (d), is inconsistent with the Access Arrangement;
- (b) would impede the existing right of the User to obtain Services;
- (c) would deprive any person of a contractual right that existed prior to the notification of the dispute, other than an Exclusivity Right which arose on or after 30 March 1995;
- (d) is inconsistent with the applicable Queuing Policy; or
- (e) requires the Service Provider to provide, or the User or Prospective User to accept, a Reference Service at a Tariff other than the Reference Tariff.

⁹⁹ Indeed, the only basis for the Authority not to approve an Access Arrangement is because it does not contain one or other of the elements referred to in sections 3.1 to 3.20 of the Code. The Authority considers that it would not be open to it to decline to approve an Access Arrangement because, for example, it is of the opinion that any one or more of the proposed terms or conditions of a Non-Reference Service, is not reasonable.

608. The Authority is of the view that the effect of section 6.18 of the Code is that if an approved Access Arrangement was to contain terms and conditions of Non-Reference Services, then the Arbitrator of a dispute in relation to such terms and conditions would have no ability to determine the dispute on its merits. The Arbitrator would be bound to apply the terms and conditions for Non-Reference Services in the Access Arrangement, even though there would not have been a review by the Authority of the reasonableness of those terms and conditions.
609. In such circumstances, the Authority considers that under the Code terms and conditions of Non-Reference Services are a matter for contractual negotiation subject to the arbitration procedure in Section 6 where agreement is not reached. This is consistent with such Services having been regarded by the Authority as Services for which a Reference Tariff is not required.
610. This conclusion is reinforced by the wording of section 2.29 of the Code, which AGN relies upon to justify the inclusion of terms and conditions for Non-Reference Services. Section 2.29 permits any “relevant matter” to be included in an Access Arrangement. However, terms and conditions for Non-Reference Services are not relevant as such Services are not ones for which a Reference Tariff is required. Further, the Authority has no role under section 3.6 of the Code to assess the reasonableness of the terms and conditions for Non-Reference Services.
611. For these reasons, the Authority does not consider that terms and conditions of Services which are not Reference Services can be included in an approved Access Arrangement as a relevant matter under section 2.29 of the Code.

Amendment 54

Clause 34 of Part A – “Terms and conditions for Services other than Reference Services” - should be amended to remove provision for the inclusion of terms and conditions for Non-Reference Services in the revised Access Arrangement.

612. The Authority considers below other particular terms and conditions proposed by AGN which are affected by this conclusion.

Interconnection service

613. Clause 21(2) of Part A of the proposed revised Access Arrangement states:

The Interconnection Service provides a right to interconnect with the AGN GDS. Subject to Part A, clause 22, the terms and conditions and prices upon which an Interconnection Service will be made available are to be negotiated by AGN and the person to whom that Service is provided.

614. The Authority has concluded that the Interconnection Service is a Service which must be described in the Services Policy of the revised Access Arrangement (see paragraphs 68 to 74 above). However, the Authority has also concluded that the

Interconnection Service is not a Service for which a Reference Tariff is required (see paragraphs 88 to 114 above).

615. In these circumstances, the Authority considers that the terms and conditions of the Interconnection Service are a matter to be determined between AGN and parties interconnecting with the GDS, subject to arbitration under section 6 of the Code in the event that agreement cannot be reached.
616. The Authority notes that the approach AGN proposes in clause 21(2) of the proposed revised Access Arrangement is consistent with the Code, except to the extent that negotiations are made subject to clause 22 which is a term and condition of the Interconnection Service. Further, the proposed revised Access Arrangement also contains a number of other clauses (21(4), 22, 23 and 28(2) of Part A) which the Authority regards as terms and conditions of the Interconnection Service. In the Authority's view, it is not appropriate for the Access Arrangement to specify such terms and conditions.
617. The Authority therefore requires clause 21(2) to be amended so that negotiations for Interconnections Services are not subject to clause 22, and the other provisions of the proposed revised Access Arrangement which are terms and conditions of the Interconnection Service to be deleted prior to approval of the proposed revised Access Arrangement.

Amendment 55

Clause 21(2) of Part A providing that the terms and conditions of the Interconnection Service are to be negotiated should be amended not to be subject to clause 22 of Part A.

Amendment 56

Clause 21(4) of Part A setting out the list of matters with which it is expected that an Interconnection Contract will deal should be deleted.

Amendment 57

Clause 22 of Part A requiring that there be a term of each Interconnection Contract in relation to compliance with the Gas Quality Specifications should be deleted.

Amendment 58

Clause 23 of Part A setting out the requirements for an application for an Interconnection Contract should be deleted.

Amendment 59

Clauses 28(2) of Part A requiring that a Prospective User of an Interconnection Service who is a Pipeline Operator must enter into an Interconnection Contract with AGN should be deleted.

Other terms and conditions of Non-Reference Services

618. Consistent with the reasoning under the heading *Services* other than Reference Services above, the terms and conditions set out clauses 27 to 30 of Part A, and clause 28 of Part C, which extend to both Reference Services and Non-Reference Services, should be amended to confine their operation to Reference Services.

Amendment 60

Clause 27 of Part A – Obtaining access to services – should be amended to confine its operation to Reference Services supplied under a Haulage Contract

Amendment 61

Clause 28 of Part A – Parties required to enter into a Service Agreement – should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Amendment 62

Clause 29 of Part A – Pre-conditions to the provision of Services – should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Amendment 63

Clause 30 of Part A – Obligation to accept and deliver Gas - should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Amendment 64

Clause 28 of Part C – Metering uncertainty - should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Entitlement to sufficient firm capacity on Interconnected Pipelines

619. In both Parts A and C of the proposed revised Access Arrangement, there are inter-related provisions that, if approved, would have the effect of requiring a User to hold firm transportation capacity on an Interconnected Pipeline sufficient to meet the

User's Contracted Peak Usage for each Delivery Point (**sufficient firm capacity**) as a condition of obtaining Reference Services from AGN.

620. Under these provisions, if approved, AGN would also have discretion to refuse or curtail Services if such a requirement is not met at all relevant times.
621. The relevant provisions are as follows:
- Part A, clause 29(2)(b)(iv) – User holding sufficient firm capacity is a pre-condition for a User or a Prospective User to enter a Haulage Contract.
 - Part A, clause 60 - Each Haulage Contract contains a representation and warranty by the User that the User has sufficient firm capacity.
 - Part A, clause 61 - AGN has discretion to make reasonable requests for information from a User for evidence of sufficient firm capacity.
 - Part C, clause 22(1)(a)(vi) – User not holding sufficient firm capacity is a curtailment condition.
622. The Authority's comments below are directed to these terms and conditions in their potential application to Reference Services, and address the issue whether in the opinion of the Authority the terms and conditions are reasonable for the purpose of section 3.6 of the Code.
623. The submitted Access Arrangement Information does not set out AGN's rationale for proposing the terms and conditions relating to the holding of sufficient firm capacity. The evident purpose of the proposed provisions is to protect AGN's legitimate business interests by providing a level of assurance to AGN that parties holding Haulage Contracts are bona fide and have access to gas sufficient to meet the requirements which their Haulage Contracts impose upon AGN to deliver gas at Delivery Points.
624. The Authority nevertheless has concerns in relation to the potential impact of the proposed revised Access Arrangement in relation to the development of competition.
625. The Authority notes that in meeting supply commitments to their customers, Users and Prospective Users of AGN's GDS may seek to avail themselves of a combination of firm, interruptible and spot transmission pipeline capacities. A requirement that prior to entering a Haulage Contract, or at any time thereafter, a User or Prospective User must be able to demonstrate that it can satisfy its contractual commitments to AGN through firm gas transportation capacity could effectively prevent such a User or Prospective User from seeking to make full use of upstream interruptible or spot transportation capacity.

626. Further, the Authority is concerned that the proposed revised Access Arrangement could adversely affect the development of competition by creating a barrier to entry for Prospective Users.
627. In a submission to the Authority dated 14 May 2004, the Office of Energy questioned both the need for these provisions and their reasonableness in view of the potential for the requirement to operate as a barrier to entry affecting competition. A submission to the Authority dated 14 May 2004 from Western Power expressed the view that this requirement for holding of sufficient firm capacity will reinforce a barrier to entry for retailers and hamper competition by acting as a limitation upon customers attempting to exercise their right to choose their gas retailer.
628. The Authority acknowledges that without the requirement for Users to hold sufficient firm capacity on an Interconnected Pipeline, AGN will face a commercial risk. That is, a User may acquire a right to firm capacity on the GDS via a Haulage Contract and then, without the added financial pressure of holding sufficient firm capacity upstream, does not avail itself of all or part of that Reference Service up to the potential of the Contracted Peak Rate. In such a case, AGN will be required to invest in assets sufficient to provide firm capacity on the GDS up to that peak rate, but may be deprived of revenue sufficient to compensate AGN for investment in those assets at the regulatory rate of return.
629. To the extent that AGN faces such a risk, the Authority considers that it may be addressed adequately through the structure of the Reference Tariff, rather than, as is proposed by AGN, by imposing an obligation on Users and Prospective Users in advance to contract for sufficient firm capacity, which may affect the development of competition.
630. The Authority notes that large volume Users supplying consumers under Reference Tariff A1 are already obliged to pay a substantial standing charge in addition to demand and usage charges. The standing and demand charges secure revenue streams irrespective of the utilisation made of the Contracted Peak Capacity at a Delivery Point. In the case of the demand charge this is because this charge is calculated for each day by multiplying the demand charge rate by the User's Contracted Peak Rate. The remaining Reference Services have a Reference Tariff with a lower standing charge and no demand charge.
631. To the extent that AGN has legitimate concerns about under-utilisation by Users of Contracted Peak Capacity to AGN's detriment, it would be open to AGN to seek the Authority's approval to restructure its Reference Tariffs.
632. For the reasons above, the Authority is not satisfied that the proposed clauses requiring Users or Prospective Users to hold sufficient firm capacity on an Interconnected Pipeline are reasonable and requires the following amendments for the proposed revised Access Arrangement to be approved.

Amendment 65

Part A, clause 29(2)(b)(iv) of the proposed revised Access Arrangement should be deleted.

Amendment 66

Part A, clause 60 of the proposed revised Access Arrangement should be deleted.

Amendment 67

Part A, clause 61 of the proposed revised Access Arrangement should be deleted.

Amendment 68

Part C, clause 22(1)(a)(vi) of the proposed revised Access Arrangement should be deleted.

Re-allocation of Reference Services

633. Clauses 17 to 20 of Part A of the proposed revised Access Arrangement propose conferring upon AGN a right to re-allocate a User's Reference Service from that currently being taken by that User (referred to as the Current Reference Service) to another Reference Service (referred to as the Replacement Reference Service).
634. Both the Current Reference Service and the Replacement Reference Service are to be one or other of the Reference Services in the proposed revised Access Arrangement, namely Reference Services A1, A2, B1, B2 & B3, which are described in clauses 12 to 16 of Part A.
635. Under the above provisions, if approved, only AGN would have the right to initiate a re-allocation of a Reference Service under a Haulage Contract. Further, AGN's right to re-allocate a Reference Service, while only available in cases where AGN acts as a reasonable and prudent person in assessing that the quantity of gas to be supplied would fall within the requirements other than for the Current Reference Service, will have effect regardless of whether the User agrees.
636. The Authority received a submission from the Office of Energy which suggested that the Authority ought to consider whether it is appropriate for AGN to have an ability to give notice of a Replacement Reference Service that would take effect regardless of whether the User agrees to the terms of the notice. The Authority did not receive any other public submissions on this issue.
637. In view of the existence of dispute resolution, including binding arbitration, under clauses 55 to 59 of Part C of the proposed revised Access Arrangement, the Authority considers that the interests of Users are reasonably protected.

Receipt Point to be subject of Interconnection Contract

638. Under clause 21(3) of Part A of the proposed revised Access Arrangement it is a requirement that every Receipt Point at which a Related Shipper will, from time to time, deliver gas into the GDS, will be the subject of an Interconnection Contract.
639. Further, clause 8 of Part C of the proposed revised Access Arrangement requires that a Haulage Contract specifies the Interconnection Contract or Contracts submitted to the relevant Receipt Points, and places conditions on the User's right to deliver gas into the GDS at a Receipt Point, namely that there is a current Interconnection Contract between AGN and the owner of the Interconnected Pipeline and no current breach thereof.
640. The effect of these clauses is to impose obligations first, on the owner of an Interconnected Pipeline to enter into an Interconnection Contract with AGN before contracting with a Related Shipper to deliver gas into the GDS and second, on a User to ensure that such an Interconnection Contract is in place, and not in breach, before arranging for gas to be transported through the GDS under a Haulage Contract. However, a User is not a party to the interconnection arrangement between the owner of the Interconnected Pipeline and AGN.
641. A submission has been received from the owner of the DBNGP as an Interconnected Pipeline that, among other things, rejects as unnecessary and inappropriate any requirement under clause 21(3) of Part A for the DBNGP to be the subject of an Interconnection Contract before gas may be delivered to the GDS at the request of a Related Shipper.
642. The Authority has concluded that the Interconnection Service should not be a Reference Service¹⁰⁰. Therefore, the arrangement under which the GDS and a transmission pipeline are interconnected is a matter to be determined between AGN and the owner of the Interconnected Pipeline, subject to arbitration under section 6 of the Code. As the Interconnection Service is not to be a Reference Service, it would be inappropriate for the Authority to approve clause 21(3) of Part A, which requires that an Interconnection Contract be in place before gas is delivered into the GDS.
643. In relation to clause 8 of Part C, the Authority notes that this clause places obligations on Users of the GDS in relation to the arrangements between AGN and the owner of an Interconnected Pipeline. However, Users are not involved in these arrangements. The Authority, therefore, does not consider clause 8 of Part C to be reasonable, because it would require Users to meet obligations in relation to matters outside of their control.
644. Finally, the Authority notes that an equivalent provision to clause 8 is contained in the current Access Arrangement. The Authority recognises that its draft decision not to

¹⁰⁰ See paragraphs 88 to 110 above.

approve clause 8 of Part C involves a reconsideration of the decision taken previously. The Authority has received a submission questioning clause 21(3) of Part A, which in turn has called into question clause 8 of Part C. Having reconsidered the issues in relation to this matter, the Authority requires the following amendment to delete clause 8 of Part C.

Amendment 69

Clause 21(3) of Part A of the proposed revised Access Arrangement should be deleted.

Amendment 70

Clause 8 of Part C of the proposed revised Access Arrangement, concerning Interconnection Contracts, should be deleted.

Changes to terms and conditions through Replacement Schedules

645. Clause 33(1) of Part A of the proposed Access Arrangement provides that AGN may from time to time, with the approval of the Authority, publish one or more Replacement Schedules. Under Schedule 2 to Part A, a Replacement Schedule is defined to be a schedule of terms and conditions for a Reference Service.
646. By clause 33(2) of Part A such Replacement Schedules operate to amend the Access Arrangement. The terms of clause 33(2) are as follows:
- (2) With effect on and from the later of:
 - (a) the date on which the Regulator gives its approval to the Replacement Schedule; or
 - (b) the date specified for this purpose in the Replacement Schedule,

any such approved Replacement Schedule has effect, and is incorporated as a term of a Haulage Contract to which the replacement Schedule relates, in substitution for, as applicable, Part C, or Part C, Schedule 1, 2, 3 or 4 (or if applicable, a Replacement Schedule which had been substituted for Part C, or Part C, Schedule 1, 2, 3 or 4 by an earlier operation of this clause).
647. Section 2.49 of the Code provides
- An Access Arrangement that has become effective may be changed only pursuant to this section 2 or pursuant to the implementation of an Approved Reference Tariff Variation Method provided for in sections 8.3B to 8.3H
648. Sections 8.3B to 8.3H of the Code provide for variations to an approved Access Arrangement without the need for the Authority to undertake the public consultation which applies under section 2 of the Code to all other variations. However, the Approved Reference Tariff Variation Methods provided for in sections 8.3B to 8.3H

are confined to variations to an approved Reference Tariff, and do not extend to variations to approved non-tariff terms and conditions for the supply of Reference Services.

649. In these circumstances, any variation to the approved terms and conditions of Reference Services is subject to the variation procedure prescribed by section 2 of the Code. In relation to review of an Access Arrangement, this procedure is set out in sections 2.28 to 2.48 of the Code. The Authority notes that, subject to section 2.33 of the Code, such procedure includes public consultation and the publication by the Authority of Draft and Final Decisions in relation to each variation.

650. Section 2.33 of the Code provides an exception to the public consultation process in the following terms:

The Relevant Regulator may dispense with the requirement to produce Access Arrangement Information in respect of proposed revisions and may approved or not approve the proposed revisions without consultation with, or receiving submissions from, persons other than the Service Provider if:

- (f) the revisions have been proposed by the Service Provider other than as required by the Access Arrangement; and
- (g) the Relevant Regulator considers that the revisions proposed are not material and will not result in changes to Reference Tariffs or to the Services that are Reference Services.

651. The Authority is of the view that AGN intends the proposed revisions relating to the amendment of the Access Arrangement by publication of Replacement Schedules to be consistent with the provisions of sections 2.28 to 2.48 of the Code (including the provisions of section 2.33 of the Code regarding situations in which public consultation will not be required).

652. The Authority is, however, not satisfied that Prospective Users who propose to enter into a Haulage Contract with AGN will properly understand the intent of clause 33(1) of Part A. Namely, that the approval by the Authority referred to means approval in accordance with the provisions of sections 2.28 to 2.48 of the Code. To remove any uncertainty, the Authority considers that, prior to approval, clause 33(1) should be amended to make clear that the approval referred to is approval by the Authority in accordance with the provisions of sections 2.28 to 2.48 of the Code.

Amendment 71

Clause 33(1) of Part A should be amended to provide that the Authority's approval of Replacement Schedules referred to is approval of a revision to the Access Arrangement in accordance with the provisions of sections 2.28 to 2.48 of the Code.

Definitions and Interpretation

653. Clause 1 of Part C provides that unless the contrary intention appears in the Haulage Contract, the Glossary in Part A of the Access Arrangement will apply to the interpretation of the Haulage Contract.
654. The terms and conditions of the Access Arrangement are incorporated into the Haulage Contract by clause 2 of Part C of the proposed revised Access Arrangement. It is conceivable, therefore, that the Haulage Contract can be used to modify the meaning of a term defined in the Access Arrangement.
655. By operation of clause 1 of Part C, a term redefined in the Haulage Contract would govern the supply of Reference Services pursuant to the Haulage Contract. As redefining a term through an amendment to the Haulage Contract would involve amending the Access Arrangement, such an amendment would need to be made in accordance with the procedure for amending an Access Arrangement under section 2 of the Code. Clause 1 of Part C does not require the section 2 amendment process to be followed. Accordingly, the Authority does not propose to approve clause 1 of Part C.
656. The Authority considers that its concerns relating to clause 1 of Part C can be addressed by removal of the words “[u]nless the contrary intention appears in the Haulage Contract”. Such an amendment would ensure that any changes to the definitions applicable to a Haulage Contract must be subject to the amendment process under section 2 of the Code.

Amendment 72

Clause 1 of Part C of the proposed revised Access Arrangement should be amended to ensure that any changes to the terms defined in the Access Arrangement and applicable in a Haulage Contract are subject to the procedure for amending an Access Arrangement in section 2 of the Code.

657. The Authority also notes that the definitions in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement include definitions which are inconsistent with the definitions in the Code or under the *GPAA*. The Authority therefore requires amendments as follows.

Amendment 73

The definition of “**Code**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition of that term in the Code, that is the definition should refer to the Code as amended from time to time, and not to the Code in force as at the Revisions Submission Date.

Amendment 74

The definition of “**Confidential Information**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 75

The definition of “**Cost of Service**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement, which refers to a section of the Code which has been repealed, i.e. section 8.3(d), should be deleted, and replaced with an appropriate alternative definition.

Amendment 76

The definition of “**Delivery Point**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 77

The definition of “**Developable Capacity**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 78

The definition of “**Gas**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 90(4) of the *GPAA*.

Amendment 79

The definition of “**New Facilities Investment**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 80

The definition of “**Prospective User**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 81

The definition of “**Receipt Point**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Identification of terms of Haulage Contract

658. Clause 2 of Part C provides that:

The terms of a Haulage Contract will be these general terms and conditions as amended or substituted from time to time by AGN and approved by the Regulator.

659. The Authority considers that certain of the provisions contained in Part A – “Principal Arrangements” – also set out terms and conditions upon which it is proposed Services including Reference Services will be supplied. Inconsistently with this, the reference in clause 2 of Part C to “these general terms and conditions” which are to be “the terms of a Haulage Contract” appears to be a reference to the Part C terms and conditions only.
660. That being the case, clause 2 of Part C, if read on its own, could convey the misleading impression that the only terms and conditions in the Access Arrangement which are intended to be incorporated into the Haulage Contract are those contained in Part C.
661. If clause 2 is left as it stands, it could cause confusion as to the intended status of terms and conditions contained in Part A of the proposed Access Arrangement, which it might be said were not intended to be incorporated into the Haulage Contract. Such confusion could be avoided by amending clause 2 of Part C to make it clear that terms and conditions contained in Part A of the Access Arrangement are also intended to be terms of the Haulage Contract.
662. On this basis, the Authority is of the opinion that clause 2 of Part C could operate unreasonably unless it is amended to provide that the terms and conditions of a Haulage Contract are the terms and conditions in both Part A and Part C of the Access Arrangement.
663. Further, it is noted that the approval by the Authority referred to in clause 2 of Part C means approval in accordance with the provisions of sections 2.28 to 2.48 of the Code. To remove any uncertainty, the Authority considers that, prior to approval, clause 2 should be amended to make clear that the approval referred to is approval by the Authority in accordance with the provisions of sections 2.28 to 2.48 of the Code.

Amendment 82

Clause 2 of Part C of the proposed revised Access Arrangement should be amended to provide that the terms and conditions of a Haulage Contract are the terms and conditions in the Access Arrangement, including those in Part A plus the general terms and conditions in Part C.

Amendment 83

Clause 2 of Part C should be amended to provide that the Authority's approval of amendments to the terms of Haulage Contracts is approval of a revision to the Access Arrangement in accordance with the provisions of sections 2.28 to 2.48 of the Code.

Additional terms contained in Haulage Contract

664. Clause 3 of Part C provides that a Haulage Contract may specify other terms and conditions upon which AGN makes the Reference Service available to the User in addition to those set out in Part C.
665. Submissions were received from two parties expressing concerns in relation to this matter.
666. The inclusion of such other terms and conditions in a Haulage Contract would occur without the Authority having had the opportunity to consider whether or not such terms or conditions are reasonable. Under section 3.6 of the Code the terms and conditions for Reference Services must be contained in an Access Arrangement and the Authority must, as the Relevant Regulator, be satisfied that they are reasonable. Therefore, the Authority is not satisfied that clause 3 of Part C is reasonable and requires that the clause be deleted in order for the revised Access Arrangement to be approved.

Amendment 84

Clause 3 of Part C of the proposed revised Access Arrangement, providing for AGN to specify terms and conditions in a Haulage Contract in addition to those specified in an approved revised Access Arrangement, should be deleted.

Security obligations and other relationship matters between AGN and User

667. Under the current Access Arrangement, there is provision for the User to provide one form of security in an amount sufficient to protect AGN's legitimate business interests (see Schedule 7, clause 7(a) thereof).

668. Clause 4(1)(a) of Part C of the proposed revised Access Arrangement amends the provisions relating to this issue. The clause proposed by AGN, if approved, will specify that the form of security is to be a bank guarantee for “at least an amount that is equal to AGN’s reasonable estimate of all fees and charges that will be incurred by the User under the Haulage Contract in the 2 months following the date of estimation, and if necessary a greater amount if, in AGN’s opinion, a greater amount is necessary to protect AGN’s legitimate business interests.”
669. Therefore, if clause 4(1)(a) of Part C is approved in its present form, the criterion for determining the amount of security will change from an objective one (“an amount sufficient to protect AGN’s legitimate business interests”) to one which includes a subjective element (“if, in AGN’s opinion, a greater amount is necessary to protect AGN’s legitimate business interests”).
670. The Authority is of the view that the proposed clause 4(1)(a) of Part C is not reasonable, to the extent that AGN is granted a discretion to determine an increase in the amount of the bank guarantee which, in AGN’s opinion, is necessary to protect its legitimate business interests. The Authority is also of the view that any unreasonableness in this respect could be addressed by amending the clause to make any increase in the amount of the bank guarantee subject to an objective qualification (e.g. an amount reasonably necessary to protect AGN’s legitimate business interests).
671. The Authority received a submission from CMS which generally questioned the reasonableness of the requirements under proposed clause 4 of Part C that Users provide security and demonstrate capacity to meet financial obligations. However, the Authority is satisfied that these are standard commercial requirements which can operate reasonably to protect the legitimate business interests of a Service Provider. Further, the Relevant Regulator regarded them as reasonable at the time the current Access Arrangement was approved and the Authority is not aware of any evidence that they have operated unreasonably during the first Access Arrangement Period. The Authority therefore concludes that the security requirements under clause 4.1(a), subject to the qualification in paragraph 670 above, are reasonable.
672. Clause 4 of Part C also contains other provisions governing the relationship between AGN and a User, namely that:
- AGN may from time to time require a User to pay amounts owing under a Haulage Contract, demonstrate compliance with AGN’s minimum insurance and prudential requirements and provide evidence of the identity of its Related Shippers;
 - a User must pay the amount of the Reference Tariff even if AGN is unable to provide a Service either because of the User’s act or omission or AGN is otherwise prevented from providing such a Service; and
 - AGN is to have unfettered access to the Meter located at the Delivery Point during the term of the Haulage Contract.

673. None of the submissions received by the Authority addressed these further provisions and the Authority has no reason to consider them not to be reasonable.

Amendment 85

Clause 4(1)(a) of Part C of the proposed revised Access Arrangement should be amended to make the exercise of the discretion by AGN to require further security subject to an objective qualification (e.g. to provide for such further amount as is reasonable to protect AGN’s legitimate business interests).

Unaccounted for Gas

674. Clause 17 of Part C of the proposed revised Access Arrangement provides that AGN will replace gas which is lost while in its “control”.
675. The Authority notes that the word “control” is not used elsewhere in the proposed revised Access Arrangement. In particular, clauses 11 and 12 of Part C, deal with issues of delivery, title and possession of gas in the GDS, and make no mention of the term “control”.
676. The Authority is concerned that there may be scope for uncertainty as to exactly which circumstances give rise to AGN’s obligation to replace unaccounted for gas.
677. The Authority therefore does not propose to approve clause 17 pending an amendment which clarifies AGN’s obligation. The Authority considers that a suitable amendment would be by adding the words “or possession”, which is used in clauses 11 & 12 of Part C, after the word “control” in clause 17.
678. Otherwise, none of the submissions received by the Authority addressed this provision and the Authority has no reason to consider the provision not to be reasonable.

Amendment 86

Clause 17 of Part C of the proposed revised Access Arrangement should be amended to clarify AGN’s obligation to replace lost gas.

Curtailment for system reinforcement

679. Clause 23 of Part C provides for curtailment of Services to the extent reasonably necessary to permit AGN to undertake any Extension or Expansion or maintenance at any time by arrangement with the User, or at least 30 days after giving the User written notice.

680. The current Access Arrangement contains an equivalent clause. However, AGN proposes a revision by which the period of notice to the User of any permitted curtailment is to be reduced from 90 to 30 days.
681. The Authority received a submission from CMS contending that the reduction from 90 to 30 days is unreasonable and commercially unacceptable. CMS provided no substantiation of the basis for this submission.
682. AGN has not indicated in the submitted Access Arrangement Information the grounds for proposing to reduce the notice period, nor has it put forward any evidence that the present notice period is operating unreasonably.
683. The Authority is of the opinion that, subject to any further submissions from AGN or interested parties, clause 23 of Part C is reasonable to the extent that it proposes to reduce the notice period to the User of a curtailment for Extension or Expansion or maintenance from 90 to 30 days.

Metering uncertainty

684. Clause 28 of Part C provides that User Specific Delivery Facilities and Standard Delivery Facilities will be designed, adjusted, operated and maintained so as to achieve the best accuracy of measurement which is technically feasible consistent with the standard of a prudent Service Provider acting efficiently, in accordance with good industry practice, and to achieve the lowest sustainable cost of delivering Services.
685. The Authority received advice in relation to this matter from the Director of Energy Safety (DES), pursuant to the Authority's power to make appropriate use of the expertise of DES under section 37(4) of the *Gas Pipelines Access (Western Australia) Act 1998* as amended. DES advised that the accuracy of metering equipment is subject to provisions contained in the *Gas Standards (Gas Supply and System Safety) Regulations 2000* and that AGN is required to ensure that as a minimum these requirements are complied with.
686. The Authority notes that the *Gas Standards (Gas Supply and System Safety) Regulations 2000* would take precedence over the Access Arrangement in circumstances where there was an inconsistency between the two instruments. However, clause 28 as presently drafted could create the misleading impression that the relevant standard is as expressed in clause 28, even if the application of that standard may fall short of the regulatory requirements. In view of this advice, the Authority is of the opinion that clause 28 of Part C is not reasonable.
687. Further, the Authority considers that this issue could be addressed by the clause noting, for the avoidance of doubt, the existence of the minimum standards under those regulations, which represent standards below which metering services supplied

by AGN must not fall. The Authority therefore requires that AGN appropriately amends clause 28 for the proposed clause to be approved.

Amendment 87

Clause 28 of Part C of the proposed revised Access Arrangement should be amended to note, for the avoidance of doubt, the existence of the minimum standards under the *Gas Standards (Gas Supply and System Safety) Regulations 2000*, which represent standards below which metering services supplied by AGN must not fall.

Payment within 10 Business Days

688. Under the proposed revisions contained in clause 31 of Part C, AGN seeks to reduce its terms of payment from 15 Business Days (which applies under the current Access Arrangement) to 10 Business Days.
689. The Authority received a submission which raised concerns as to the reasonableness and commercial acceptability of this reduction.
690. The Authority is satisfied that the proposed terms of payment of 10 Business Days are consistent with commercial practice. The proposed terms of payment are also consistent with the Authority's amended Draft Decision on the Access Arrangement for Goldfields Gas Pipeline¹⁰¹. The Authority, therefore, considers that the proposed terms of payment of 10 Business Days are reasonable.

Disputed invoices

691. Clause 32(1) of Part C provides that the procedure for disputed invoices under the Retail Market Scheme applies to the Haulage Contract. Clause 32(2) provides for AGN to charge interest upon payments withheld by the User under a disputed invoice where the dispute is subsequently resolved in favour of AGN.
692. The equivalent clause in the current Access Arrangement – clause 17 of Schedule 7 - provides in clauses 17(2) & (3) for the payment of interest by the User and AGN respectively in respect of amounts withheld under the dispute procedure but later found to have been payable. The proposed revisions contained in clause 32 involve retaining the provision for the payment of interest by the User – in clause 32(2) – but removing the previous provision for payment of interest by AGN – clause 17(3). The Authority received a submission that this is unreasonable.

¹⁰¹ Economic Regulation Authority, 29 July 2004, *Amended Draft Decision on the Proposed Access Arrangement for the Goldfields Gas Pipeline*, p 117 (NB: Clause 13.4 of the proposed General Terms and Conditions dated 15 December 1999 provided for payment within 14 days of receipt of an invoice.)

693. The Authority sees no reason why the obligation to pay interest should not be reciprocal as it is under the current Access Arrangement. The Authority therefore requires the proposed revised Access Arrangement to be amended to reflect the provisions of the current Access Arrangement.

Amendment 88

Clause 32(2) of Part C should be amended to reflect the wording of the equivalent clause in the current Access Arrangement, which provides an obligation applicable to both parties for the payment of interest upon amounts reimbursable following dispute resolution in relation to invoices.

Correction of payment errors

694. Clause 33 of Part C of the proposed revised Access Arrangement provides a procedure for payments between the parties to correct overpayments.
695. The Authority received a submission from one party in relation to an alteration to the current provision which deals with the payment of interest upon amounts not paid after notice being given by the payee.
696. The submitting party noted that by clause 33(2) of Part C, AGN has proposed removing the word “party” from the clause and have it replaced with the word “User” resulting in the provision being one-sided. That is, the clause imposes an interest obligation on the User for late re-payment of detected overpayments, but does not subject AGN to the reciprocal obligation.
697. AGN has not put forward in its submitted AAI any explanation for this proposed revision, which would appear to have the potential to disadvantage Users unreasonably.
698. The Authority considers that the proposed clause 33(2) of Part C is unreasonable to the extent that it purports to impose an interest obligation on the User for late re-payment of detected overpayments, but does not subject AGN to a reciprocal obligation. Further, the Authority considers that any such unreasonableness could be addressed by amending the clause to reflect the wording of the equivalent provision in the current Access Arrangement – clause 18, Schedule 7 thereof – which makes the obligation applicable to both parties.

Amendment 89

Clause 33(2) of Part C of the proposed revised Access Arrangement should be amended to reflect the wording of the equivalent clause in the current Access Arrangement, which provides an obligation applicable to both parties for the payment of interest upon subsequently detected over-payments.

Guaranteed Service Level Payments

699. A Guaranteed Service Level (**GSL**) scheme proposed by AGN for small use customers is described in section 3.10 of the submitted Access Arrangement Information.
700. GSL schemes are intended to provide incentives to Service Providers to ensure that the level of service delivered to individual end use consumers is not materially less than the high level of service reliably delivered by the network as a whole. Where the Service Provider fails to deliver prescribed services within predetermined service levels, payments are made by the Service Provider to consumers.
701. Terms and conditions relating to the payments to be made by AGN under its proposed GSL scheme are set out in clause 35 of Part C of the proposed revised Access Arrangement. The proposed amounts to be paid under the GSL scheme are, however, set out in section 3.10 of the submitted Access Arrangement Information.
702. There are no equivalent provisions in the current Access Arrangement or current Access Arrangement Information.
703. The Authority received a submission in relation to proposed clause 35(2) of Part C. This proposed clause provides that:
- If:
- (a) the User receives notification of a matter and the User delays in passing on that notification to AGN; and
 - (b) as a result of that delay, AGN is required to make a payment to a Small Use Customer as a result of failing to satisfy a GSL, then the User must either:
 - (i) reimburse AGN for the payment made to the Small Use Customer; or
 - (ii) if requested by AGN, on its behalf, pay the required payment to the Small User Customer or credit that amount to the Small User Customer's next bill, and AGN is not required to reimburse or credit the User for that amount.
704. The submitting party raised a concern that there is no objective measure in the provision and that the clause must provide for a delay by the User of 2 days to be reasonable.

705. The Authority considers that clause 35(2) of Part C is not reasonable to the extent that it purports to impose an obligation upon the User to reimburse AGN for GSL payments caused by any delay, no matter how minor, in the User giving AGN notice from a Small Use Customer.
706. Further, the Authority is of the view that any such unreasonableness could be addressed by AGN amending the proposed clause to provide a short period (e.g. no more than 2 days) within which the User can pass on the notice to AGN without being required to reimburse any GSL payment by AGN.
707. Accordingly, the Authority requires clause 35(2) of Part C to be amended to provide a reasonable period within which a User may pass on a GSL notice from a Small Use Customer without the User without being required to reimburse any GSL payment by AGN.
708. The Authority notes that proposed clause 35(2)(a) of Part C refers to delay by a User in passing on notification of a “matter” without providing any indication of the types of matters to which the clause applies. The Authority has not received any submissions expressing concerns in relation to this aspect of the proposed clause. In the circumstances, the Authority does not propose to require any amendment in relation to this aspect at this time.

Amendment 90

Clause 35(2) of Part C of the proposed revised Access Arrangement should be amended to provide a reasonable period within which a User may pass on a GSL notice from a Small Use Customer without being required to reimburse any GSL payment by AGN.

Saving of AGN’s other remedies

709. Clause 44 of Part C contains provisions regarding the saving of the parties’ remedies in addition to specific remedies conferred under the Access Arrangement.
710. An equivalent provision is contained in the current Access Arrangement. No submissions have been received by the Authority questioning the operation of the equivalent provision to date, nor the operation of the proposed provision during the second Access Arrangement Period. The Authority therefore has no reason to consider this provision not to be reasonable.
711. The title to this clause is, however, inconsistent with its content which includes saving of the User’s rights and remedies as well as AGN’s.
712. The Authority is of the view that the title of the clause should be amended before approval to conform with its content, so as to avoid uncertainty, by referring to the saving of the parties’, not only AGN’s, other remedies.

Amendment 91

The heading to clause 44 of Part C should be amended to refer to the parties' and not only AGN's remedies, consistent with the content of the clause.

Novation of contracts do not trigger default provisions

713. Clause 46 of Part C of the proposed revised Access Arrangement sets out terms upon which the Haulage Contract may be novated at the User's request. Novation refers to the substitution of a third party as the User under the Haulage Contract.
714. This is a new provision for which there is no equivalent in the current Access Arrangement.
715. The Authority has received a submission contending that this clause is unreasonable for two reasons.
716. The first relates to clause 46(1) which provides that a Haulage Contract may be novated with AGN's prior written consent, which may be withheld if there is an increase in commercial or technical risk to AGN.
717. The submitting party argued that the words "such consent should not be unreasonably withheld" be included, in order to make the provision acceptable to all parties.
718. The Authority understands that commercial contracts commonly provide for consents of this kind to be subject to a requirement that the consent is not to be unreasonably withheld. Further, it is conceivable that a novation may increase AGN's commercial or technical risk, in which case it may be reasonable for AGN to withhold consent.
719. The Authority therefore requires an amendment to ensure that AGN only exercises its discretion to refuse consent when it is reasonable to do so.
720. The second aspect of the submission relates to clause 46(3). This clause provides that "AGN may charge a reasonable fee, in its absolute discretion, to cover AGN's costs associated with assessing whether to grant its consent under Part C, subclause 46(1)."
721. The submitting party contended that clause 46(3) be deleted as it is an unreasonable provision. The submitting party contended that AGN should pay its own costs as part of its own due diligence.
722. There are, however, the following arguments which detract from the force of this submission. First, while there is a reference to AGN having an absolute discretion, this refers to a discretion whether or not to charge the fee, not to the setting of the amount. In fact, the fee must be a "reasonable fee". Second, in relation to who should bear the costs of the necessary enquiries, AGN's costs are occasioned by the User's request to novate. Thus the Authority does not regard it as unreasonable for

AGN to pass on its reasonable costs to the User, just as it is common, and not regarded as unreasonable, for a lessor to be entitled to claim the costs of enquiring as to the suitability of an assignee of a lease.

723. In the circumstances, the Authority considers the provision for AGN to pass on its reasonable costs in relation to a User's request to novate to be reasonable.
724. The Authority did not receive any submissions in relation to the other clause, namely clause 46(2), which provides that a novation of a Haulage Contract is not an event of default of the Haulage Contract and the Authority has no reason to believe this clause not to be reasonable.
725. The Authority is therefore of the opinion that clause 46 is reasonable and should be approved, subject to the addition of words such as "and provided that such consent shall not be unreasonably withheld" at the conclusion of clause 46(1), to ensure that the discretion can only be exercised reasonably.

Amendment 92

Clause 46(1) of Part C of the proposed revised Access Arrangement should be amended to add a requirement that AGN's discretion to withhold consent shall only be exercised in circumstances where it is reasonable to do so.

Indemnity to AGN for liability for indirect damage

726. Clause 50 of Part C provides that neither party to the Haulage Contract shall be liable to each other for any Indirect Damage. Indirect Damage is defined in Schedule 2 to Part A to include consequential loss or damage including without limitation loss of use, production, revenue, income, profits, business or savings, or business interruption, whether or not the consequential loss or damage was foreseeable.
727. Clause 51 of Part C is a new provision for which there is no equivalent in the current Access Arrangement. Clause 51 extends the operation of clause 50 by providing that where AGN is not liable to the User for Indirect Damage by reason of clause 50 of Part C, then if a person (defined as a downstream person) claims against AGN for Indirect Damage either directly or through the User then the User must indemnify AGN for any liability of AGN to the downstream person.
728. The Authority has not received any submissions from Users or Prospective Users who may be affected. In the circumstances, the Authority does not propose an amendment to these clauses.

Making good damage caused in the course of installing delivery facilities

729. Clause 62 of Part C of the proposed revised Access Arrangement is in identical form to the equivalent clause contained in the current Access Arrangement – clause 47,

Schedule 7 thereof. Clause 62(1) provides that AGN will not be liable to pay compensation for, or make good any, damage done to the land or premises of the User or the User's gas customer by AGN in the course of installing User Specific Delivery Facilities or Standard Delivery Facilities, except as otherwise provided for in clauses 62(2) to (6).

730. Clause 62(2) provides that if in the course of installing User Specific Delivery Facilities or Standard Delivery Facilities, AGN opens or breaks up any sealed or paved surface, or damages or disturbs any lawn, landscaping or other improvement, then AGN will if necessary fill in any ground to "restore it to approximately" its previous level.
731. One submission received by the Authority raised concerns in relation to the words "restore it to approximately" in clause 62(2). However, it is unlikely that AGN could ever restore ground opened up to exactly the same state as it was when AGN commenced the installation work.
732. The submission also raised a concern in relation to AGN's liability where repair or reinstatement works are required, as opposed to liability with respect to installation works which are dealt with by clause 62. It is noted, however, that liability in respect of matters other than installing User Specific Delivery Facilities or Standard Delivery Facilities, is subject to the general liability regime under the Access Arrangement (clauses 48 to 54 of Part C).
733. In the circumstances, the Authority is satisfied that proposed clause 62 of Part C is reasonable.

Capacity Management Policy

734. Sections 3.7 and 3.8 of the Code require that an Access Arrangement include a Capacity Management Policy as follows:
- 3.7 An Access Arrangement must include a statement (a *Capacity Management Policy*) that the Covered Pipeline is either:
- (a) a Contract Carriage Pipeline; or
 - (b) a Market Carriage Pipeline.
- 3.8 The Relevant Regulator must not accept an Access Arrangement which states that the Covered Pipeline is a Market Carriage Pipeline unless the Relevant Minister of each Scheme Participant in whose Jurisdictional Area the Pipeline is wholly or partly located has given notice to the Relevant Regulator permitting the Covered Pipeline to be a Market Carriage Pipeline.

735. Contract Carriage is a system of managing third-party access whereby:
- the Service Provider normally manages its ability to provide Services primarily by requiring Users to use no more than the quantity of Service specified in the Contract;
 - Users are normally required to enter into a Contract that specifies a quantity of Service;
 - charges for use of a Service are normally based, at least in part, upon the quantity of Service specified in a Contract; and
 - a User normally has the ability to trade its right to obtain a Service to another User.
736. Market Carriage is a system of managing third-party access whereby:
- the Service Provider does not normally manage its ability to provide Services primarily by requiring Users to use no more than the quantity of Service specified in a Contract;
 - Users are not normally required to enter into a Contract that specifies a quantity of Service;
 - charges for use of Services are normally based on actual usage of Services; and
 - a User does not normally have the ability to trade its right to obtain a Service to another User.
737. Clause 36 of Part A of the proposed revised Access Arrangement provides that AGN will manage the GDS as a Contract Carriage Pipeline.
738. The Code requires no more than a statement in the Access Arrangement that the GDS be a Contract Carriage Pipeline or, subject to Ministerial approval for any proposal for the pipeline to be a Market Carriage Pipeline. As the proposed revised Access Arrangement states that the GDS is to be managed as a Contract Carriage Pipeline, the Authority concludes that the requirements of the Code are met.

Trading Policy

739. Section 3.9 of the Code requires that an Access Arrangement for a Covered Pipeline that is described as a Contract Carriage Pipeline must include a policy that explains the rights of a User to trade its right to obtain a Service to another person (a **Trading Policy**).

740. Section 3.10 of the Code requires that the Trading Policy must comply with the following principles.

- 3.10 (a) A User must be permitted to transfer or assign all or part of its Contracted Capacity without the consent of the Service Provider concerned if:
- (i) the User's obligations under the contract with the Service Provider remain in full force and effect after the transfer or assignment; and
 - (ii) the terms of the contract with the Service Provider are not altered as a result of the transfer or assignment (a *Bare Transfer*).

In these circumstances the Trading Policy may require that the transferee notify the Service Provider prior to utilising the portion of the Contracted Capacity subject to the Bare Transfer and of the nature of the Contracted Capacity subject to the Bare Transfer, but the Trading Policy must not require any other details regarding the transaction to be provided to the Service Provider.

- (b) Where commercially and technically reasonable, a User must be permitted to transfer or assign all or part of its Contracted Capacity other than by way of a Bare Transfer with the prior consent of the Service Provider. The Service Provider may withhold its consent only on reasonable commercial or technical grounds and may make its consent subject to conditions only if they are reasonable on commercial and technical grounds. The Trading Policy may specify conditions in advance under which consent will or will not be given and conditions that must be adhered to as a condition of consent being given.
- (c) Where commercially and technically reasonable, a User must be permitted to change the Delivery Point or Receipt Point from that specified in any contract for the relevant service with the prior written consent of the Service Provider. The Service Provider may withhold its consent only on reasonable commercial or technical grounds and may make its consent subject to conditions only if they are reasonable on commercial and technical grounds. The Trading Policy may specify conditions in advance under which consent will or will not be given and conditions that must be adhered to as a condition of consent being given.

741. Section 3.11 of the Code states that examples of things that would be reasonable for the purposes of sections 3.10(b) and (c) are:

- 3.11 (a) the Service Provider refusing to agree to a User's request to change its Delivery Point where a reduction in the amount of the service provided to the original Delivery Point will not result in a corresponding increase in the Service Provider's ability to provide that service to the alternative Delivery Point; and
- (b) the Service Provider specifying that, as a condition of its agreement to a change in the Delivery Point or Receipt Point, the Service Provider must receive the same amount of revenue it would have received before the change.

742. The Trading Policy proposed by AGN is set out at clauses 37 to 43 of Part A of the proposed revised Access Arrangement under the following headings:

- Transfers or assignments of Capacity (clause 37 of Part A);
- Bare transfers (clause 38 of Part A);

- Other transfers (clause 39 of Part A);
 - Transferor remains liable to AGN (clause 40 of Part A);
 - Change of Receipt Point or Delivery Point (clause 41 of Part A);
 - Examples (clause 42 of Part A);
 - Costs (clause 43 of Part A).
743. With the exception of clause 43 of Part A, which is a proposed new clause dealing with the recovery by AGN of its reasonable costs of enquiries relevant to the granting of consent to a transfer other than a bare transfer, the Trading Policy proposed by AGN is identical to the Trading Policy under the current Access Arrangement.
744. The issue for determination with respect to the proposed Trading Policy is whether it complies with the principles set out in section 3.10 of the Code as set out above. In this respect, the Authority has not received any submissions nor otherwise has it any reason to believe that the proposed Trading Policy does not comply with the relevant principles. Subject to any comments or submissions from Users to the contrary upon this Draft Decision, the Authority does not propose to require any amendment to the Trading Policy.

Queuing Policy

745. Section 3.12 of the Code requires that an Access Arrangement must include a policy for determining the priority that a Prospective User has, as against any other Prospective User, to obtain access to Spare Capacity and Developable Capacity. Section 3.12 also makes provision for a Prospective User to seek dispute resolution under section 6 of the Code where relevant.
746. Section 3.13 of the Code requires that the Queuing Policy must:
- (a) set out sufficient detail to enable Users and Prospective Users to understand in advance how the Queuing Policy will operate;
 - (b) accommodate, to the extent reasonably possible, the legitimate business interests of the Service Provider and of Users and Prospective Users; and
 - (c) generate, to the extent reasonably possible, economically efficient outcomes.
747. Section 3.14 of the Code provides for the Authority to require the Queuing Policy to deal with any other matter the Authority thinks fit, taking into account the matters listed in section 2.24 of the Code.
748. AGN has provided a Queuing Policy at clauses 44 to 52 of Part A of the proposed revised Access Arrangement that is substantially unchanged from the Queuing Policy

in the current Access Arrangement. The only exception is the inclusion of an additional provision at clause 51(2)(c) of Part A.

749. Under the current equivalent of proposed clause 51(1) of Part A¹⁰², the parties may not extend the duration of a Service Agreement or increase a User's Contracted Peak Rate other than in accordance with the Applications Procedure under the Access Arrangement. The proposed new clause 51(2)(c) of Part A provides, in effect, that the requirement in clause 51(1) of Part A does not prevent AGN or a User from exercising any rights under the proposed new Overrun Service under Schedules 1 and 2 of Part C (discussed in paragraphs 550 to 566 above) or the proposed new Replacement Reference Service under clauses 17 to 20 of Part A (discussed in paragraphs 633 to 637 above).
750. The Authority has not received any submissions raising concerns about the proposed Queuing Policy, nor is there otherwise any evidence before the Authority that the Queuing Policy in the current Access Arrangement has not operated in a way consistent with the Code requirements.
751. In the circumstances, the Authority is satisfied that the proposed Queuing Policy complies with the relevant Code requirements.

Extensions/Expansions Policy

752. Section 3.16 of the Code requires that an Access Arrangement include a policy (an **Extensions/Expansions Policy**) which states:
- (a) the method to be applied to determine whether any extension to, or expansion of the Capacity of, the Covered Pipeline:
 - (i) should be treated as part of the Covered Pipeline for all purposes under the Code; or
 - (ii) should not be treated as part of the Covered Pipeline for any purpose under the Code;
 (for example, the Extensions/Expansions Policy could provide that the Service Provider may, with the Relevant Regulator's consent, elect at some point in time whether or not an extension or expansion will be part of the Covered Pipeline or will not be part of the Covered Pipeline);
 - (b) specify how any extension or expansion, which is to be treated as part of the Covered Pipeline, will affect Reference Tariffs (for example, the Extensions/Expansions Policy could provide:
 - (i) Reference Tariffs will remain unchanged but a Surcharge may be levied on Incremental Users where permitted by sections 8.25 and 8.26 of the Code; or
 - (ii) specify that a review will be triggered and that the Service Provider must submit revisions to the Access Arrangement pursuant to section 2.28 of the Code);
 - (c) if the Service Provider agrees to fund New Facilities if certain conditions are met, a description of those New Facilities and the conditions on which the Service Provider will fund the New Facilities.

¹⁰² Current Access Arrangement, clause 55 of Chapter 6.

753. Section 3.16 further provides that the Authority may not require the Extensions/Expansions Policy to state that the Service Provider will fund New Facilities, unless the Service Provider agrees.
754. An Extensions/Expansions Policy is provided by AGN in clauses 53 to 58 of Part A of the proposed revised Access Arrangement. Except for clause 56(2) and clause 58, the provisions are substantially the same as in the current Access Arrangement.
755. The Authority has not received any submissions raising concerns about the proposed Extensions/Expansions Policy, nor is there otherwise any evidence before the Authority that the Extensions/Expansions Policy in the current Access Arrangement has not operated in a way consistent with the Code.
756. The Authority therefore does not propose to require amendments to those parts of the Extensions/Expansions Policy which continue the approach in the current Access Arrangement.
757. The Authority limits its comments below to the revised aspects of the Extensions/Expansions Policy.

Excluded extensions

758. Clause 56(1) of Part A of the proposed revised Access Arrangement provides in relation to excluded extensions as follows:
- AGN may, in its discretion and with the Regulator’s consent, declare that an Extension or Expansion which would otherwise become part of the AGN GDS under Part A, clause 54 is to be an Excluded Extension.
759. This procedure for exclusion of an Extension or Expansion has the effect, as set out in clause 56(4), that the Extension or Expansion is not to be treated as part of the AGN GDS for any purpose under the Code.
760. This exclusion procedure is as contemplated by the example given in section 3.16(a) of the Code, namely:
- (for example, the Extensions/Expansions Policy could provide that the Service Provider may, with the Relevant Regulator’s consent, elect at some point in time whether or not an extension or expansion will be part of the Covered Pipeline or will not be part of the Covered Pipeline)
761. Under the current Access Arrangement (clauses 60(2) and 60(3) of Chapter 7) AGN may, prior to AGN installing Extension or Expansion facilities, request the Authority’s consent to the proposed Extension or Expansion being excluded from the Covered Pipeline.
762. In its proposed revisions (clause 56(2) of Part A), AGN has proposed that the consent given by the Authority to the exclusion of a proposed Extension/Expansion from the Covered Pipeline be binding upon the Authority as follows:

Before undertaking an Extension or Expansion, AGN may make a written request to the Regulator seeking the Regulator's prior consent under Part A, clause 56(1), which consent binds the Regulator in respect of the Extension or Expansion specified in the request.

763. There is no discussion in the submitted Access Arrangement Information explaining AGN's reasons for proposing the revised clause 56(2).
764. Under section 1.40 of the Code, any Extension or Expansion of the Capacity of a Covered Pipeline becomes part of the Covered Pipeline if the Extensions/Expansions Policy under the approved Access Arrangement so provides. Clause 54 of Part A of the proposed revised Access Arrangement provides, in effect, that any Extension or Expansion which is part of, or (for the purposes of gas flow) directly connected with, an existing Sub-network becomes part of the Covered Pipeline, subject to the exclusion procedure in clause 56.
765. A difficulty with AGN's proposed revision to the exclusions procedure is that it appears to prevent coverage of an excluded Extension or Expansion, including through the exercise of the NCC's discretion under section 1.2 of the Code to recommend to the Relevant Minister that an excluded Extension or Expansion be covered by the Code.
766. Further, the Authority notes that under sections 1.22 and 1.23 of the Code, a Service Provider may request an opinion from the NCC as to whether a proposed Pipeline would meet the criteria for coverage, and the NCC may provide an opinion in response. However, such an opinion is expressed in the Code not to bind the NCC in relation to any subsequent application for coverage of the Pipeline.
767. The Authority is not satisfied, for the reasons above, that the revision proposed by AGN is appropriate under the Code. The Authority therefore does not intend to approve the proposed revision to the Extensions/Expansions Policy.

Amendment 93

Clause 56(2) of Part A of the proposed revised Access Arrangement should be amended to remove the words "which consent binds the Regulator in respect of the Extension or Expansion specified in the request".

New connections

768. The proposed revisions include, in clause 58 of Part A, a provision regarding new connections:

New Connections (sic) Where the provision of a Service requires AGN to install Delivery Facilities:

- (a) the Haulage Contract (or another contract) must deal to AGN's reasonable satisfaction with the construction and installation of the Delivery Facilities, including:
 - (i) matters relating to site access, health and safety, standards of work and scheduling of work; and
 - (ii) the User's obligations as to the payment for the installation of the Delivery Facilities;
- (b) subject to Part A, subclause 57(3), AGN may seek a Capital Contribution from the User in respect of the Delivery Facilities;
- (c) for the avoidance of doubt and without limiting Part A, subclause 58(b), AGN may decline to install Delivery Facilities where it is not obliged by a Distribution Licence to install them.

769. Proposed clause 57(3) as referred to in clause 58(b) above provides that

Where AGN is obliged under a Distribution Licence to connect a premises (sic) to the AGN GDS ("Obligation to Connect") AGN will not impose Surcharges or seek Capital Contributions in respect of Standard Delivery Facilities used to provide either Reference Service B2 or Reference Service B3 to the extent that it is required by the Distribution Licence to bear costs under the Obligation to Connect.

770. To the extent that proposed clause 58 of Part A extends to Non-Reference Services, it contains terms and conditions for the provision of such Services. For the reasons outlined at paragraphs 598 to 611 above, it is not appropriate to include terms and conditions of Non-Reference Services in an Access Arrangement and clause 58 of Part A should be amended accordingly.

Amendment 94

Clause 58 of Part A of the proposed revised Access Arrangement should be amended to confine its operation to new connections for the provision of Reference Services under a Haulage Contract.

771. In addition, the Authority notes that the effect of clause 58 of Part A, if approved, would be that for any New Connections within the GDS, AGN would retain discretion to determine whether it will or will not install Delivery Facilities, except where required by the terms of its Distribution Licence.

772. The Authority also notes that the discretion to be conferred upon AGN to decline to install Delivery Facilities is to apply, even in circumstances where:

- the Facilities may be required to provide the Reference Service;
- the Haulage Contract in respect of such Reference Services must deal to AGN's reasonable satisfaction with respect to the construction and installation of Delivery Facilities as to matters such as site access, health

and safety, standards of work, scheduling of work and payment, in accordance with clause 58(a);

- AGN may seek a Capital Contribution from the User in respect of the Delivery Facilities, in accordance with clause 58(b).

773. In such circumstances, the Authority has difficulty in understanding why AGN requires the discretion to decline to install Delivery Facilities, as is proposed by clause 58(c) of the revised Access Arrangement. However, the Authority has not received any submissions on this matter and intends to approve the clause as proposed.

Review and Expiry of Access Arrangement

774. Sections 3.17 to 3.20 of the Code provide as follows:

3.17 An Access Arrangement must include:

- (a) a date upon which the Service Provider must submit revisions to the Access Arrangement (a *Revisions Submission Date*); and
- (b) a date upon which the next revisions to the Access Arrangement are intended to commence (a *Revisions Commencement Date*).

In approving the Revisions Submissions Date and Revisions Commencement Date, the Relevant Regulator must have regard to the objectives in section 8.1, and may in making its decision on an Access Arrangement (or revisions to an Access Arrangement), if it considers it necessary having had regard to the objectives in section 8.1:

- (i) require an earlier or later Revisions Submission Date and Revisions Commencement Date than proposed by the Service Provider in its proposed Access Arrangement;
- (ii) require that specific major events be defined that trigger an obligation on the Service Provider to submit revisions prior to the Revisions Submission Date.

3.18 An Access Arrangement Period accepted by the Relevant Regulator may be of any length; however, if the Access Arrangement Period is more than five years, the Relevant Regulator must not approve the Access Arrangement without considering whether mechanisms should be included to address the risk of forecasts on which the terms of the Access Arrangement were based and approved proving incorrect. These mechanisms may include:

- (a) requiring the Service Provider to submit revisions to the Access Arrangement prior to the Revisions Submission Date if certain events occur, for example:
 - (i) if a Service Provider's profits derived from a Covered Pipeline are outside a specified range or if the value of Services reserved in contracts with Users are outside a specified range;
 - (ii) if the type or mix of Services provided by means of a Covered Pipeline changes in a certain way; or

- (b) a Service Provider returning some or all revenue or profits in excess of a certain amount to Users, whether in the form of lower charges or some other form.

Where a mechanism is included in an Access Arrangement pursuant to section 3.18(a), the Relevant Regulator must investigate no less frequently than once every five years whether a review event identified in the mechanism has occurred.

- 3.19 Nothing in section 3.18 shall be taken to imply that the Relevant Regulator may not approve an Access Arrangement Period longer than 5 years if the Relevant Regulator considers this appropriate, having regard to the objectives of section 8.1.
- 3.20 An Access Arrangement submitted under section 2.3 may include a date at which time the Access Arrangement will expire. If an Access Arrangement submitted under section 2.3 expires, the Covered Pipeline the subject of the Access Arrangement ceases to be Covered on the expiry date. The Service Provider must notify the Code Registrar if a Pipeline ceases to be Covered under this section and the Code Registrar must update the Public Register accordingly.
775. Under Part A, clause 63 of the proposed revised Access Arrangement, AGN has proposed a Revisions Submissions Date of 30 June 2009, and in clause 64, an intended Revisions Commencement Date of 1 January 2010.
776. Under section 3.17(i) of the Code the Authority may, having regard to the objectives of section 8.1 of the Code, require an earlier or later Revisions Submissions Date and Revisions Commencement Date than proposed by AGN.
777. The Authority is satisfied that the intended Revisions Commencement Date proposed by AGN of 1 January 2010 is appropriate. However, the Authority considers that the proposed Revisions Submission Date of 30 June 2009, which would only provide 6 months before the intended Revisions Commencement Date for all stakeholders to make submissions, and for the Authority to consider the proposed revisions, would not allow an adequate period, having regard to the objectives in section 8.1 of the Code. The Authority considers that an appropriate period for submissions and assessment would be not less than 9 months, and requires an appropriate amendment to the proposed revised Access Arrangement.
778. It is noted that on the basis of the Authority's draft decision to accept an intended Revisions Commencement Date of 1 January 2010, the duration of the proposed second Access Arrangement Period is not intended to exceed 5 years. Accordingly, the provisions of sections 3.18 and 3.19 of the Code do not arise for consideration by the Authority.
779. With respect to section 3.20 of the Code, AGN has not proposed an expiry date for the revised Access Arrangement. Therefore, there is no need for the Authority to consider the issue of expiry.
780. The Authority also notes that Schedule 1 of Part A of the proposed revised Access Arrangement includes two specific major events, in relation to higher-than-forecast gas flows, and regulatory and tax changes, which it is proposed by AGN will trigger an obligation on AGN to submit revisions prior to the Revisions Submission Date. In

relation to the trigger event for regulatory and tax changes the Authority notes that AGN has specified in Schedule 1, clause 2(1)(b) values for the forecast total costs for providing Reference Services. There is a need for these values to be amended to accord with the amended values to be included in Table 4.14 of the submitted Access Arrangement Information as required by Amendment 26 in this Draft Decision.

781. The Authority does not consider it necessary, having regard to the objectives in section 8.1 of the Code, to require under 3.17(b)(ii) of the Code that any additional specific major events be defined that trigger an obligation on AGN to submit revisions prior to the Revisions Submission Date.

Amendment 95

Clause 63 of Part A of the proposed revised Access Arrangement should be amended to provide a Revisions Submissions Date of not later than 31 March 2009.

Amendment 96

The values in Schedule 1, clause 2(1)(b) of Part B of the proposed revised Access Arrangement for the forecast total costs for providing Reference Services should be amended to accord with the amended values to be included in Table 4.14 of the submitted Access Arrangement Information as required by Amendment 26 in this Draft Decision.

REQUIRED AMENDMENTS

Services Policy

Amendment 1

The Services Policy should be amended to include descriptions of the Services ancillary to the Reference Services which are likely to be sought by a significant part of the market.

Amendment 2

The proposed revised Access Arrangement should be amended to include Reference Tariffs and terms and conditions for Ancillary Services described in the Services Policy.

Amendment 3

Clauses 24 & 25 of Part A of the proposed revised Access Arrangement should be deleted.

Amendment 4

The term “User” should be defined as in the Code as “a person who has a current contract for a Service or an entitlement to a Service as a result of an arbitration.”

Amendment 5

The proposed revised Access Arrangement should be amended to include provisions, in accordance with the Code, by which Reference Tariffs may recover from all Users of the GDS the costs of heating value management during the second Access Arrangement Period.

Amendment 6

Clauses 16, 17 & 18 of Part B and clause 62 of Part A of the proposed revised Access Arrangement should be deleted.

Amendment 7

Clause 31(c) of Part A of the proposed revised Access Arrangement should be amended to delete the references to clauses 16 to 18 of the proposed revised Access Arrangement.

Amendment 8

Clause 26 of Part A of the proposed revised Access Arrangement should be amended to be consistent with sections 3.2(b) and (c) of the Code.

Reference Tariffs and Reference Tariff Policy

Amendment 9

Clause 22 of Part B of the Reference Tariff Policy in the proposed revised Access Arrangement should be amended to set out the principles used to determine the opening value of the Capital Base at the commencement of the second Access Arrangement Period

Amendment 10

Clause 22 of Part B of the Reference Tariff Policy in the proposed revised Access Arrangement should be amended to clarify whether the value of User Specific Delivery Facilities has been included in actual and forecast New Facilities Investment.

Amendment 11

Table 4.1 of the Access Arrangement Information should be amended to show the values for the assets comprising the Initial Capital Base converted to dollars at 31 December 2004 using the appropriate index value to adjust for inflation.

Amendment 12

Table 4.4 of the Access Arrangement Information should be amended to set out the remaining lives of assets comprising the Initial Capital Base calculated as at 31 December 2004 as set out in Table 2 of this Draft Decision.

Amendment 13

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

Amendment 14

Table 4.2 of the Access Arrangement Information should be amended to reflect the values in Table 4 of this Draft Decision.

Amendment 15

The Access Arrangement Information should be amended to include the values for Depreciation for New Facilities Investment during the first Access Arrangement Period as set out in Table 5 of this Draft Decision.

Amendment 16

The Access Arrangement Information should be amended to include the values for total Depreciation for the first Access Arrangement Period as set out in Table 6 of this Draft Decision.

Amendment 17

Clause 22 of Part B of the proposed revised Access Arrangement should be amended to provide an opening value of the Capital Base of \$658.39 million (dollars at 31 December 2004).

Amendment 18

Table 4.7 of the Access Arrangement Information should be amended to reflect the Authority's calculation of forecast User Initiated Capital as set out in Table 9 of this Draft Decision, and to adjust all other values to dollars at 31 December 2004.

Amendment 19

Table 4.6 of the Access Arrangement Information should be amended to reflect the Authority's calculation of forecast New Facilities Investment by asset class as set out in Table 10 of this Draft Decision

Amendment 20

Table 4.5 of the Access Arrangement Information should be amended to reflect the Authority's calculation of total Depreciation for each year of the second Access Arrangement Period as set out in Table 13 of this Draft Decision.

Amendment 22

The pre-tax weighted average cost of capital referred to at page 49 of the submitted Access Arrangement Information should be amended from 8.5 percent to 6.50 percent.

Amendment 23

The submitted Access Arrangement Information should be amended to include the values as set out in Column 2 of Table 19 in this Draft Decision as the values for determining the Rate of Return for the revised Access Arrangement.

Amendment 24

Table 4.8 of the Access Arrangement Information should be amended to reflect the Authority's calculation of the return on the Capital Base for each year of the second Access Arrangement Period as set out in Table 21 of this Draft Decision.

Amendment 25

Table 4.11 of the Access Arrangement Information should be amended to accord with the forecast Non Capital Costs shown in Table 23 of this Draft Decision.

Amendment 26

Table 4.14 of the Access Arrangement Information should be amended to accord with the Authority's determination of Total Revenue for each year of the second Access Arrangement Period, as set out in Table 24 of this Draft Decision.

Amendment 27

The submitted Access Arrangement Information should be amended to include the information set out in Table 25 of this Draft Decision in relation to prudent discounts.

Amendment 28

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 respectively should be amended to accord with Table 26 of this Draft Decision for the Reference Tariffs to apply for the first year of the second Access Arrangement Period.

Amendment 29

The proposed 2005 Reference Tariffs set out in Tables 3.1 and 3.1A of the submitted Access Arrangement Information should be amended to accord with Table 26 of this Draft Decision.

Amendment 30

The forecast number of B2 and B3 customers connected, as set out in Table 6.5 of the submitted Access Arrangement Information, should be amended to accord with Table 27 of this Draft Decision.

Amendment 31

The X factor referred to in clause 8(2) of Part B of the proposed revised Access Arrangement should be amended from -0.0218 to 0.0396.

Amendment 32

Clause 8 of Part B of the proposed revised Access Arrangement should be amended to include a constraint which would limit the amount by which any particular Tariff Component may increase in any one year to 2 percent above the price path for any Tariff Component established by the Reference Tariff adjustment formula.

Amendment 33

Clause 5(b) of Part B of the proposed revised Access Arrangement, providing AGN with a discretion to add or remove one or more Tariff Components, should be deleted.

Amendment 34

Clause 11 of Part B of the proposed revised Access Arrangement should be amended to include a requirement that, at the time it submits the annual Variation Report, AGN also submits a forecast of Tariff Components of Reference Tariffs for 3 years or to the end of the second Access Arrangement Period whichever is the sooner.

Amendment 35

The Reference Tariff adjustment formula, $CPI_{t,x} (1-X_t) \times (1+R_t)$, and the formula for determining the R factor in clause 8 of Part B of the proposed revised Access Arrangement, should be amended so that the formulae achieve their intended purposes.

Amendment 36

Clause 66 of Part A, and clauses 12 to 14 of Part B of the proposed revised Access Arrangement should be amended to provide for a Reference Tariff Variation Method under section 8.3 of the Code, in relation to FRC Costs and FRC New Facilities Investment, that is consistent with sections 8.1 and 8.21 of the Code.

Amendment 37

Clauses 35 of Part B of the proposed revised Access Arrangement should be amended to provide for an Incentive Mechanism that provides for a rolling carry-over mechanism of no longer than five years.

Amendment 38

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended 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.

Amendment 39

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended to confine the carry-over mechanism for New Facilities Investment to User Initiated Capital and amends the submitted Access Arrangement Information to include appropriate benchmark unit costs for this category.

Amendment 40

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended to provide for an Incentive Mechanism that excludes from the carry-over mechanism those FRC and Regulatory Costs over which AGN has limited or no control.

Amendment 41

Clauses 33 to 36 of Part B of the proposed revised Access Arrangement should be amended to provide for an Incentive Mechanism that provides an appropriate mechanism, which should expressly apply to both efficiency gains or losses, for determining the efficiency carry-over for the final year of the second Access Arrangement Period.

Amendment 42

Clause (5) of Schedule 1 and clause (5) of Schedule 2 of Part B of the proposed revised Access Arrangement should be amended to specify the basis of the pro-rating under Reference Tariffs A2 and B1, and the basis of any necessary end-of-year reconciliation.

Amendment 43

The definition of the Overrun Charge applicable to clauses 7 to 9 of Schedule 1, and clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement should be amended to clarify the gigajoules of gas to which the Overrun Service Rate of twice the Reference Tariff is to apply.

Amendment 44

The Overrun Charge in relation to Reference Service A2, in clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement, should be deleted.

Amendment 45

The provisions regarding notification of overruns in clauses 7 to 9 of Schedule 1, and clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement should be amended either to make notification mandatory in defined circumstances, or to confer a right upon a User who is incurring Overrun Charges to nominate an increased Contracted Peak Rate (subject to the Queuing Policy) or to have flow control installed.

Amendment 46

The provisions regarding notification of overruns in clauses 7 to 9 of Schedule 1, and clauses 10 to 12 of Schedule 2, of Part C of the proposed revised Access Arrangement should be amended to clarify the circumstances in which an excursion would count as being an “occasion”.

Amendment 47

The proposed revised Access Arrangement should be amended to include a mechanism which complies with section 8.40 of the Code by which revenue from Overrun Charges exceeding the reasonable cost of providing the Overrun Service will be rebated across all Users of Reference Services.

Amendment 48

Clause 37(1)(b) of Part B of the proposed revised Access Arrangement should be amended to clarify the method of forecasting New Facilities Investment to which reference is being made.

Amendment 49

Clause 37(1)(c) of Part B of the proposed revised Access Arrangement should be amended to specify the financing structure assumed for the purposes of determining the Rate of Return.

Amendment 50

Clause 37(1)(d) of Part B of the proposed revised Access Arrangement should be amended to clarify the Fixed Principle that is intended in relation to depreciation.

Amendment 51

Clause 37(1)(e) of Part B of the proposed revised Access Arrangement should be amended to correct a typographical error by amending “Part B, clause 27(2)(a)” to read “Part B, clause 27(2)”, and to clarify the Fixed Principle that is intended in relation to FRC costs.

Amendment 52

Clause 37(1)(g) of Part B of the proposed revised Access Arrangement relating to the tariff basket form of price control should be deleted.

Terms and Conditions

Amendment 53

Clauses 16(1), 26, 27, 32(1), 36(3), 58 and 64 of Part C, of the proposed revisions should be amended to remove cross-referencing to the RMS or the RMRs.

Amendment 54

Clause 34 of Part A – “Terms and conditions for Services other than Reference Services” - should be amended to remove provision for the inclusion of terms and conditions for Non-Reference Services in the revised Access Arrangement.

Amendment 55

Clause 21(2) of Part A providing that the terms and conditions of the Interconnection Service are to be negotiated should be amended not to be subject to clause 22 of Part A.

Amendment 56

Clause 21(4) of Part A setting out the list of matters with which it is expected that an Interconnection Contract will deal should be deleted.

Amendment 57

Clause 22 of Part A requiring that there be a term of each Interconnection Contract in relation to compliance with the Gas Quality Specifications should be deleted.

Amendment 58

Clause 23 of Part A setting out the requirements for an application for an Interconnection Contract should be deleted.

Amendment 59

Clauses 28(2) of Part A requiring that a Prospective User of an Interconnection Service who is a Pipeline Operator must enter into an Interconnection Contract with AGN should be deleted.

Amendment 60

Clause 27 of Part A – Obtaining access to services – should be amended to confine its operation to Reference Services supplied under a Haulage Contract

Amendment 61

Clause 28 of Part A – Parties required to enter into a Service Agreement – should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Amendment 62

Clause 29 of Part A – Pre-conditions to the provision of Services – should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Amendment 63

Clause 30 of Part A – Obligation to accept and deliver Gas - should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Amendment 64

Clause 28 of Part C – Metering uncertainty - should be amended to confine its operation to Reference Services supplied under a Haulage Contract.

Amendment 65

Part A, clause 29(2)(b)(iv) of the proposed revised Access Arrangement should be deleted.

Amendment 66

Part A, clause 60 of the proposed revised Access Arrangement should be deleted.

Amendment 67

Part A, clause 61 of the proposed revised Access Arrangement should be deleted.

Amendment 68

Part C, clause 22(1)(a)(vi) of the proposed revised Access Arrangement should be deleted.

Amendment 69

Clause 21(3) of Part A of the proposed revised Access Arrangement should be deleted.

Amendment 70

Clause 8 of Part C of the proposed revised Access Arrangement, concerning Interconnection Contracts, should be deleted.

Amendment 71

Clause 33(1) of Part A should be amended to provide that the Authority's approval of Replacement Schedules referred to is approval of a revision to the Access Arrangement in accordance with the provisions of sections 2.28 to 2.48 of the Code.

Amendment 72

Clause 1 of Part C of the proposed revised Access Arrangement should be amended to ensure that any changes to the terms defined in the Access Arrangement and applicable in a Haulage Contract are subject to the procedure for amending an Access Arrangement in section 2 of the Code.

Amendment 73

The definition of "**Code**" in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition of that term in the Code, that is the definition should refer to the Code as amended from time to time, and not to the Code in force as at the Revisions Submission Date.

Amendment 74

The definition of "**Confidential Information**" in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 75

The definition of "**Cost of Service**" in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement, which refers to a section of the Code which has been repealed, i.e. section 8.3(d), should be deleted, and replaced with an appropriate alternative definition.

Amendment 76

The definition of "**Delivery Point**" in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 77

The definition of “**Developable Capacity**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 78

The definition of “**Gas**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 90(4) of the *GPAA*.

Amendment 79

The definition of “**New Facilities Investment**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 80

The definition of “**Prospective User**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 81

The definition of “**Receipt Point**” in the Glossary in Schedule 2 of Part A of the proposed revised Access Arrangement should be amended to correspond with the definition in section 10.8 of the Code.

Amendment 82

Clause 2 of Part C of the proposed revised Access Arrangement should be amended to provide that the terms and conditions of a Haulage Contract are the terms and conditions in the Access Arrangement, including those in Part A plus the general terms and conditions in Part C.

Amendment 83

Clause 2 of Part C should be amended to provide that the Authority’s approval of amendments to the terms of Haulage Contracts is approval of a revision to the Access Arrangement in accordance with the provisions of sections 2.28 to 2.48 of the Code.

Amendment 84

Clause 3 of Part C of the proposed revised Access Arrangement, providing for AGN to specify terms and conditions in a Haulage Contract in addition to those specified in an approved revised Access Arrangement, should be deleted.

Amendment 85

Clause 4(1)(a) of Part C of the proposed revised Access Arrangement should be amended to make the exercise of the discretion by AGN to require further security subject to an objective qualification (e.g. to provide for such further amount as is reasonable to protect AGN's legitimate business interests).

Amendment 86

Clause 17 of Part C of the proposed revised Access Arrangement should be amended to clarify AGN's obligation to replace lost gas.

Amendment 87

Clause 28 of Part C of the proposed revised Access Arrangement should be amended to note, for the avoidance of doubt, the existence of the minimum standards under the *Gas Standards (Gas Supply and System Safety) Regulations 2000*, which represent standards below which metering services supplied by AGN must not fall.

Amendment 88

Clause 32(2) of Part C should be amended to reflect the wording of the equivalent clause in the current Access Arrangement, which provides an obligation applicable to both parties for the payment of interest upon amounts reimbursable following dispute resolution in relation to invoices.

Amendment 89

Clause 33(2) of Part C of the proposed revised Access Arrangement should be amended to reflect the wording of the equivalent clause in the current Access Arrangement, which provides an obligation applicable to both parties for the payment of interest upon subsequently detected over-payments.

Amendment 90

Clause 35(2) of Part C of the proposed revised Access Arrangement should be amended to provide a reasonable period within which a User may pass on a GSL notice from a Small Use Customer without being required to reimburse any GSL payment by AGN.

Amendment 91

The heading to clause 44 of Part C should be amended to refer to the parties' and not only AGN's remedies, consistent with the content of the clause.

Amendment 92

Clause 46(1) of Part C of the proposed revised Access Arrangement should be amended to add a requirement that AGN's discretion to withhold consent shall only be exercised in circumstances where it is reasonable to do so.

Extensions/Expansions Policy

Amendment 93

Clause 56(2) of Part A of the proposed revised Access Arrangement should be amended to remove the words "which consent binds the Regulator in respect of the Extension or Expansion specified in the request"

Amendment 94

Clause 58 of Part A of the proposed revised Access Arrangement should be amended to confine its operation to new connections for the provision of Reference Services under a Haulage Contract.

Review and Expiry of Access Arrangement

Amendment 95

Clause 63 of Part A of the proposed revised Access Arrangement should be amended to provide a Revisions Submissions Date of not later than 31 March 2009.

Amendment 96

The values in Schedule 1, clause 2(1)(b) of Part B of the proposed revised Access Arrangement for the forecast total costs for providing Reference Services should be amended to accord with the amended values to be included in Table 4.14 of the submitted Access Arrangement Information as required by Amendment 26 in this Draft Decision.